ECOLABELLING, ENVIRONMENTAL MANAGEMENT AND RELATED ACTIVITIES

Recent developments and their relevance to the leather industry

Prepared by

Willy Frendrup
UNIDO Consultant

Project Manager

Jakov Buljan
Agro-industries and Sectoral Support Branch
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Summary

Over the past few years, ecolabelling schemes, environmental management systems and similar environmental initiatives have undergone rapid development. The present report surveys these systems and assesses their impact on the leather industry, especially on leather-exporting companies.

A total of twelve ecolabelling schemes relating to leather and/or leather products are contained in the annexes to the report. Of those, five entered into force in 2000 and a further three in 1999. More schemes are under preparation.

Most schemes concern the environmental impact of leather production in addition to addressing consumer protection issues. Furthermore, many schemes include sets of functional requirements.

In recent years, the International Organization for Standardization (ISO) has developed standards for environmental labels and declarations. Furthermore, a revised regulation for the award of a European Community ecolabel has just been issued.

Environmental criteria as found in ecolabelling schemes also form part of product specifications applied by a number of leather-consuming industries. They also find application in public purchases and tenders.

Many private labels that make unwarranted environmental claims still abound. Steps should be taken to combat the use of such labels. According to the ISO standards, labels of this kind must be avoided; in some European countries they are already being phased out.

Environmental management systems are enjoying increased acceptance among tanneries and their customers alike. Of the two international standards for environmental management systems that exist, the ISO 14001 standard and the EU eco-management and audit scheme (EMAS) regulation, the former is open to companies throughout the world, whereas the latter applies solely to companies operating in the EU or Norway. Both systems are well co-ordinated with, and bear a high degree of similarity to, each other. EMAS is somewhat broader in scope than ISO 14001. EMAS registration calls for environmental conditions being met not only by the company applying for registration, but also by its suppliers and subcontractors. In the course of time, many automotive companies will insist upon their suppliers having an ISO 14001 certificate themselves.

At least 25 tanneries have obtained ISO 14001 certificates to date; 15 or more are in the process of obtaining certification. One tannery has already secured EMAS registration and three more are preparing for the same.

Life-cycle assessments or the evaluation of the potential environmental impact of a product system from cradle to grave are fundamental features of some ecolabelling schemes and environmental management systems. Since the selection and weighting of impact categories within a life-cycle assessment is based on value-choices and not on science, the assessment has a strongly subjective element. As an evaluation tool, it should thus be handled with caution. In any event, specific features of the life cycle, such as recycling waste leather, will take on greater importance in the future.
International companies are using cross-boundary environmental management to an ever greater degree and it will take on particular importance for leather-exporting companies. In the same vein, governmental regulations governing the amounts of hazardous substances contained in leather are also gaining in importance for leather exporters.

External environmental demands pose a challenge to the leather industry: a challenge which can and must be effectively met.
1. Introduction

In the years since the UNIDO expert group meeting held in Vienna, 12-13 March 1997 (1), measures related to ecolabelling, environmental management, official regulations and other environmental procedures have developed apace. This holds particularly true for the industrialised countries. These developments are bound to bear far-reaching consequences for the tanning industry in the leather exporting countries as well. In both instances, they pose a challenge that calls for an appropriate response.

As a follow-up to the meeting in Vienna, three workshops were held in: Chennai (India) on 23 October 1997; Yogyakarta (Indonesia) on 13 May 1998; and Beijing (China) on 22 November 1998. Among the subjects taken up at the workshops, an outline for an international ecolabel scheme for leather was discussed (see Annex 21).

The present report contains a comprehensive survey of recent developments, the current situation and possible future developments, with special reference to the implications they bear for the leather industry.

Schemes normally referred to as ecolabels fall into two categories: (a) exclusively product-based labelling schemes and (b) schemes based on both production conditions and product properties.

In the strict sense of the term, product-based labels cannot be regarded as ecolabels, since ecological considerations do not fall within the scope of such labels. It would be more correct to describe them as “consumer protection labels” since the criteria on which they are based relate mainly to the supposedly harmful substances contained in the leather.

In the other category, ecolabels in the proper sense of the term, account is also taken of the ecological consequences of the leather production process.

By including the environmental consequences of leather production, such a scheme acts of itself as an incentive to use ecologically sustainable production processes by: (a) helping to enforce existing, usually reasonably strict, environmental legislation and (b) protecting tanneries which have introduced significant environmental improvements against unfair competition. A certificate issued according to this type of scheme may be awarded to tanneries direct. It can be used as a marketing asset and thus help to recoup some of the funds invested in environmental improvements.

Given that no such thing as an “absolutely ecologically sound product” exists, all ecolabelling schemes are necessarily relative in the sense that they focus on products considered less harmful than other products in the same product group. An important feature of all ecolabelling systems is that the criteria governing award of the label must be stricter than or at least as strict as the requirements set in official regulations. A general clause is often included stipulating that production "must comply with any relevant environmental regulations".

Fundamentally, establishing criteria and setting limits must be considered a political question. However, international standards for the elaboration of ecolabelling schemes do exist.
Most ecolabelling schemes also include functional requirements, the basic philosophy being that ecolabels ought not to be awarded to low-quality products.

Consumers today are becoming increasingly aware of "social" or "ethical" values, such as occupational health and safety, animal welfare and child labour. Consequently, parameters of this kind are increasingly common features of ecolabelling schemes and have an impact on product specifications being set by various customers.

The information to be provided by the producer may be based on self-declaration (which has to be presented in a manner that inspires consumer trust) or on certification by an independent third party (often an accredited verifier). The trend is moving towards greater demand for independent verification.

Environmental management systems can be similarly certified according to international standards. However, ecolabelling and environmental management schemes are essentially different. An ecolabelling award refers to a specific product, whereas an environmental management certificate relates to a production site or company as a whole. Over and above insisting on product specifications, some customers demand that their suppliers have a certified environmental management system.

2. Ecolabelling

2.1. General

The Global Ecolabelling Network provides a general survey of ecolabelling activities and competent bodies around the world. The material can be downloaded from the internet (30).

The Global Ecolabelling Network summarises ecolabelling as follows:

- "Ecolabelling (or environmental labelling) is a guide for consumers to choose products and services that cause less damage to the environment.

- Ecolabelling makes a positive statement that identifies products and services as less harmful to the environment than similar products or services used for a specific function.

- Ecolabelling is fundamentally different from the setting of minimum product standards or requirements. The key difference is that ecolabelling is intended to reward environmental leadership".

More often than not, the criteria applied and the limits set in ecolabelling schemes are thus stricter than corresponding official regulations. Furthermore, applying for an ecolabel is quite voluntary. Ecolabelling schemes are revised regularly, typically every third year, thus ensuring that that they remain at the cutting edge of general environmental improvements.

2.2. Ecolabelling schemes of relevance to the leather industry

Twelve schemes relating exclusively or partly to leather and/or leather products, are listed in Annex 2. The schemes themselves are found in extenso in Annexes 3-13 and 18.
A feasibility study on introducing an EU ecolabel for furniture is currently being conducted. A Nordic Swan Label scheme for furniture is also being drawn up, for which most of the criteria have been established. The elaboration of criteria for upholstery leather, however, has been postponed until 2001.

It is also assumed that an ecolabel for footwear will soon be established in the Czech Republic (2).

Of the schemes listed in Annex 2, one (ICT Eco-Tox Label) is based exclusively on self-declaration; all the others involve certification by an independent third party. Three schemes aim at leather properties alone, whereas the remaining schemes also take account of the ecological consequences of leather production, either by using specific criteria or by stating that production must comply with national environmental regulations - or by a combination of both.

Functional requirements are included in eight schemes.

In two schemes (Nos. 1 and 6), award of the label is contingent upon compliance with the Washington Convention on Endangered Species (3). In the Dutch scheme for footwear (see Annex 8) it is also stated that “Fur and leather made from the skin of animals specially bred for their skin may not be used in the footwear”.

The Dutch footwear scheme also has “total energy content” as a parameter. It lists in an appendix figures for the energy content of various materials used in the footwear, including upper leather, insole leather, sole leather and leatherboard.

Comments on individual schemes listed in Annex 2 are given below:

No. 4. Lederinstitut Gerberschule Reutlingen. Certificates have been awarded to just over 30 companies, most of the award recipients are tanneries (some of which also manufacture leather products). More recently, a leather garment producer obtained a certificate (4).

No. 5. EU ecolabel for footwear. As at October 2000, the label had been awarded to two shoe factories: one in Italy and one in Spain.

No. 8. The former Öko-Tex Standard 116 for leather has been revoked. In its stead, leather products are to be evaluated according to the general Öko-Tex Standard 100.

The Öko-Tex standard 100 distinguishes between four categories of products:

<table>
<thead>
<tr>
<th>Category</th>
<th>Relevant leather products</th>
</tr>
</thead>
<tbody>
<tr>
<td>I For infants (up to 3 years of age)</td>
<td>Woolskin bed pads</td>
</tr>
<tr>
<td>II With skin contact</td>
<td>Gloves, watch straps</td>
</tr>
<tr>
<td>III Without skin contact</td>
<td>Leather garments</td>
</tr>
<tr>
<td>IV For house fittings and fixtures</td>
<td>Furniture, wall linings</td>
</tr>
</tbody>
</table>

Where leather products are concerned, two sets of limits are problematic: the minimum pH level (4.0 for all categories) and the maximum content of extractable chromium (1 ppm for category I, 2 ppm for categories II-IV in table above).
At a recent meeting, it was decided to change the lower pH limit for leather to 3.5. The chromium limit for leather was not changed.

The Öko-Tex Standard 100 is based exclusively on product properties. Recently, however, an Öko-Tex Standard 1000 has been introduced, comprising a certificate for the maintenance of satisfactory environmental and occupational health conditions during production. In many respects, the Öko-Tex 1000 is similar to the ISO 14001 (see Chapter 4.1). The Öko-Tex 1000 certificate is only awarded to companies which have already obtained an Öko-Tex 100 certificate for some of their products.

As at October 2000, 20 Öko-Tex 1000 certificates had been awarded; none of which had gone to leather companies.

No. 9 According to the Austrian scheme for office furniture, neither the use of chrome leather nor that of “hazardous” azo dyestuffs is allowed (see Chapter 8).

As for hazardous substances in leather, the following parameters are included in most schemes: pentachlorophenol, azo dyestuffs generating certain aromatic amines (see Chapter 8), hexavalent chromium and formaldehyde. Limits set for cadmium and pH also form part of some schemes (in fact, the pH value may also be considered a functional parameter).

In one scheme, the SG schedule (see Annex 5), a limit has been set for free glutaraldehyde in leather.

In other schemes, regulation is such that award of a label is made contingent upon certain categories of chemicals not being used during production.

Some schemes include parameters that are inappropriate to leather: primarily, metals such as antimony, zinc or mercury. Most probably, those schemes were initially drawn up for a whole range of materials. That notwithstanding, superfluous testing represents a waste of resources and the costs incurred have to be borne directly by the producer - and ultimately by the consumer.

Any limits cited in ecolabelling schemes or any other regulations should be stated as numerical values. “Zero” limits are meaningless since zero concentrations are never to be found in nature or in industrial products. Similarly, the term “below detection limit” should be avoided, unless a figure for the detection limit is defined. (If necessary, the figure can be adjusted during a general revision of the scheme). Most schemes cite limits in numerical terms.

As for ecological production-related criteria, some schemes simply state that production must comply with environmental regulations (national or local). Water-based finishing is prescribed in some schemes. The EU scheme demands that the tannery waste water be treated (either in the tannery itself or in a communal treatment plant) to obtain a 75% reduction of the COD. The two Dutch schemes set a maximum limit for the discharge of chrome from the tannery at 0.33 kg Cr/ton finished leather or 0.08 kg Cr/ton rawhide. The footwear scheme goes on to stipulate that the tannery waste water must be biologically treated.
The Brazilian scheme sets pH and temperature limits, in addition to specifying concentration levels for BOD, COD, total Cr, sulphide, suspended solids, and settleable solids in the tannery waste water.

The Catalan scheme demands as a minimum compliance with official regulations. Further demands may be made with regard to COD, suspended solids and heavy metals in the waste water.

2.3. International standards for ecolabelling schemes

A revised regulation governing the award of a European Community ecolabel has just been issued (see Annex 15).

In the introductory remarks it is stated that:

“It is necessary to guarantee transparency in the implementation of the scheme and to ensure consistency with relevant international standards in order to facilitate access to, and participation in, the scheme by manufacturers and exporters of countries outside the Community”.

This is borne out by other statements in the introduction reading:

“In the case of SMEs and also product manufacturers as well as service providers of developing countries, the application fee will be reduced by at least 25%”

“In the case of SMEs and also product manufacturers as well as service providers of developing countries, the annual fees will be reduced by at least 25%”.

Further reductions in the annual fee may be granted to applicants who have already received certification under EMAS or ISO 14001.

According to the new regulation, both goods and service may qualify for an ecolabel award.

Life-cycle considerations have to be part of the process of establishing ecological criteria. Details are to be found in Article 3 of and Annexes I and II to the Regulation. Life-cycle assessments (LCAs) must be conducted in accordance with ISO 14040 and ISO 14024 standards, where applicable. (See Chapter 5 for more on LCAs).

The ISO has developed four standards for environmental labels and declarations(5) (6) (7) (8). Environmental labels and declarations are defined simply as “claims which indicate the environmental aspects of a product or service” (5).

The standard ISO 14020 (5) comprises general principles for environmental declarations, formulated as a series of statements with matching “specific considerations”.

ISO 14024, 14021, and 14025 define, and set norms for, three different types of environmental declarations:
Type I (ISO 14024) (7):

An independent third party formulates environmental requirements for a group of goods or services and awards a label, a symbol or something similar, provided that the product in question complies with the requirements laid down. Compliance has to be verified by an independent third party. The classic ecolabelling schemes (Nos. 2, 4, 5, 6, 7, 9, 10, 11 and 12 in Annex 2) belong to this category. (Strictly speaking, schemes Nos. 3 and 8 are not environmental declarations, but relate solely to consumer safety).

Type II (ISO 14021) (6):

Self-declaration of environmental assertions put forward by the supplier of the product without third-party verification. The claims must be substantiated and consequently applied if commercial customers or consumers are to trust them. The ICT Eco-Tox scheme (No. 1 in Annex 2) is an example of this type of declaration.

Type III (ISO 14025) (8):

Declaration, verified by an independent third party, for a product, within categories of parameters determined in advance and based on life-cycle assessments according to the ISO 14040 series of standards (see Chapter 5). The declaration may also contain additional environmental information. This type of declaration involves procuring a large volume of data and is normally too complicated for small and medium enterprises.

To some extent type-III declarations are expected to oust classic ecolabels in business-to-business relations, whereas classic ecolabels will be mainly directed towards final consumers.

However, even in the Scandinavian countries, the EU and the Nordic Swan labels will continue to prevail for the time being, since type III declarations are considered too complicated for general use.

International standardisation of ecolabelling schemes according to ISO standards is important if the creation of technical barriers to trade is to be avoided. Moreover, the aim should be to co-ordinate ecolabelling schemes for individual product groups at the international level, and to phase out those schemes that are only valid at the local or national levels.

The WTO Committee on Trade and Environment (CTE) has published a document entitled "How environmental taxes and other requirements fit in." (see Annex 17). It provides comments on:

- Ecolabelling and LCAs
- Handling requirements (packaging, recycling and disposal requirements, etc.)
- Environmental changes and taxes

*It addresses those aspects with regard to their possibly raising technical barriers to trade. Generally speaking, the objections the document raises are primarily aimed at government and other mandatory measures, especially those directed towards production conditions in the exporting country. The objections raised are not directed*
towards voluntary schemes. However, the document can be taken as an argument in favour of all schemes being international to the maximum possible extent.

2.4. Private ecolabelling and unsubstantiated “ecological” claims

The use of unsubstantiated environmental claims must be rejected out of hand. According to ISO standards, assertions such as “environmentally friendly”, “green”, “natural” and “ecological” should not be used. In the Scandinavian countries, consumers’ organisations and other entities agree that labelling and declarations of this kind have to be rooted out, and only authorised labels established according to international standards may be used. Many retail chains which formerly used their own ecolabels have since replaced them with duly authorised labels. The ISO standards state quite categorically that: “Environmental labels and declarations shall be based on scientific methodology that is sufficiently thorough and comprehensive to support the claim” (5)

It is well known that many companies market leather and leather products bearing designations similar to those mentioned above. The most frequent criteria used to substantiate claims that a leather is “ecological” or something similar are that the leather is vegetable tanned, that it is dyed with natural dyestuffs or that it has not been dyed at all (see Chapter 5.2 for the chrome-vegetable issue)

According to Germann: "In future, the use of terms like “eco”, “bio” or “natural” in the marketing of leather (products) for commercial considerations only, will be restricted. The increasing amount of information as a result of future research in the field of ecology will be better understood and more accurately interpreted by the public authorities. So, for instance, investigations on ecological balance sheets for different technologies in leather production will enable an environmental assessment in a realistic manner.

Among other things, this will illustrate that neither synthetic tanning or auxiliary agents should be considered as generally “bad” nor natural products as generally “good”. All ecological effects resulting from the production of these agents, up to their remaining portions in final products and wastes have to be taken into consideration" (9).

A governmental committee set up in Denmark to study the production of “organic” non-food products, discussed the possibility of leather qualifying for an “ecological” label, since ecologically produced hides are available. However, the committee ultimately felt that given the chemical processes used in tanneries, leather - regardless of the tanning method - should not be labelled “ecological”.

3. Customers' environmental demands

3.1. Public purchases

Since 1995, a law has been in force in Denmark obliging official agencies (governmental, regional and municipal) to take ecological properties into consideration in their purchasing policies. The Danish environmental protection agency (EPA) has established guidelines for “ecological purchases” covering several product groups, including upholstered furniture and working gloves.
According to the guidelines for upholstered furniture (1998), “leather ought not to be chrome-tanned”. As justification it is stated that “chromium is a metal injurious to health”. A similar formula was to be found in the original draft guidelines for working gloves drawn up in 2000. However, it proved possible to change the wording in the final version so that leather tanned using high-exhaustion chrome tanning is now accepted. Furthermore, preference has to be given to undyed leather. Hair-save unhairing and utilisation of fleshings are cited as examples of environmentally friendly methods.

The principles governing purchases made in a typical Danish county are given below.

Preference shall be given to:

- Products incurring the lowest possible environmental load during their life-cycles
- Suppliers with an EMAS registration or an ISO 14001 certificate.
- Products complying with an authorised ecolabel scheme.

If none of these criteria apply, Danish EPA guidelines, if any, are used.

3.2. Automotive and footwear companies

Over the years, the automotive companies have made extensive environmental demands with respect to the properties and production of the leather they purchase.

Most European car producers call for non-chrome leather. One company specifies an upper limit of 5 ppm Cr; this means that the tannery also has to eliminate all metal-complex dyestuffs containing chrome. Another company requires that the leather be Öko-Tex certified (see Annex 10). As mentioned in Chapter 2.2, this involves an upper limit of 1 ppm extractable Cr (with an acidic artificial perspiration solution).

Automotive company requirements normally include restrictions on “hazardous” substances, such as a limit on the formaldehyde content of 5-10 ppm. More and more automotive companies require that their suppliers have an ISO 14001 certificate; in some cases, they have set a deadline for the acquisition of the same by 2002 or 2003 (13) (14). Some international shoe companies have set similar product specifications.

4. Environmental management systems

4.1. International standards

Two international standards for environmental management systems (EMS) exist:

(a) The ISO 14000 series, consisting of the two standards ISO 14001 and ISO 14004. The ISO 14004 standard is ancillary to ISO 14001 and contains guidelines on principles, systems and supporting techniques (10) (11).

(b) The EU EMAS regulation.

As defined in ISO 14001, an environmental management system is “the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing,
achieving, reviewing and maintaining the environmental policy”. The EMAS definition is couched in more or less the same terms.

At present, both standards are being revised. Issuance of the revised ISO 14000 standards is scheduled for 2003. It is assumed that the revision will comprise:

a) Close co-ordination between ISO 14001 and ISO 9000: 2000  
b) Textual clarification by means of amendments  
c) Extension to and improvement of ISO 14004

The inclusion of new requirements or subjects is hardly expected.

The revision of the EMAS regulation is practically complete; that notwithstanding, the revised regulation is only expected to become official in the first half of 2001. However, it can be expected that to all intents and purposes the official version will be identical to the text in the Common Position adopted by the EU Council (see Annex 16).

The most important innovations of the EMAS regulation are:

a) As is already the case for ISO 14000, EMAS registration is going to be open to all organisations, the activities of which have an environmental impact. Both schemes define an “organisation” as “a company, corporation, firm, enterprise, authority or institution, or part or combinations thereof, whether incorporated or not, public or private, that has its own functions and administration”  
b) The ISO 14001 standard has been adopted as a requirement for environmental management. This means that when an organisation already has an ISO 14001 certificate, EMAS registration will not entail any duplication. Furthermore, EMAS registration will automatically include ISO 14001 certification.  
c) Simpler administrative and economic procedures are going to be introduced for small and medium enterprises.

ISO 14001 is open to organisations throughout the world, whereas only organisations operating in the EU or Norway are eligible for EMAS registration.

The two schemes are closely co-ordinated and bear a great similarity to each other. Both are voluntary; both include a commitment to continuous environmental improvement and reduction of pollution, as well as to compliance with relevant environmental legislation and regulations (more explicitly formulated in EMAS).

In addition to the requirements set for ISO 14001 certification, EMAS registration calls for:

• Verification by an accredited verifier  
• An introductory environmental audit (verified)  
• A public environmental statement (verified) which has to be updated annually  
• Regular validation, at least every third year (verified)

The ISO 14001 certificate relates to the environmental management system as such, whereas EMAS registration relates to the site with ongoing activities. An important feature of the EMAS regulation is that in order to be registered, the organisation (company) “shall consider
the environmental performance and practices of contractors, subcontractors and suppliers.”

“The organisation should endeavour to ensure that the suppliers and those acting on the organisation’s behalf comply with the organisation’s environmental policy within the remit of the activities carried out for the contract” (Annex VI to the “Common Position”; see Annex 16 of the present report).

The first ISO 14001 certificates and EMAS registrations were awarded in 1996. Approximately 15,000 “organisations” have since obtained ISO 14001 certificates, most of them in the Far East (more than 3,000 in Japan alone, as well as numerous “organisations” in Korea and the Taiwan province of China) and Western Europe. Relatively few certificates have been awarded in South-east Asia or Latin America, but in both regions the number is growing rapidly. Only very few certificates have been awarded in the United States and equally few in Central and Eastern Europe.

According to the most recent list (12), 2,945 companies are EMAS-registered, of which some two thirds are located in Germany.

In 1999, 107 Danish companies were surveyed as to their experience with environmental management systems (ISO 14001 or EMAS). The main findings were:

1. The systems had been introduced primarily for strategic reasons.
2. In most cases, introduction had yielded savings in terms of resources and environmental costs, in addition to enhancing the corporate image.
3. Implementation of the system had led to a larger scale of improvement than official regulations
4. Implementation had borne consequences upstream (towards suppliers) in 51% of the companies, and downstream (towards customers and/or waste disposal) in 40% of the companies.
5. Requirements set for suppliers:

<table>
<thead>
<tr>
<th>Percent of the companies</th>
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<tbody>
<tr>
<td>Provision of information about their environmental practices</td>
</tr>
<tr>
<td>Proven compliance with environmental regulations</td>
</tr>
<tr>
<td>Operation of an EMS</td>
</tr>
<tr>
<td>Operation of a certified EMS</td>
</tr>
</tbody>
</table>

6. The major obstacles to implementation were time and knowledge. Costs were less important.
7. Average implementation costs were in the order of US$ 65,000 (based on a representative sample of all company types and sizes).

As mentioned above, introduction of an environmental management system is a voluntary undertaking. However, more and more customers require that companies operate certified environmental management systems. Many customers lack the time and knowledge needed to conduct a reliable evaluation of the environmental practices of their suppliers or the environmental properties of the products supplied. Consequently, they rely on suppliers they
trust. That trust may come about as result of environmental certificates, ecolabels, reputation or prior experience.

The Danish EPA carried out a study entitled “Eco-labelling and EMAS. Choice or integration?” (1999). The study showed that direct integration of the two systems is infeasible since ecolabelling aims at the product, whereas environmental management systems aim at the enterprise as a whole.

None the less, positive interaction between the two systems is both feasible and desirable. A company finds it easier to apply for an ecolabel if it already has a certified environmental management system. As mentioned above, this is borne out by the fact that applicants for a EU ecolabel enjoy a reduction in the application fee, if they have an ISO 14001 certificate or are EMAS-registered (see Chapter 2.3). An environmental management system makes it easier to control the properties of individual products and emissions from the production processes. It is thus a good basis for proving compliance with ecolabel criteria and limits. It may be advantageous to draw on the same verifier for both systems.

An environmental management system offers a higher degree of certainty in terms of the reliability of the information that the suppliers have to provide in order to demonstrate compliance with ecolabelling specifications. This degree of certainty also extends to the information that the supplier does not use chemicals that are impermissible under the ecolabelling scheme.

On the other hand, ecolabelling is an effective supplement to environmental management because it involves specific environmental demands.

4.2. Environmental management systems in tanneries and their implementation

1995 marked the first award of a certificate for an environmental management system; it went to a tannery in the United Kingdom. The certificate was awarded according to the British standard BS 7750, a precursor of the international ISO 14001 standard. The first tannery obtained an ISO 14001 certificate in 1997.

Today, approximately 25 tanneries in Western Europe are in possession of an ISO 14001 certificate; some 10 more have submitted applications.

A number of tanneries in Africa, India and Latin America are preparing themselves for certification.

In Australia, many tanneries have installed environmental management systems in order to comply with local environmental requirements, reduce costs and ensure safety in the workplace. In all likelihood, they will not seek formal certification unless their customers demand it.

To date only one tannery in the United States, Garden State Tannery Inc., has obtained an ISO 14001 certificate (14). Given the demands being made by the automotive industry (see chapter 3.2), however, it is to be expected that many tanneries, both within the United States and without, will have to apply for certification.
It is also to be expected that other leather-consuming industries will follow the trend and call for ISO 14001 certification.

In Germany one tannery is EMAS-registered, as are two shoe factories.

Unione Nazionale Industria Conciaria (the Italian Leather Manufacturers’ Association) undertook a project on behalf of the EU entitled "Pilot project to prepare, promote and aid Italian tanneries’ participation in the EC ecomanagement and audit system (LIFE/ENV/IT/136)" (15). In addition to the Italian Leather Institute (SSIP), 11 Italian tanneries each employing 25 to 200 employees participated in the project.

Of the 11 tanneries, 6 had obtained an ISO 14001 certificate prior to the project or achieved certification in the course thereof. Two more are currently applying for a certificate. Furthermore, three of the tanneries that participated in the project are now applying for EMAS registration, two of the latter already have an ISO 14001 certificate.

As part of the project, comprehensive material was compiled in Italian. It comprises background material, manuals and videos about the procedures governing ISO 14001 certification and/or EMAS registration.

The project showed that the costs of introducing an environmental management system varied from tannery to tannery, ranging between some US$ 17,000 and 55,000. The lower figure was considered the most representative. The variation was not due to tannery size. The cost of maintaining the system was estimated to correspond to approximately half the total labour costs of a highly qualified technician (environment manager).

As for benefits, the tanneries point to such gains as resource savings and lower impact levels. However, it is not easy to estimate their economic value; one tannery estimated the gain to be roughly US$ 25,000 a year, to which must be added improvements in the corporate image and in relations with the immediate surroundings: benefits that defy quantification.

The study concluded that:

“The tannery’s initial investment in adopting an ecomanagement system in all probability has adequate return-time in itself. What is harder to evaluate is what will occur in actual operation. Here it seems that tannery size is again a crucial factor”;

and

“The results have shown that the tanneries [which are] potential candidates for ecomanagement are first of all those with more than 50 employees, while it is harder for those with 25 to 50”.

4.3. Environmental reporting

Many companies around the world issue public environmental reports, either on a voluntary basis or in compliance with a mandatory regulation. As mentioned above, these reports are required for EMAS registration.
In Denmark, the issuance of public environmental reports has been mandatory since 1996 for a number of companies, including tanneries. For EMAS-registered companies, special reporting of this kind is not necessary. About 1,000 companies are required to submit reports; some further 200 do so on a voluntary basis. In certain cases, for example companies operating internationally, these reports are comprehensive and verified; they are directed towards customers and environmental authorities around the world.

As from 1999, 300 companies in the Netherlands are required to submit annual public environmental reports. In Norway and Sweden, all companies are required to include environmental information in their business accounts.

The reports must indicate the volume of water, chemicals and energy consumed, as well as the output of liquid, solid and gaseous wastes. Furthermore, pursuant to a bill due to be enacted this year, a description must be given of the company’s environmental management systems, subcontractor requirements (if any) and waste handling operations. Any complaints must also be mentioned.

5. Life-cycles and the leather industry

5.1. Life-cycle assessments

A global consensus is developing that members of every individual trade and profession must aim at minimising the environmental impact of their trade or profession, and not merely the impact deriving from the production process itself. Trade must also take steps to guard against its production processes and products creating more general, long-term problems.

As a tool for this specific purpose, a methodology for life cycle assessment has been developed and defined in four ISO standards (16) (17) (18) (19).

A life-cycle is defined as “consecutive and interlinked stages of a product system, from raw material acquisition or generation of natural resources to the final disposal”. A life-cycle assessment (LCA) is defined as “compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life-cycle” (16).

It is further stated that:

“LCA is a technique for assessing the environmental aspects and potential impacts associated with a product, by:

- Compiling an inventory of relevant inputs and outputs of a product system;
- Evaluating the potential environmental impacts associated with those inputs and outputs;
- Interpreting the results of the inventory analysis and impact assessment phases in relation to the objectives of the study.”

An LCA studies the environmental aspects and potential impacts throughout a product’s life (i.e. cradle-to-grave) from raw material acquisition through production, use and
disposal. The general categories of environmental impacts needing consideration include resource use, human health, and ecological consequences" (16).

An LCA is restricted to environmental impacts; it does not extend to the economic or social aspects of a product.

Before embarking on an LCA, the first step is to define the goal and scope of the study. Guidelines are to be found in ISO Standard 14041 (17).

For example, the objective of an LCA may be:

- For an existing product, minimisation of the environmental impact over the life-cycle by substituting substances, energies and processes.
- For a new product, selection of suitable substances, processes and design.
- In both cases, the results have a bearing on the selection of suppliers.
- For the comparison of a number of existing products, identification of the product with the lowest environmental impact. This may be used, for example, to compare different types of leather or to compare leather, textiles and synthetic materials.

The EU Eco-label Award Scheme (see Annex 15) prescribes that an LCA be used to lay down criteria for an ecolabelling scheme and to determine those categories of products for which an ecolabelling scheme should be established.

Some governments use LCAs to draw up product legislation, including taxes on purchases.

Delineating an LCA depends on the purpose of the analysis. In the case of leather the question is whether analysis should extend back to the cattle breeder or even further.

In an LCA for cured meat, for example, the question arises whether it goes back as far as the fertilisers and pesticides applied to the grazing fields.

The guidelines for the application of LCAs in the EU Eco-label Award Scheme state that:

“For agriculture and forestry, it might not be possible to draw a sharp boundary on a spatial basis between product system and environment. If resources are taken from a natural habitat, then the boundary should be set at the point of collection. In a fully artificial production system, such as glasshouses with glasswool culture, the processes should clearly be within the system boundary. In intermediate cases, the boundary will depend on the intensity of cultivation, on other attributes of the ecosystem affected by cultivation, and on specific aspects of the soil or of the cultivated crop or the wood”.

This consideration is relevant - not only for raw hides, but also for vegetable tanning materials.

It is important to bear in mind that selecting and weighting impact categories are based on value-choices, and not on science. “Different individuals, organizations, and societies may have different preferences, therefore it is possible that different parties will reach different ranking results based on the same indicator results or normalised indicator results” (18). The standard stresses that: “All weighting methods and operations used shall be documented to provide transparency” (18).
As ranking and weighting cannot be standardised, any valuation necessarily takes on both a political and scientific dimension. The interpretation must integrate scientific data with political goals set for environmental quality.

One consequence of all this is the risk that an LCA can be biased since, consciously or unconsciously, it is influenced by the interests of the country where the choice and weighting of impacts are made - more often than not the importing countries. An environmental statement from a Japanese company reads: “Impact assessment was conducted using the following categories because they represent indicators that are familiar and understandable to users in Japan ...”. In the WTO document, referred to above (see Annex 17) it is stated that: “Labels following the [LCA] approach are frequently based on criteria that relate to only a few aspects of a process of production or of a product. This creates the potential for unwarranted trade restriction, in particular protectionism in disguise.”

In Denmark, a tax on packaging material is being introduced, based on an LCA conducted by the Danish EPA. The industry contested the results of the LCA, asserting that assumptions made in the LCA were incorrect or unscientifically based. The EPA replied that political priorities had also been taken into account (Berlingske Tidende, 11 October 2000).

5.2. Life-cycle considerations relating to the leather industry

For the leather industry, the importance of life-cycle considerations and the significance of LCAs will undoubtedly increase in the future. Although it is not known how the impact categories will be selected and weighted in future and the consequences that bears for the leather industry, the order of priorities will in all probability differ from that of today.

An LCA for leather, compared to alternative materials, would probably show a positive balance for leather. Consideration would be given to the fact that hides and skins are a renewable resource. Furthermore, they are a by-product of meat production, which, if not used for the production of leather, would give rise to considerable environmental problems.

That notwithstanding, an LCA is an instrument which has to be handled with the utmost caution. As described above, the selection and weighting of impact categories are subjective. Consequently, the conclusions of an LCA hinge on the assumptions made by the person(s) or institution(s) conducting the assessment. It is important that people from the leather trade take an active part in future activities in this field.

LCAs might also play a useful role in providing a well-founded comparison of the environmental impact of different tanning agents and that of the resultant leathers. An ecological comparison between different types of tanning agents, encompassing leather production, waste water, sludge, and leather wastes, has been carried out (20. Chrome tanning has its own advantages and drawbacks, and the conclusion is that the chrome-tanning method must be considered not very harmful in environmental terms.

To date, nobody has ever conducted a complete LCA comparing different tanning methods, ranging from the procurement of raw materials to the disposal of waste products. In an LCA on that scale, the weighting of different impacts would probably have a decisive influence on the findings. With regard to the procurement of tanning material alone, a comparison would have to be made of the environmental impact of chrome-ore mining, the collection of vegetal
material *in natura*, plantation cultures and organic synthesis. These issues would represent but a fraction of the complete LCA.

At the other end of the life-cycle, the issue is waste leather: not only the waste leather generated by the tanneries themselves, but also the waste leather emanating from both leather-consuming industries and the final consumers. In shoe factories, for example, 30% of the leather input ends up as waste (21). As mentioned in Chapter 4.2, two shoe factories have acquired EMAS registration; they are required to oversee the environmental practices of their suppliers.

Ever-increasing demands are being voiced that waste leather and leather products be minimised and recycled. Sooner or later, leather producers will have to contribute to the efforts to comply with these demands.

Recyclability requirements are rapidly increasing, where motor-cars are concerned. An EU directive relating to end-of-life vehicles (i.e. breaking up cars) was recently issued (24). Leather is not among the materials explicitly mentioned in the directive. However, it required that: “Materials and components of vehicles put on the market after 1 July 2003 do not contain ... hexavalent chromium...”. The Commission has yet to establish maximum concentration values for various substances, including hexavalent chromium.

The directive prescribes increasing recyclability of end-of-life vehicles (80% of the weight to be recycled as of 1/1 2006; 85% of the weight as of 1/1 2015). Probably, this will entail a demand for recyclable leather, possibly non-chrome leather (see Chapter 3.2).

6. **Occupational health and safety management**

The British Standards Institution has developed two standards for the assessment and certification of OHS management systems: BSI-OHSAS Standard 18001:1999 and 18002:1999 (22) (23). OHSAS 18002 is ancillary to OHSAS 18001 in the same way as ISO 14004 is ancillary to ISO 14001.

The standards have been developed so as to be compatible with the ISO 9001 and ISO 14001 standards, thus facilitating the integration of management systems relating to quality, environmental practices and occupational health and safety.

It is to be expected that ultimately OHS management systems will be certified to the same extent as ISO 14001 or EMAS certification.

7. **Cross-boundary environmental management**

The Danish Board of Technology, an advisory agency to the Danish Government, recommends that: “The development of a market for products with lower impact on the environment requires that Danish companies and consumers have easy access to information about the environmental properties of individual products. Within the trades mentioned above [one of these is the leather trade], it will be necessary to develop environmental declarations and ecolabelling schemes, preferably internationally standardised, e.g. through United Nations agencies. Furthermore, a governmental purchase and contract policy, rewarding companies which are able to document that they supervise sufficiently their foreign
subcontractors and productions, will increase the market for environmentally favourable products.

Combined with this, aid in the form of training and know-how transfer must be lent in order to ensure that foreign subcontractors comply with the enhanced environmental demands. It would be useful if the (Danish) Government were to support Danish customers in this kind of activities” (25).

In the report, the points of view expressed by the WTO (see Annex 17) are taken into account. It is pointed out that the environmental problems and their order of priority differ from country to country and from region to region. In performing cross-boundary environmental management, due consideration must be given to a country’s environmental and social conditions. (Where tanneries are concerned, thought might be given to the discharge of salt with the waste water: a practice that may be dangerous or harmless, depending on geographical conditions).

As mentioned in Chapter 4.1, an EMAS registered company has to ensure satisfactory environmental performance and practices on the part of its subcontractors and suppliers, even those not within the EU.

A Danish, EMAS-registered, textile company, Novotex A/S, has developed a system for evaluating the environmental impact of textile production through the complete life-cycle of cotton as a basis for their production of eco-labelled “Green Cotton®” textiles. The system is ISO 14001 certified. The aim is to obtain quantitative measurements of the environmental impact of each step in the production process, extending right back to the very growing of the cotton itself (26).

The system is used as a tool to evaluate the environmental standards maintained by the suppliers and check whether the companies involved are reducing the environmental impact of their production. The system can also be used to screen potential new suppliers. In the application of the system, the local conditions of the supplier are taken into consideration.

Every supplier linked to the production chain in some way or another has to complete a detailed questionnaire once a year. For each criterion, a score is given, ranging from a cut-off level to a best available technology-level. The questionnaires are followed up by regular audits: for example, every third year.

For their ecologically labelled products, the company demands sustainable cultivation of cotton, requiring that the cotton: (a) be handpicked in order to avoid the use of defoliants; (b) contain no pesticide residues; and (c) be grown according to ecolabelling standards for organic food production.

The system calls for a high level of communication and administration. However, the company seeks to minimise the burden on its suppliers, inter alia, by supplying computer-software and helping them with technical know-how as far as possible.

Regular suppliers use the system to establish their own internal systems. They obtain a comprehensive view of their environmental conditions and relations with environmental authorities.
Consumers are becoming increasingly vociferous in their demands with respect to what may be termed “social” or “ethical” parameters, such as occupational safety and health, child labour, low wages and animal welfare. This has a knock-on effect for, importing companies. In the United States, an increasing number of companies have appointed ethics officers to manage their “ethical programmes”. In the United Kingdom institutional investors are obliged to publish their (ethical and environmental) code of conduct (if any) governing their investments.

In order to maintain their public image and reputation among consumers, many (especially international) companies have adopted a code of conduct, including requirements being set for their suppliers and preparations being made for contingencies.

A Danish company used to sell footballs that it had made by a subcontractor in a South-east Asian country. A Norwegian TV journalist reported that the footballs were sewn by children. Immediately, the story broke on Danish TV as well. The story was untrue as the Danish company had maintained a close check on its supplier. Nevertheless, it took some months to get the story retracted, by which time people had forgotten all about the footballs. In one country, the Danish company even had to bring the matter before a board of appeal.

After this incident, the company labelled its footballs “guaranteed handsewn by adults”, only to have the label pirated by less serious companies.

International auditing companies have developed social auditing systems for companies and they conduct independent audits. For the audits, they use local auditors conversant with local culture and practices, in order to maintain a proper balance between Western norms and local conditions.

8. Mandatory regulations and ecolabelling criteria governing various substances in leather

In the interest of consumer protection, many countries, including the EU as a whole, have established regulations governing the amounts of hazardous substances contained in various materials, including leather. Countries and regions alike have prohibited the production, marketing or import of products containing substances with concentration levels exceeding the limit. Hazardous substances may also be regulated through a ban on their use in production. The substances or groups of substances, regulated in this way by official authorities, are more or less the same as the criteria most often used as in ecolabelling schemes.

Substances, belonging to one or both of these groups are: pentachlorophenol, certain azo dyes, formaldehyde, cadmium and hexavalent chromium.

Pentachlorophenol:

The official limit in the EU as a whole is 1000 ppm (27). However, in most EU countries and in many non-EU countries, the upper limit is 5 ppm (originally established by Germany in 1989).
Azo dyestuffs:

Under certain conditions, some azo dyestuffs can decompose in the organism and generate certain aryl amines that are considered carcinogenic. Maximum limits for these amines (and consequently the corresponding dyestuffs) were initially introduced in some EU countries, the first being Germany in 1997.

The regulation has since been harmonised within the EU as a whole (28). Restrictions have been established for azo dyestuffs which upon decomposition may generate one or more of 21 aryl amines, specified in a list in the directive (see Annex 19).

The upper concentration limit in leather, for example, is defined as follows:

Products with a content of azo dyestuffs, which may generate one or more of the specified aryl amines in an amount corresponding to a concentration of more than 30 ppm (per amine) in the product, are prohibited.

Formaldehyde:

The relevance of the limits set for aldehydes in leather applies to a relatively short period of time subsequent to production since aldehydes taken up in the leather gradually become totally bound in the hide substance. Free aldehydes in leather, however, can very well provoke an allergic reaction.

Official regulations governing the formaldehyde content in various materials are common. In Europe, the Japanese or Finnish guidelines are generally used (maximum limits 60 ppm and 100 ppm, respectively). For various materials or uses, lower limits can be found: as low as 20 ppm.

The Finnish regulation is stricter than appears at first sight. On entry into the country, only one random sample in a shipment is tested by customs. If the formaldehyde concentration in that sample exceeds the permissible limit, the whole shipment is impounded. This means that in practice, the average concentration has to be substantially lower than 100 ppm.

There appear to be no official limits on the concentration of glutaraldehyde in leather.

Cadmium:

In Denmark, the upper concentration limit is 75 ppm in the product. However, concentration figures are no longer particularly relevant since the use of pigments containing cadmium has ceased.

Extractable chromium:

According to an EU directive (29), the maximum content of extractable chromium in leather used in toys has been fixed at 60 ppm (HCl extraction at pH 1.5 and 37°C).
Hexavalent chromium:

No official regulation has been drawn up to date. Several countries, however, are in the course of drafting a regulation including upper limits for the concentration of hexavalent chromium. Hexavalent chromium content in leather can be relatively simply avoided by means of process modifications.

The use of pigments containing cadmium or hexavalent chromium has been banned. A survey of concentration limits according to some ecolabelling schemes is to be found in Annex 20. The table lists those substances used as criteria in a significant number of schemes.

In some schemes, the expression “below detection limit” is used. The detection limit for aryl amines is normally stated as 30 ppm (the concentration that the EU applies as its limit). The detection limit for hexavalent chromium in leather is 3 ppm Cr (method IUC/18).

In several ecolabelling schemes, the criteria for various substances are not expressed in terms of concentration values, but as “use in the production not allowed”.

Threshold values stipulated in the various schemes vary widely. In most cases, the lowest values are found in the SG and Öko-Tex schemes.

Generally speaking, the limits are no stricter than the corresponding values found in official regulations. In many cases, values at or near the detection limit have been set as limits.

9. Conclusions and recommendations

1. Given the inevitable demand for and development towards a sustainable community in a globalised world as a consequence of greater population growth and increasing consumer awareness world-wide, environmental requirements and regulations are here to stay.

2. However, it is hardly possible to predict in detail the consequences of this trend. In all probability, government and other mandatory regulations will intensify. The future of all voluntary schemes is determined, in the last resort, by the attitude of the final consumers. The ultimate question is whether a sufficient number of consumers are willing to pay higher prices for products declared ecologically and ethically sound. Experience in Western Europe to date shows that some (and not just a few) are so inclined, whereas others are not.

3. As for the future, a qualified guess would be that environmental and social requirements set by large, mostly multinational companies are going to gain in importance. Bogus labelling schemes (using such terms as “nature”) will disappear.

In all likelihood, not all the ecolabelling schemes used at present will survive. Locally or nationally based schemes have failed to secure broad acceptance and internationally based schemes will gain ground at the expense of more local schemes.

4. Third-party verification, to the extent that it is part of most current schemes, is necessary in order to achieve and maintain credibility.
5. An international ecolabelling scheme for leather and leather products conforming to ISO standards and WTO rules would be of great benefit to the leather industry. An international label would be most useful from the standpoint of exports, whereas a national label scheme may be helpful when dealing with local consumers and coping with local environmental pressure.

6. It is important that the leather industry exert to the greatest possible degree influence on environmental developments of relevance to the industry, such as definition of criteria in ecolabelling schemes or value-choices in LCAs. For example, of immediate importance is the chrome issue or an effective response to claims being made by such organisations as PETA. Tasks such as these can only be effectively performed on the basis of close international co-ordination within the leather industry. International organisations, such as ICT or IULTCS, will have an important role to play in this regard.

7. Environmental demands are thrust upon the leather industry from without. They represent a challenge: a challenge that will undoubtedly be met.

   It is important to realise and take advantage of the possibilities these demands open up:

   Production of "ecological" leather and the implementation of a reliable environmental management system are useful marketing assets, including the maintenance of a positive corporate image.

   Competent environmental management goes hand in hand with competent quality management. Both presuppose a high level of production control.

   Environmental management systems facilitate relations with environmental authorities, thus saving money and eschewing problems.

8. In many cases, for example in a tannery cluster, it is useful for a group of tanneries to employ jointly an environmental manager or consultant.
References

2. K. Kolomaznik: Communication, IUE Commission Meeting, Barcelona, April 2000


### ECOLABELLING SCHEMES FOR LEATHER AND LEATHER PRODUCTS

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Organisation</th>
<th>Name</th>
<th>Most recent version</th>
<th>Products</th>
<th>Annex No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International</td>
<td>International Council of Tanners</td>
<td>Eco-Tox Label</td>
<td>1996</td>
<td>Leather</td>
<td>III</td>
</tr>
<tr>
<td>2</td>
<td>Indonesia</td>
<td>BAPEDAL (Indonesian EPA)</td>
<td></td>
<td>1996</td>
<td>Sheep and goat skin, garment leather</td>
<td>IV</td>
</tr>
<tr>
<td>3</td>
<td>Germany</td>
<td>1) SG (Schadstoffgeprüft)</td>
<td>Test Mark for Leather</td>
<td>1997</td>
<td>leather, fur, and leatherboard</td>
<td>V</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>Lederinstitut Gerberschule Reutlingen</td>
<td></td>
<td>1997</td>
<td>Leather and leather products</td>
<td>VI</td>
</tr>
<tr>
<td>5</td>
<td>International</td>
<td>European Union</td>
<td>Community Eco-label to Footwear</td>
<td>1999</td>
<td>Footwear</td>
<td>VII</td>
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<tr>
<td>6</td>
<td>Netherlands</td>
<td>Stichting Milieukeur</td>
<td>Certification Schedule Footwear</td>
<td>1999</td>
<td>Footwear</td>
<td>VIII</td>
</tr>
<tr>
<td>7</td>
<td>Netherlands</td>
<td>Stichting Milieukeur</td>
<td>Certification Schedule Furniture</td>
<td>1999</td>
<td>Furniture</td>
<td>IX</td>
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<tr>
<td>8</td>
<td>International</td>
<td>TESTEX²</td>
<td>Öko-Tex Standard 100</td>
<td>2000</td>
<td>Leather and leather products</td>
<td>X</td>
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<tr>
<td>9</td>
<td>Austria</td>
<td>Bundesministerium für Umwelt, Jugend, und Familie</td>
<td>Österreichisches Umweltzeichen</td>
<td>2000</td>
<td>Office furniture</td>
<td>XI</td>
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<td>10</td>
<td>Brazil</td>
<td>Associação Brasileira de Normas Técnicas</td>
<td>Marca ABNT – Qualidade Ambiental</td>
<td>2000</td>
<td>Footwear</td>
<td>XVIII</td>
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<tr>
<td>11</td>
<td>Catalonia</td>
<td>Departament de Medi Ambient</td>
<td>Distintiú de garantia de qualitat ambiental³</td>
<td>2000</td>
<td>Leather products</td>
<td>XII</td>
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<tr>
<td>12</td>
<td>India</td>
<td>Central Pollution Control Board (India)</td>
<td>Ecomark Criteria for Finished Leather</td>
<td>2000</td>
<td>Leather</td>
<td>XIII</td>
</tr>
</tbody>
</table>

1) Prüf- und Schuhforschungsinstitut Pirmasens; TÜV Rheinland Sicherheit und Umweltschutz GmbH; Institut Fresenius
2) International Association for Research and Testing in the Field of Textile Ecology
3) Emblem of guarantee of environmental quality
International Council of Tanners

ICT ECO-Tox Guideline No. 1/96

Environmental Impact and Safety Compliance Statement

This leather is manufactured from a renewable natural resource which is itself a by-product of food production. No cetacean derived products have been used in processing nor are the skins derived from any species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Annexes I and II. Effluent and wastes arising from the production of the leather have been treated and disposed of according to Law, relating to removal of organic matter, heavy metal and other toxic ions.

The producer has in place an Environmental Management and Audit Scheme which is assessed according to

The supplier advises that the undermentioned materials have not been used in the production of this leather, although they may be present in insignificant amounts arising from acknowledged trace contaminants of chemicals used in processing.

<table>
<thead>
<tr>
<th>Consumer Safety Factor</th>
<th>Absence determined by process or Quantity found by analysis</th>
<th>Limit for Insignificance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium based pigments</td>
<td>50mg/kg Total Cadmium</td>
<td></td>
</tr>
<tr>
<td>Soluble nickel salts</td>
<td>2.5mg/kg</td>
<td></td>
</tr>
<tr>
<td>Soluble hexavalent chromium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pentachlorophenol</td>
<td>5mg/kg</td>
<td></td>
</tr>
<tr>
<td>Compounds which release amines under reductive conditions</td>
<td>50mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

 Declaration issued by: _____________________________________________________________

 on behalf of: _____________________________________________________________

 Order reference: _____________________________________________________________

 Date: _______________________________________________________________________

 Test House providing analytical data: ____________________________________________

 (if applicable): ________________________________________________________________

(1) Insert name of country. 

(2) Insert name of scheme, if any, eg BS7750, or state if internal. 

(3) Tick if chemical not used in processing. 

(4) Recommended methods given overleaf. 

(5) As determined in Bundesgesetzblatt, Jahrgang 1994, Teil 1. (Germany). 

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P.T.O.
DECREE
DIRECTOR OF THE ENVIRONMENT IMPACT MANAGEMENT AGENCIES
Nr. : Kep-07 1996
on
THE APPOINTMENT OF THE INDONESIAN ECO-LABELLING EXPERTS COMMITTEE

THE TASKS :

a. Determine the products and/or services category types will be arranged in eco-labelling programmes on priority scale basis.
b. Formulate a general guide on ecolabel criteria for products and/or services.
c. Appoint a technical team whose tasks are preparing draft on products and/or services category ecolabel criteria as stated in item a.
d. Prepare and submit final draft on ecolabel criteria as stated in item c to the director of Environment Impact management Agencies or other officers in charge.
e. Prepare materials for discussions on the final draft of ecolabel criteria as stated in item d.
f. Provide suggestions/advice for the director of the Environment Impact Management Agencies for inputs received from all linkaged parties in ecolabel criteria determination.
g. Provide suggestions and proposals on institutional development, system, mechanism, and procedure of eco-labelling implementation for the director of Environment Impact management Agencies.
h. Prepare and submit reports on the task implementation periodically to the director of Environment Impact management agencies or other officers in charge.

[Signature] 03.12.96
### SHEEP AND GOAT SKIN GARMENT LEATHER

#### I. Environmental requirements:

<table>
<thead>
<tr>
<th>No.</th>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Materials used</td>
<td>Materials used are of skins produced by slaughtered sheep and goats except those of productive females.</td>
<td>Statements issued by producers and signed by General Manager and approved by the head of slaughter houses.</td>
</tr>
<tr>
<td>2.</td>
<td>Chemical use</td>
<td>Cr2O3 content minimum 2.5%; Oil or fat content max. 6-12%; pH 3.5-7.0; water content, etc.; PCP, heavy metals, azo dyes, formaldehyde are not allowed.</td>
<td>Statements issued by producers and signed by General Manager enclosed with product testing certificates issued by IRDLAI (conform SNI.06-0234-1989) and testing certificate using GC and ASS for hazardous metal substances, PCP and azo dyes.</td>
</tr>
<tr>
<td>3.</td>
<td>In water</td>
<td>Max. COD 300 mg/l; Max. BOD 150 mg/l; Max. fat 5 mg/l; Max. NH3 10 mg/l; Max. S 1 mg/l; Max. TSS 150 mg/l; Max. Cr. 2 mg/l; Max. pH 6-9</td>
<td>Statements issued by producers and signed by General Manager enclosed with effluent testing certificates issued by IRDLAI or Environment Health Technical Institute (ETIKL) conforming with Zainery Waste Water Quality Standards: Kep. 03/Men.KLH/II/1991</td>
</tr>
<tr>
<td>4.</td>
<td>Air Emission</td>
<td>EI23 = 0.03 ppm; Ammonia/NH3 = 2.0 ppm; S2 = 0.10 ppm; Dust = 0.26 mg/m3; Noise = &lt; 70</td>
<td>Statements issued by producers and signed by General Manager enclosed with testing certificates issued by IRDLAI conforming with requirement of: Kep. 02/Men.KLH/II/1988</td>
</tr>
</tbody>
</table>
II. Functional requirements:

<table>
<thead>
<tr>
<th>No.</th>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Visually inspected:</td>
<td></td>
<td>Statements issued by producers and signed by General Manager enclosed with product testing certificates issued by IRDLAI (conforms with SNI 06-0234-1989)</td>
</tr>
<tr>
<td></td>
<td>Grain side</td>
<td>Not loose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leather performance</td>
<td>Compact, plastic and soft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finishes</td>
<td>Even and bright</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tear resistance</td>
<td>strong/good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elasticity</td>
<td>Elastic</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Physical:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thickness</td>
<td>0.8-1.7 mm (for casual shoes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4-1.7 mm (for daily purpose-army shoes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.6-2.0 mm (for on duty purpose-army shoes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tanning</td>
<td>Properly tanned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rub fastness: dry</td>
<td>unfade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>little fade is allowed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>wet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tensile strength</td>
<td>Min. 225 kgs/cm²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tensile stretch</td>
<td>Max. 70%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>Min. 20,000 times</td>
<td></td>
</tr>
<tr>
<td></td>
<td>water absorption</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. 2 hours</td>
<td>Max. 80%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. 24 hours</td>
<td>Max. 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bursting resistance</td>
<td>Max. 600 psi</td>
<td></td>
</tr>
</tbody>
</table>
IV. Additional Requirements.

<table>
<thead>
<tr>
<th>No.</th>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Label</td>
<td>The environmental logo is not introduced except any regulational requirements available.</td>
<td>Observable</td>
</tr>
<tr>
<td>2.</td>
<td>Note pads</td>
<td>Note pads should be attached.</td>
<td>Observable</td>
</tr>
<tr>
<td>3.</td>
<td>Packing</td>
<td>It is suggested that consumer packing is made from materials conforming environmental requirements those are recyclable papers or other materials easy to be recycled.</td>
<td>Statement issued by producers that packing is signed by the general manager.</td>
</tr>
</tbody>
</table>
Be on the safe side –
with shoes, leather goods,
leather clothing and
leather products

* This mark has been registered as a service mark with the German Patent Office

SCHADSTOFFGEPRÜFT = tested for harmful substances
Responsibility

Natural materials such as leather and fur have to be tanned and dyed to achieve the desired characteristics. Chemicals are also used for conservation purposes while the materials are in storage or in transit.

Chemicals are indispensable for the production of leather goods – today and in the future.

In order to protect consumers, chemical substances may only be used as long as they do not constitute any danger to health.

Consequently, it is extremely important to check that they are used correctly during production, that the auxiliaries are suitable and that the materials contain only a low quantity of harmful substances or, even better, none at all.

This is the only way to obtain products which are not harmful to health.

Health

Responsible manufacturers and retailers of shoes, leather goods, leather clothing and the materials required for production know the danger and act accordingly.

To document that their products have been manufactured with exceptional care, they label them with the SG mark which verifies that the goods have been “tested for harmful substances”.

This mark is awarded only to products which meet the stringent limits and parameters for harmful substances set forth in the SG catalogue of test criteria. All SG limits are much lower than the statutory specifications.

The SG mark confirms that there is no danger to health according to present-day knowledge.

And this gives the consumer security.

SG criteria for testing
As at July 7, 1997

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Leather, fur</th>
<th>Textiles</th>
<th>Leather fibre material</th>
<th>Paper, wood, cellulose fibre, cork</th>
<th>Adhesives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Limit values</td>
<td>Limit values</td>
<td>Limit values</td>
<td>Limit values</td>
<td>Limit values</td>
</tr>
<tr>
<td>Colour fastness</td>
<td>3 min.</td>
<td>4 min.</td>
<td>3.5 - 7.0</td>
<td>3.5 - 7.0</td>
<td>3 - 4 min.</td>
</tr>
<tr>
<td>pH of aqueous extract</td>
<td>3.5 - 7.0 (± 0.5)</td>
<td>4.5 - 7.5</td>
<td>0.5- 8</td>
<td>4.5 - 7.5</td>
<td>3 - 4 min.</td>
</tr>
<tr>
<td>Formaldehyde (releaseable under test conditions)</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
</tr>
<tr>
<td>Glycol, Glutaraldehyde each</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
<td>0.15/50 mg/kg</td>
</tr>
<tr>
<td>Pentachlorophenol (PCP)</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Dieldrinated phenoles (TI, Sum other than PCP)</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Pesticides (Wood preservatives)</td>
<td>0.1 mg/kg/1/</td>
<td>not detectable</td>
<td>not detectable</td>
<td>not detectable</td>
<td>not detectable</td>
</tr>
<tr>
<td>Forbiden ink dyes</td>
<td>not detectable</td>
<td>not detectable</td>
<td>not detectable</td>
<td>not detectable</td>
<td>not detectable</td>
</tr>
<tr>
<td>Allergizing disperse dyes</td>
<td>Chromium VI, soluble</td>
<td>200/50 mg/kg</td>
<td>200/50 mg/kg</td>
<td>200/50 mg/kg</td>
<td>200/50 mg/kg</td>
</tr>
<tr>
<td>Soluble mineral tanning agents, soluble total Al, Cr, Ti, Zr content</td>
<td>1.5%</td>
<td>5% / 1.5%</td>
<td>5% / 1.5%</td>
<td>5% / 1.5%</td>
<td>5% / 1.5%</td>
</tr>
<tr>
<td>Substances extractable by washing out</td>
<td>Upper leather/ lining leather/ vache leather/ sole</td>
<td>15% / 5%</td>
<td>15% / 5%</td>
<td>15% / 5%</td>
<td>15% / 5%</td>
</tr>
<tr>
<td>Other heavy metals (soluble)</td>
<td>Antimony</td>
<td>2.0 mg/kg</td>
<td>2.0 mg/kg</td>
<td>2.0 mg/kg</td>
<td>2.0 mg/kg</td>
</tr>
<tr>
<td>Arsenic</td>
<td>0.2 mg/kg</td>
<td>0.2 mg/kg</td>
<td>0.2 mg/kg</td>
<td>0.2 mg/kg</td>
<td>0.2 mg/kg</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Chromium, total content</td>
<td>20 mg/kg</td>
<td>20 mg/kg</td>
<td>20 mg/kg</td>
<td>20 mg/kg</td>
<td>20 mg/kg</td>
</tr>
<tr>
<td>Cobalt</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
</tr>
<tr>
<td>Copper</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
</tr>
<tr>
<td>Lead</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
<td>0.0 mg/kg</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.02 mg/kg</td>
<td>0.02 mg/kg</td>
<td>0.02 mg/kg</td>
<td>0.02 mg/kg</td>
<td>0.02 mg/kg</td>
</tr>
<tr>
<td>Nickel</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
<td>4.0 mg/kg</td>
</tr>
<tr>
<td>Tin</td>
<td>1.0 mg/kg</td>
<td>1.0 mg/kg</td>
<td>1.0 mg/kg</td>
<td>1.0 mg/kg</td>
<td>1.0 mg/kg</td>
</tr>
</tbody>
</table>

Methods/standards applied

- SNV 195 65 t
- DIN 54070 / DIN 53339
- textiles: ISO 3071
- leather: DIN 53112
- LAW 112, leather: DIN 53315
- DIN 53115
- DIN 53313
- DIN 53313
- extraction: DIN 38407-F-2 or HPLC
- textiles: section 29 LMBG 82 02-2
- leather: section 35 LMBG 82 02-3
- extraction TLC
- DIN 53314
- extraction, determination by ICP-OES, AAS
- DIN 53307

Not detectable
Dear Sirs,

The Lederinstitut Gerberschule Reutlingen (LGR) grants a certificate in conjunction with a test mark for leather which has been produced in an environmentally acceptable way and tested for hazardous substances as well as for articles which have been made from these leathers.

The foundations for this constitute legally binding definitions by the leather manufacturer and initial sample testing by the materials testing department of the LGR.

The management of the test marks by means of an appropriate application and random sample test, which are at the discretion of the test place, can be extended over the initial period of operation of one year by a further six months. The LGR reserves the right to obtain products from the tested leathers in the market place and conduct random tests on them.

An additional element of the process may be an audit of the leather producing company by LGR staff. In this context both the requirements of the leather manufacturing and the environmental aspects will be tested. This audit is not a compulsory requirement in the acquisition of the test certificate. It should however be aspired to by the certificate holders.

The following declarations must be handed over by the leather manufacturer with the application and must be confirmed by the legally binding signature of the authorised representative.
1. Information on the Leather Production

This information of the leather production represents legally binding declarations by the leather manufacturer, which may only be given by the manufacturers themselves and cannot be delegated. The information assists the LGR in the decision to issue the certificate and the test mark. The examination of the leather in question can only be undertaken after delivery of the completed application and compliance with all points of the requirements.

The LGR pledges the confidential treatment of the manufacturer and all the information provided in the application.

1.1 Leather Manufacturer with Full Company Address

(Should pre-finished interim products like wet-blue or crust leather be manufactured elsewhere, then the finished leather manufacturer must have the certificates for these products which must be attached to the application).
1.2 Name and Address of the Authorised Representative

1.3 Leather type, Description or Brand Name relating to manufacture or brought about by use

1.3.1 Leather Colour Description used: (Main, primary and secondary colours descriptions)
1.3.1.1 Main Leather Colour: (for overall testing)

1.3.1.2 Primary Leather Colours: (under this point 10 primary leather colours may be given which are also subject to the additional test in point 2.1.3.)

1.3.2 Perceived use of Leather: (e.g. bags, shoe upper leather etc)

1.3.3 Animal and Leather Type: (bovine aniline leather, goat suede etc)
1.4 Information on the Fulfilment of Environmental Requirements in the Country of Manufacture

1.4.1 Sulphide removal

Requirements in the country of manufacture in mg H₂S/l: _________
respectively in mg S²⁻/l: _________ or in freight of: _________

Total Effluent: □ Partial Flow: □

The fulfilment of this requirement must be substantiated by the forwarding of at least two inspection certificates of the last six months prior to Application (with copies of Analysis Statements for the application). yes: □

1.4.2 Minimisation of Chrome Emission

Requirements in the country of manufacture in mg Cr/l _________
respectively in freight of: _________

Total Effluent: □ Partial Flow: □

The fulfilment of this requirement must be substantiated by the forwarding of at least two inspection certificates of the last six months prior to Application (with copies of Analysis Statements for the application). yes: □

(Only to be completed when using Chrome-Ill-salts in the wet processing.)

1.4.3 The total effluent from the leather manufacturing process is mechanically: yes □ and biologically treated: yes □

This information is valid for direct discharge: □

and also for indirect discharge: □ of which the effluent is treated, e. g. in a municipal treatment plant mechanically and biologically.

The stated compliance with the environmental requirements can be verified at any time by an authorised member of staff of the LGR in the company. The compliance with the environmental requirements of the country of manufacture must be substantiated for six months prior to delivery of the application by provision on request of the inspection
analysis. The ongoing fulfilment of the environmental requirements must be substantiated on request through regular verification for the period of the validity of the certificate by means of analysis reports.

1.5 For materials which have been added and remain in the leather, the safety data sheets and supplier product specifications are available, from which the following required data regarding the product content are evident.

(The safety data sheets must be provided by the leather manufacturer with the application. Duplicates of the safety data sheets must be kept by the leather manufacturer with the test number for a period of 3 years. They may be examined by the test place)

1.5.1 Tanning/Retanning agents

<table>
<thead>
<tr>
<th></th>
<th>yes □</th>
<th>no □</th>
</tr>
</thead>
</table>

1.5.2 Dyestuffs: (Excluding Azo dyes, which in the 5th directive to the modification of the Commodities Act of the Federal Republic of Germany can be split into named amines.)

<table>
<thead>
<tr>
<th></th>
<th>yes □</th>
<th>no □</th>
</tr>
</thead>
</table>

1.5.3 Fatty materials: (Absorbable organic halogen compounds must not be included (AOX).)

<table>
<thead>
<tr>
<th></th>
<th>yes □</th>
<th>no □</th>
</tr>
</thead>
</table>

1.5.4 Finishing materials: (Only waterbased finishing products may be used. Use of e.g. top coats with organic solvents must guarantee compliance with the legal requirements.)

<table>
<thead>
<tr>
<th></th>
<th>yes □</th>
<th>no □</th>
</tr>
</thead>
</table>

1.5.5 Bactericides and fungicides: (Products containing PCP must not be used)

<table>
<thead>
<tr>
<th></th>
<th>yes □</th>
<th>no □</th>
</tr>
</thead>
</table>

The active agents of the applied products must be indicated as follows:
The leather manufacturer is liable by means of this legally binding declaration for the accuracy and the observance of the information provided in the application. Any changes to the manufacturing process which infringe upon the details given must be notified to the test centre immediately. Only they may decide whether the certificate with the test mark can be maintained. Should changes occur with regard to the named authorised representative then this must be advised together with the signature of the new authorised representative to the LGR.

Should it be established by the LGR through investigation that the observance of the basis on which the granting of the certificate was made is no longer applicable then a warning will be issued by the LGR and in the case of a failure to comply the authorised use of the certificate can be withdrawn.

Tests leading to the granting of the certificate can only be carried out on new unused leather, they cannot be undertaken on leathers taken from a user situation.

As the LGR has no influence on the sampling and the continuity of production, the certificate and test mark with reference to the leather sample testing only relate to those samples submitted and examined. The guarantee by the test centre for the finished lots according to the declarations is therefore excluded.

The following signature will be provided by the authorised representative:

Name and function of the authorised representative:

Place and date:
2.1.1 Chrome VI Compounds
below the detection limit of the test method DIN 53 314

2.1.2 Pentachlorophenol (PCP)
below the prescribed maximum levels of 5 mg/kg (chemical prohibition directive of the Federal Republic of Germany 14 October 1993)

2.1.3 Azo Dyestuffs which can be split off in cancer producing amines
below the detection limit of the test method DIN 53 316 E

2.1.4 Free and by partial hydrolysis separable formaldehyde
not above 200 mg/kg

These tests can, according to need and as decided by the test centre, be enlarged upon or extended by means of the following examinations:

2.1.5 Smell test
not below level 3

2.1.6 Qualitative test on free sulphur
negative

2.2 Designation of the analysis processes used:

(Where the test methods are still under development they will be used by the test centre in conformity with the latest position. This will be guaranteed by collaboration with the relevant national and international governing bodies.)
2.2 Designation of the analysis processes used:

(Where the test methods are still under development they will be used by the test centre in conformity with the latest position. This will be guaranteed by collaboration with the relevant national and international governing bodies.)

Chrome VI compounds DIN 53 314
Pentachlorophenol content - DIN 53 313
Establishment of Arylamine DC / HPLC / GC-MS - DIN 53 316 E
Formaldehyde content, (free and by partial hydrolysis separable) dependent upon B 82.02 - Official Collection of Examination processes according to Section 35 LMBG.

2.3 The following quality tests are suggested (where required they can be replaced or extended by other tests):

2.3.1 Test for Rub fastness for leather colours and finishes DIN 53 339
The requirements will be established according to the type of leather

2.3.2 Determination of the pH value of an aqueous leather extract DIN 53 312
minimum 3.5 (a limitation of the pH value to the alkali zone will only ensue if required)
3 Testing fees

3.1 For basic testing of one main leather colour with test certificate and specification of test number ........................................... 2.300,— DM

3.2 For every additional leather colour according to 1.3.1.2 ..........300,— DM

3.3 For auditing at the request of the applying company or test certificate holder:
Travelling expenses (using the most appropriate, fastest means of transport),
Remuneration for time spent in compilation of the audit certificate ........................................... (daily rate 700,— DM)

3.4 For extension of the overall test certificate on application after expiry of 1 year ........................................... 500,— DM

3.4.1 In case of nonconformance discovered during the course of random sample inspections for 3.4, incurred test expenses as well as costs for any necessary issue of reminders shall be charged in addition. A new leather of the colour designation in question must be submitted, for which repeat testing expenses must be charged accordingly.

3.5 If nonconformance to basic requirements is discovered during the course of basic random sampling inspections, testing and reminder expenses will be charged on the basis of the inspections forming the subject of the objection.
New leathers must be provided for the nonconforming samples taken from the random sample inspection. The inspection costs incurred here shall also be charged.

3.6 Should it become necessary to withdraw a test certificate, administrational costs shall be charged at ........................................... 300,— DM
The Lederinstitut Gerberschule Reutlingen hereby grants the company:

use of the authorisation for the leather which under the following description or trade mark in the inspection application:

and the colour descriptions:

for the designated production for one year from the date of granting the application of this

Certificate and Test Mark

with the test number:

The certificate and test number can also be used for objects which have been manufactured either in total or to the greater extent (min of 80% of the leather surface area) from the leather tested. Labelling of finished items where other leather which has not been tested is also included must feature the reference to the leather which can display the test mark and test number in a clear and unmistakable manner.

The test mark must exactly represent the points given by the test centre in form and text and, like the test number, be clearly recognisable and legible. The required minimum size must be adhered to. No particular colour specification is made.

In the case of an approved extension of the application, no change of test mark and number will apply.

Date

Lederinstitut Gerberschule Reutlingen

Dr.-Ing. H.-P. Germann  Dipl. Chem. J. Lange
Director                  Head of material testing
COMMISSION DECISION

of 17 February 1999

establishing the ecological criteria for the award of the Community eco-label to footwear

(notified under document number C(1999) 340)

(Text with EEA relevance)

(1999/179/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 880/92 of 23 March 1992 on a Community eco-label award scheme (1), and in particular the second subparagraph of Article 5(1) thereof;

Whereas the first subparagraph of Article 5(1) of Regulation (EEC) No 880/92 provides that the conditions for the award of the Community eco-label shall be defined by product group;

Whereas Article 10(2) of Regulation (EEC) No 880/92 states that the environmental performance of a product shall be assessed by reference to the specific criteria for product groups;

Whereas in accordance with Article 6 of Regulation (EEC) No 880/92, the Commission has consulted the principal interest groups within a consultation forum;

Whereas the measures set out in this Decision are in accordance with the opinion of the committee set up pursuant to Article 7 of Regulation (EEC) No 880/92,

HAS ADOPTED THIS DECISION:

Article 1

The product group 'footwear' (hereinafter referred to as 'the product group') shall mean:

'All articles of clothing designed to protect or cover the foot, with a fixed outer sole which comes into contact with the ground'.

Article 2

The environmental performance and the fitness for use of the product group shall be assessed by reference to the specific ecological and fitness for use criteria set out in the Annex.

Article 3

The product group definition and the specific ecological criteria for the product group shall be valid for a period of three years from the first day of the month following the adoption of the criteria.

Article 4

For administrative purposes the product group code No assigned to this product group shall be '017'.

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 17 February 1999.

For the Commission

Ritt Bjerregaard

Member of the Commission

ANNEX

In order to qualify for an eco-label, the product as defined in Article 1 must comply with the criteria of this Annex, with tests carried out on application as indicated in the criteria. Where appropriate, other test methods may be used if their equivalence is accepted by the competent body assessing the application. Where no tests are mentioned, or are mentioned as being for use in verification or monitoring, competent bodies should rely as appropriate on declarations and documentation provided by the applicant and/or independent verifications.

The competent bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria in this Annex.

These criteria aim in particular at limiting the levels of toxic residues and the emissions of volatile organic compounds, and at promoting a more durable product.

The functional unit is one pair of shoes. Requirements are based on shoe size 40 Paris point. For children's shoes the requirements apply for a size 32 Paris point (or the largest size in the case of maximum sizes smaller than 32 Paris point).

ECOLOGICAL CRITERIA

1. Residues in the final product

(a) The average concentration of residues in the final product shall not exceed the following:

- chromium (VI): 10 ppm,
- arsenic: 10 ppm,
- cadmium: 10 ppm,
- lead: 10 ppm.

Test methods (test report required on application)

- Cr (VI): standard EN 420 (note that difficulties in measurement due to interferences may be encountered when analysing certain coloured leathers),
- Cd, Pb, As: analyses by atomic absorption spectroscopy (AAS) following digestion by strong acid.

Sample preparation:

(1) Separate the upper components from the bottom components,
(2) grind completely the upper components and the bottom components, keeping both separate,
(3) analyse a sample of each of these two preparations,
(4) the concentrations of the above substances in each of these two samples shall not exceed the above values.

(b) The amount of free and partially hydrolysable formaldehyde of the textile components of the footwear shall not exceed 75 ppm and of the leather components shall not exceed 150 ppm.

Test methods (test report required on application)

- textiles: Japan Law 112, SFS 4996 or Preniso 14184-1
- leather: IUC 94.50001 a or DIN 53315

2. Emissions from the production of material

The waste water from leather tanning sites shall be treated, either by an in-house or municipal waste water treatment plant/facility, so as to achieve a reduction of the COD content of at least 75 %.

Test method (test report and appropriate complementary data required on application)

COD: ISO 6060 water quality, determination of chemical oxygen demand
3. Use of harmful substances (up until purchase)

(a) Pentachlorphenol (PCP) and its salts and esters shall not be used.

*Test method (for purposes of verification)*

- textiles: gas chromatography (GC) with electron capture detection (ECD), limit value 0.05 ppm
- leather: analyses should be carried out by DIN 53313 with
  - (a) mass spectrometry (MS)
  - (b) electron capture detection (ECD); limit value 5 ppm.

(b) No azo dyes shall be used that may cleave to any of the following aromatic amines:

4-aminodiphenyl  (92-67-1)
benzidine     (92-87-5)
4-chloro-o-toluidine   (93-69-2)
2-naphthylamine  (91-59-8)
o-aminoazotoluene  (97-56-3)
2-amino-4-nitrotoluene  (99-55-8)
p-chloroaniline   (106-47-8)
2,4-diaminoanisol (615-05-4)
4,4'-diaminodiphenylmethane  (101-77-9)
3,3'-dichlorobenzidine   (91-94-1)
3,3'-dimethoxybenzidine  (119-90-4)
3,3'-dimethylbenzidine  (119-93-7)
3,3'-dimethyl-4,4'-diaminodiphenylmethane  (838-88-0)
p-cresidine        (120-71-8)
4,4'-methylene-bis-(2-chloraniline)  (101-14-4)
4,4'-oxydianiline   (101-80-4)
4,4'-thiodianiline  (139-65-1)
o-toluidine      (95-53-4)
2,4-diaminotoluene  (95-80-7)
2,4,5-trimethylaniline  (137-17-7)
4-aminoazobenzene (60-09-3)
o-anisidine      (90-04-0)

*Test method (for purposes of verification)*

- textiles: German method B-82.02 or equivalent, limit 30 ppm. (Note that false positives are possible for 4-aminoazobenzene and confirmation is therefore recommended).
- leather: standard DIN 53316, limit 30 ppm. (Note that false positives are possible for 4-aminoazobenzene, 4-aminodiphenyl and 2-naphthylamine and confirmation is therefore recommended).

4. Use of volatile organic compounds (VOCs) during final assembly of shoes

The total use of VOCs during final footwear production, for the following categories, shall not exceed on average:

- general sports, children, occupational, men’s town, specialist cold: 30 gr VOC/pair,
- casual, women’s town: 25 gr VOC/pair,
- fashion, infants, indoor: 20 gr VOC/pair.

VOCs are any organic compound having at 293.15 K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.
The total use of VOCs during final shoe production shall be calculated as follows:

\[ M_{\text{VOCtot}} = \Sigma (M_{\text{adhiv}} \times C_{\text{VOCadh}}) + \Sigma (A_{\text{finish}} \times M_{\text{finish}} \times C_{\text{VOCfinish}}) \]

Where:

- \( M_{\text{VOCtot}} \) = the total use of VOCs in the production of the pair of shoes (g).
- \( M_{\text{adhiv}} \) = the amount of adhesives (1) applied to the pair of shoes considered (g).
- \( C_{\text{VOCadh}} \) = the VOC content of the adhesives applied (index: g VOCs per g adhesive).
- \( A_{\text{finish}} \) = the area of the pair of shoes onto which the finish (2) is applied (m²).
- \( M_{\text{finish}} \) = the amount of finish applied per metre square (g/m²).
- \( C_{\text{VOCfinish}} \) = the VOC content of the finishes applied (index: g VOCs per g finish).

(1) only adhesives with solvents have to be taken into account. Water based and hot melt adhesives are exempted;
(2) finishes: base coats, top coats and repair coats, (upper) finish layers of leather, synthetics upper, lining, cotton, etc. only when based on solvents.

Registration of purchased leather, adhesives, finishes and production of footwear over at least the last six months is required.

5. Electric components

The footwear shall not contain any electric or electronic components.

6. Packaging of the final product

(a) Where cardboard boxes are used for the final packaging of footwear, they shall be made from a minimum of 80 % recycled material.
(b) Where plastic bags are used for the final packaging of footwear, they shall be made from recycled material.

CONSUMER INFORMATION

7. User instructions

The following information shall be supplied with the product:

- these shoes have been treated to improve their water resistance. They do not require further treatment. (This criterion is applicable only to footwear that has been water-resistant treated),
- where possible repair your footwear rather than throw them away. This is less damaging to the environment.

FITNESS FOR USE CRITERIA

8. Parameters contributing to durability

Occupational and safety footwear must carry the CE mark (in accordance with Council Directive 89/686/EEC (1) on the approximation of the laws of the Member States relating to personal protective equipment). All other footwear must meet the requirements indicated in the table below (test report required on application). The parameters referred to are measured according to the following test methods:

- uppers flex resistance: Document CEN/TC 309 N 113
- uppers tear strength: Document CEN/TC 309 N 115
- uppers bondability: EN 1392
- outsoles flex resistance: prEN 12769
- outsoles abrasion resistance: prEN 12770
- outsoles bondability: EN 1392
- insoles water absorption and desorption: prEN 12746
- uppers water resistance: Document CEN/TC 309 N 121
- outsoles water resistance: prEN 13072.

## Parameters contributing to durability

<table>
<thead>
<tr>
<th></th>
<th>General sports</th>
<th>Children's Casual</th>
<th>Men's town</th>
<th>Specialist cold</th>
<th>Women's town</th>
<th>Fashion</th>
<th>Infants</th>
<th>Indoor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uppers flex resistance:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(kc without visible damage)</td>
<td>Dry = 100</td>
<td>Dry = 100</td>
<td>Dry = 80</td>
<td>Dry = 100</td>
<td>Dry = 50</td>
<td>Dry = 15</td>
<td>Dry = 15</td>
<td>Dry = 15</td>
</tr>
<tr>
<td>Wet = 20</td>
<td>Wet = 20</td>
<td>Wet = 20</td>
<td>Wet = 20</td>
<td>Wet = 20</td>
<td>Wet = 10</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Uppers tear strength:</strong></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>(Average tear force, N)</td>
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<td></td>
</tr>
<tr>
<td>— leather</td>
<td>80</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>— other materials</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td><strong>Uppers bondability:</strong></td>
<td>4.0</td>
<td>4.0</td>
<td>3.0</td>
<td>3.5</td>
<td>4.0</td>
<td>3.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Outsoles flex resistance:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut growth (mm)</td>
<td>≤ 4</td>
<td>≤ 4</td>
<td>≤ 5</td>
<td>≤ 6</td>
<td>≤ 8</td>
<td>≤ 12</td>
<td>≤ 12</td>
<td>≤ 12</td>
</tr>
<tr>
<td>Nsc = no spontaneous crack</td>
<td>nsc</td>
<td>nsc</td>
<td>nsc</td>
<td>nsc</td>
<td>nsc at -10°C</td>
<td>nsc</td>
<td>nsc</td>
<td></td>
</tr>
<tr>
<td><strong>Outsoles abrasion resistance:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D 0.9 g/cm³ (mm²)</td>
<td>≤ 200</td>
<td>≤ 250</td>
<td>≤ 200</td>
<td>≤ 350</td>
<td>≤ 400</td>
<td>≤ 450</td>
<td>≤ 400</td>
<td>≤ 450</td>
</tr>
<tr>
<td>D &lt; 0.9 g/cm³ (mg)</td>
<td>≤ 150</td>
<td>≤ 170</td>
<td>≤ 150</td>
<td>≤ 200</td>
<td>≤ 300</td>
<td>≤ 250</td>
<td>≤ 250</td>
<td>≤ 300</td>
</tr>
<tr>
<td><strong>Outsoles bondability:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N/mm)</td>
<td>4.0</td>
<td>4.0</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>D 0.9 g/cm³</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>2.5</td>
<td>3.0</td>
<td>2.5</td>
</tr>
<tr>
<td>D &lt; 0.9 g/cm³</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Insoles water absorption and desorption: abs (mg/cm²)</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>des (%)</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

In addition, specialist cold footwear shall meet the following requirements for water resistance:

— uppers: penetration time 240 min, absorption < 25%.
— outsoles: penetration time 60 min and after two hours water absorption < 20% (highly water resistant — applicable only to certain soiling material).
CERTIFICATION SCHEDULE

FOOTWEAR

Effective from: 1 april 1999
Exempted for use until 1 april 2002
Established by: Stichting MilieuKeur
Code: SL 5
Serial number MK11

This certification schedule comprises 15 pages (excluding cover sheet)

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1. **Product group**

This certification schedule pertains to the product group footwear.

This product group covers "all articles of clothing intended to protect or cover the foot with a sole that comes into contact with the ground".

1. For Milieukeur to be applied to footwear, at least 95% of the weight must consist of or more than 90% of the surface of the leg material specified in appendix 1. The requirements in this certification schedule apply provided that the materials referred to in appendix 1 account for more than 5% of the weight or more than 10% of the surface of the upper material of the footwear.

The requirements are set for shoe size 40. If this "test model" meets the criteria, then the entire series complies. For children's shoes the requirements are for shoe size 32.

Footwear as defined by this certification schedule includes:

- shoes with a flat or high heel for normal use indoors or outdoors;
- sandals with or without heel strap;
- dancing shoes;
- sport shoes with no special hardware (e.g. cleats);
- shoes made from one piece of, for example, rubber or plastic;
- safety footwear for which the guidelines EN 344/345/346 and/or 89/686/EEG are applicable.

The product group is divided into three categories:
Category 1 (intense use): Men's (daily use), sport, children's (daily use), industrial (safety) footwear.
Category 2 (average use): Ladies' (daily use), sandals, men's and children's (high fashion for special occasions), specific season-related footwear.
Category 3 (light use): Ladies' (high fashion for special occasions), slippers and footwear for around the house.

Not applicable are shoes to which specific hardware has been added for the practice of certain sports, such as spikes, clamps, skate blades, football boots (studs), ski boots, etc. Among other reasons, these fail to meet the requirement which reads: "with a sole that comes into contact with the ground".
2. **Categorisation**

For the awarding of a Milieukeur, shoes that differ from each other in only a few components can be covered by one certificate. The supplier is required to clearly indicate the variations in the description to be attached to the application for certification.

The certification institute evaluates whether or not the required condition of type-similarity has been met and on which aspects extra testing will be necessary.

If a group is expanded with new designs, the same procedure has to be followed.

The term variations also means changing the supplier, e.g. obtaining leather from a different tannery.

3. **Environmental requirements**

3.1 **Raw materials**

<table>
<thead>
<tr>
<th>Environmental requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1 The total energy content including energy used during manufacturing (wrenching, heat-setting, soling and finishing), may not exceed the following standards. Category I: 95 MJ/pair (not applicable for safety footwear and children’s footwear) Category I: 75 MJ/pair (not applicable for children’s footwear) Category 3: 60 MJ/pair Safety footwear: 150 MJ/pair Children’s footwear size 32: 60 MJ/pair</td>
<td>Measurement report, containing the masses of the different materials and a calculation of the total energy content of the footwear. For determining the energy content of the materials, the table in appendix I must be used. To determine the energy used during production: 1 measured average energy use per pair during the entire manufacturing process (manufacturing and drying machines) 2 capacity of the machines (manufacturer’s details) multiplied by the measured average service throughput time of a pair of shoes Purchased electrically = 9.5 MJ/kWh Natural gas = 50.4 MJ/kg</td>
</tr>
</tbody>
</table>

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### Environmental requirement

#### 3.1.2
To the materials may not be added:
- halogenated fire retardants;
- colouring agents with an LD50 (rat, oral)-value smaller than 2000 mg/kg;
- colouring agents with an LC50 (fish, 96h) or an EC50 (daphnia, 48h) or an IC50 (algae, 72h) smaller than 100 mg/l;
- colouring agents for which the LC and the LD value is unknown;
- benzidine analogous colouring agents;
- additives for which the arsenic, cadmium, chrome (except Cr III-tanned leather), copper-, mercury-, lead and zinc-concentrations exceed the BAGA limit;
- chlorophenols appearing on the "black list" for substances.
- chlorous Volatile Organic Substances

#### Method
- Declaration of the supplier and/or manufacturer, signed by the (managing) director + list of colouring agents used with LC50 and/or LD50 values and references.
- For the toxicity values, the International Substance Information System (ISIS) is to be consulted.

### 3.2 Leather (all types)

#### Environmental requirement

#### 3.2.1
The chrome release into water may not exceed 120 mg/pair during the entire chain. For all of the processed leather, no more than 0.33 Cr/kg leather may be emitted during the tanning process (this is equal to a Cr emission of 2 ppm at a water consumption of 40 m³/ton of hides).

#### Method
- Declaration of the suppliers, signed by the (managing) director (Cr emissions can be analyzed according to NEN 6444 or NEN 6448).

#### 3.2.2
The leather processed in the shoe must be treated with finishes with a water base, unless the manufacturer can prove that other VOS-reducing measures restrict VOS emissions during finishing. Use of VOS must be restricted so that the total VOS use does not exceed the 3.6.1 requirement.

#### Method
- Declaration of the shoe manufacturer and/or tanner, signed by the (managing) director.

#### 3.2.3
During the entire tanning process of the leather used in the footwear, all of the waste water must be dumped via a (communal) biological water purification installation.

#### Method
- Declaration of the supplier, signed by the (managing) director.
<table>
<thead>
<tr>
<th>Environmental requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.4 At least 75% of the purchased upper material must be used for the leg.</td>
<td>Declaration of the shoe manufacturer and/or leg-supplier, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.3 Synthetic upper and lining materials</td>
<td></td>
</tr>
<tr>
<td>Environmental requirement</td>
<td>Method</td>
</tr>
<tr>
<td>3.3.1 The synthetic upper material contained in the shoe must be finished with finishes which have a water base, unless the manufacturer can prove that other VOS reducing measures restrict VOS emissions during finishing. Use of Finishes containing VOS must be restricted so that the total VOS use does not exceed the 3.6.1 requirement.</td>
<td>Declaration of the shoe manufacturer and/or supplier, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.4 Cotton</td>
<td></td>
</tr>
<tr>
<td>Environmental requirement</td>
<td>Method</td>
</tr>
<tr>
<td>3.4.1 The cotton contained in the shoe must be treated with finishes which have a water base, unless the manufacturer can prove that other VOS reducing measures restrict VOS emissions during finishing. Use of Finishes containing VOS must be restricted so that the total VOS use does not exceed the 3.6.1 requirement.</td>
<td>Declaration of the shoe manufacturer and/or supplier, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.4.2 Cotton may not be bleached with bleaches containing chlorine.</td>
<td>Declaration of the supplier, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.4.3 During the improvement process, all of the waste water has to be dumped via a (communal) biological water purification system.</td>
<td>Declaration of the supplier, signed by the (managing) director.</td>
</tr>
</tbody>
</table>
### 3.5 Synthetic sole materials and rubber

<table>
<thead>
<tr>
<th>Environmental requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5.1 During the production of the rubber sole, use of finishes containing VOS must be restricted so that the total VOS use does not exceed the 3.6.1 requirement.</td>
<td>Declaration of the sole manufacturer, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.5.2 No TDI may be processed into PUR. The maximum emission of MDI during production may not exceed 50 g/ton and 20 g/m³.</td>
<td>Declaration of the shoe manufacturer and/or supplier, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.5.3 No Volatile Organic Substances may be used for the foaming of synthetic materials (this includes hydrocarbons containing chlorine) causing the total VOS use to exceed the 3.6.1 requirement.</td>
<td>Declaration of the shoe manufacturer and/or supplier, signed by the (managing) director.</td>
</tr>
<tr>
<td>3.5.4 No more than 2% sulphur may be used as vulcanisation material, and no nitrodiphenylamine as aggregate.</td>
<td>Declaration of the shoe manufacturer and/or supplier, signed by the (managing) director.</td>
</tr>
</tbody>
</table>

### 3.6 Shoe production

<table>
<thead>
<tr>
<th>Environmental requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6.1 The total use of VOS during the entire shoe production process (including use of glue, finish and paint/dyes during tanning and sole production) may not exceed the following values:</td>
<td>Declaration of the shoe manufacturer, signed by the (managing) director.</td>
</tr>
<tr>
<td>Category 1: 50g VOS/pair</td>
<td></td>
</tr>
<tr>
<td>Category 2: 45g VOS/pair</td>
<td></td>
</tr>
<tr>
<td>Category 3: 40g VOS/pair</td>
<td></td>
</tr>
<tr>
<td>Glue containing toluene shall not be permitted</td>
<td></td>
</tr>
</tbody>
</table>
4. Functional requirements

4.1 Upper leather

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1 Tearing strength</td>
<td>Cat 1: ≥ 80 N</td>
<td>ISO 3377</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: ≥ 50 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: ≥ 40 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.2 Water proofness</td>
<td>All categories</td>
<td>IUP/10</td>
<td>Only for closed shoes</td>
</tr>
<tr>
<td></td>
<td>- Waterabsorption</td>
<td></td>
<td>Only applicable if the shoe manufacturer explicitly reports this product ch</td>
</tr>
<tr>
<td></td>
<td>- Watertransmission</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>max. 30% after 1/2 hour</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>max. 0.5 g after 1/2 hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.3 Rub fastness</td>
<td>No more than slight damage</td>
<td>IUF/450</td>
<td>A brush test 4.4.2 is carried out on unlined footwear to judge the colouring.</td>
</tr>
<tr>
<td></td>
<td>(min. 4 according ISO 105 AO2):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friction</td>
<td>Felt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50/40/30</td>
<td>dry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50/40/30</td>
<td>wet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30/25/20</td>
<td>rubber dry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20/15/10</td>
<td>rubber wet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50/40/30</td>
<td>dry</td>
<td></td>
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</tr>
<tr>
<td>50/40/30</td>
<td>wet</td>
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<tr>
<td>30/25/20</td>
<td>rubber dry</td>
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<tr>
<td>20/15/10</td>
<td>rubber wet</td>
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</table>

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<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.5</td>
<td>Resistance to repeated flexing, wet and dry</td>
<td>No more than slight damage (min. 4 according CTL-F65):</td>
<td>IUP/20</td>
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<tr>
<td></td>
<td></td>
<td>Cat 1:</td>
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<td>Flexes</td>
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<td>split leather</td>
</tr>
<tr>
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<td></td>
<td>20.000</td>
<td>with top layer</td>
</tr>
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<td></td>
<td></td>
<td>20.000</td>
<td>patent leather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cat 2:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexes</td>
<td>Leather type</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60.000</td>
<td>split leather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.000</td>
<td>with top layer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.000</td>
<td>patent leather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cat 3:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexes</td>
<td>Leather type</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40.000</td>
<td>split leather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.000</td>
<td>with top layer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.000</td>
<td>patent leather</td>
</tr>
</tbody>
</table>

4.2 Synthetisch schachtmaterial

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.2.1    | Tear strenght | Cat 1: ≥ 40 N  
Cat 2: ≥ 25 N  
Cat 3: ≥ 20 N | ISO 4674 |        |
| 4.2.2    | Resistance to repeated flexing | Very slight damage (min. 4-5 according CTL-F65) after:  
Cat 1: 150.000  
Cat 2: 100.000  
Cat 3: 70.000 | IUP/20 |        |
| 4.2.4    | Rub fastness | No more than slight damage (min. 4 according ISO 105 AO2):  
rub felt material | IUF/450 | Veslic C4505 |
|          | Finish layer | Cat 1/Cat.2/Cat. 3  
50/40/30 dry wet  
50/40/30 wet dry  
30/25/20 rubber wet |        |        |
### 4.3 Textiel schachtmateriaal

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.3.1 Tear strength | Cat 1: ≥ 40 N  
                        Cat 2: ≥ 25 N  
                        Cat 3: ≥ 20 N | ISO 4674 |          |

### 4.4 Lining leather

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.4.1 Tear strength | Cat 1: ≥ 30 N  
                        Cat 2: ≥ 25 N  
                        Cat 3: ≥ 20 N | ISO 4674 |          |
| 4.4.2 Rub fastness | No more than slight damage (min. 4 according ISO 105 AO2), colouring minus 3: | |          |

- Rubs vilt leer
  - Cat 1/Cat.2/Cat. 3  
  - 50/40/30 droog wet  
  - 50/40/30 nat dry  
  - 30/25/20 rubber dry  
  - 20/15/10 rubber wet  

- IUF/450 Veslic C4505

### 4.5 Synthetic lining (with top layer)

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.5.1 Tear strength | Cat 1: ≥ 15 N  
                        Cat 2: ≥ 12.5 N  
                        Cat 3: ≥ 10 N | ISO 4674 |          |

| 4.5.2 Abrasion resistance | All categories: No more than slight damage after  
                            - 40,000 revolutions dry  
                            - 20,000 revolutions wet | EN 344 5.14 |        |

### 4.6 Textile lining

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.6.1 Tear strength | Cat 1: ≥ 15 N  
                        Cat 2: ≥ 12.5 N  
                        Cat 3: ≥ 10 N | NEN 3361 |          |
### 4.7 Binnenzoolleder

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.7.1 Water soluble matter</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Total</td>
<td>≤15% ≤12 ≤12</td>
<td>IUC/6</td>
<td></td>
</tr>
<tr>
<td>- Salts</td>
<td>≤1,5% ≤1,5 ≤1,5</td>
<td>IUC/6</td>
<td></td>
</tr>
<tr>
<td>- Epsom salt</td>
<td>≤1,0% ≤1.0 ≤1.0</td>
<td>ISO 5399</td>
<td></td>
</tr>
<tr>
<td><strong>4.7.2 Water absorption</strong></td>
<td>Absorption at least:</td>
<td>EN 344 5.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 1: 90 mg/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: 75 mg/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: 65 mg/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desorption at least:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 1: 60 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: 50 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: 40 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.8 Non-leather insole materials

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.8.1 Abration resistance</strong></td>
<td>No visible damage after 1000 wear strokes.</td>
<td>EN 344 5.16</td>
<td></td>
</tr>
<tr>
<td><strong>4.8.2 Water absorption</strong></td>
<td>Absorption at least:</td>
<td>EN 344 5.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 1: 90 mg/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: 75 mg/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: 65 mg/cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desorption at least:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 1: 60 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: 50 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: 40 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.9 Sole leather

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.9.1 Thickness</strong></td>
<td>Cat 1: ≥ 4.0 mm</td>
<td>ISO 2589</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: ≥ 2.5 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: ≥ 2.5 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.9.2 Abration resistance</strong></td>
<td></td>
<td>ISO 4649</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 1: ≤ 350 mm³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 2: ≤ 400 mm³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cat 3: ≤ 450 mm³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.10 Rubber and synthetic sole materials

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.10.1 Thickness | Cat 1: ≥ 4.0 mm  
Cat 2: ≥ 2.5 mm  
Cat 3: ≥ 2.5 mm | ISO 2589 | Not including profiling |
| 4.10.2 Abrasion resistance | Maximum Volume loss in mm³ according to material and application | ISO 4649 | Rubber and TR with 10 N load; PUR and porous material with 5 N load |
| Material | Cat 1 | Cat 2 | Cat 3 |
| Rubber | ≤150 | ≤200 | ≤300 |
| TR | ≤150 | ≤250 | ≤350 |
| PUR | ≤150 | ≤200 | ≤300 |
| Poro-achtigen | ≤250 | ≤350 | ≤450 |
| 4.10.3 Resistance to repeated flexing | Maximum growth of the incision:  
Cat 1: 4 mm  
Cat 2: 6 mm  
Cat 3: 8 mm | EN 344 5.17 |
| 4.10.4 Hydrolysise resistance | The treated material must comply with the guidelines for the resistance to repeated flexing. | ISO 5423 Annex C | PUR only |

4.11 Shoe construction

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 4.11.1 Bond of sole to upper | Adhesive strength:  
Cat 1: ≥ 4.0 N/mm  
Cat 2: ≥ 3.0 N/mm  
Cat 3: ≥ 2.5 N/mm | EN 344 5.1.3.2 | |
| - Glued sole | Cat 1: ≥ 500,000 flexes  
Cat 2: ≥ 400,000 flexes  
Cat 3: ≥ 250,000 flexes | Satra PM 92 | |
| - Stitched sole | | | |

5. Product information
The following information should be visible on purchase and/or in the enclosures:

- That the footwear is sufficiently waterproof not to require further treatment (with closed footwear).

- That the shoe can be repaired. Repair is less damaging to the environment than disposal.
(This requirement does not apply to safety footwear)

6. Additional requirements

If the shoes are packaged, they should be packed in a cardboard box consisting of no less than 80% recycled paper.

Fur and leather made from the skin of animals specially bred for their skin may not be used in the footwear.

Individual company environmental logos are not permitted. Otherwise, the following requirement applies: compliance with the Environmental Advertising Code, especially article 7.

7. Quality control

Control research is carried out once a year. Other inspections will be conducted if complaints provide sufficient reason for it.

8. Clarification

"Declaration of the manufacturer" refers to a technical dossier containing information about design, construction, materials' specifications, laboratory research (preferably conducted by a third party), certificates from suppliers etc., and/or by means of an annual report/bookkeeping and/or other administrative documents that they meet the demands laid down.

Certification and inspection will be carried out on the basis that both the producer of the materials and the shoe manufacturer have a good environmental protection system or quality assurance system. A protection system conforming to the ISO-9000 series or an inspection based on a report of an ISO-9000 series (or comparable) certified independant research institute is preferred here.

Whether or not an on-site inspection is necessary is left to the discretion of the certification institution. This will involve spot checks and will occur in case of doubt.
Appendix 1:
For materials permitted in Ecolabel footwear with the corresponding energy-content

<table>
<thead>
<tr>
<th>Allowed Materials</th>
<th>Energie-inhoud (MJ/kg) (Energie grondstof + energie proces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper leather</td>
<td>98,0</td>
</tr>
<tr>
<td>Insole leather</td>
<td>59,0</td>
</tr>
<tr>
<td>Lefa</td>
<td>59,0</td>
</tr>
<tr>
<td>Sole leather</td>
<td>50,0</td>
</tr>
<tr>
<td>Cotton</td>
<td>106,0</td>
</tr>
<tr>
<td>PUR (upper material)</td>
<td>89,0</td>
</tr>
<tr>
<td>PUR (sole material)</td>
<td>85,0</td>
</tr>
<tr>
<td>Various other synthetic materials (polyolefines, polystyrene, ABS, polyester, polyamide, polycarbonates)</td>
<td>75,0</td>
</tr>
<tr>
<td>PA/PET (upper material)</td>
<td>75,0</td>
</tr>
<tr>
<td>EVA (pressed)</td>
<td>81,0</td>
</tr>
<tr>
<td>EVA (injection moulded)</td>
<td>88,0</td>
</tr>
<tr>
<td>Rubber</td>
<td>93,0</td>
</tr>
<tr>
<td>Natural rubber (mixed)</td>
<td>50,0</td>
</tr>
<tr>
<td>Wood and cork</td>
<td>33,0</td>
</tr>
<tr>
<td>Copper</td>
<td>90,0</td>
</tr>
<tr>
<td>Steel and iron</td>
<td>23,4</td>
</tr>
<tr>
<td>Aluminium</td>
<td>198,2</td>
</tr>
<tr>
<td>100% recycled steel</td>
<td>10,0</td>
</tr>
<tr>
<td>100% recycled aluminium</td>
<td>10,0</td>
</tr>
<tr>
<td>100% recycled PUR, PA, PET, EVA, polyolefinen, polystyreen, ABS, polyester, polyamide, polycarbonaten</td>
<td>10,0</td>
</tr>
</tbody>
</table>
1. Product group

This certification schedule pertains to the product group “furniture” intended for use indoors and outdoors.

“Furniture” means:
- seats, such as chairs (office, dining-room, garden, and canteen chairs), armchairs, couches and stools;
- tables and desks;
- cupboards and shelves;
- beds, bedsteads and cots (excluding mattress);
- worktops (kitchen sink units for example).

The following furniture is not included in the product group:
- bathroom furniture;
- medical furniture, such as dentist chairs and wheelchairs;
- chairs fastened to their surrounding area, like street furniture, train and cinema seats.

The furniture must consist of one or more materials from the list below:
- wood, cane, bamboo and other natural wooden materials;
- chipboard, plywood, three and five-ply wood, MDF, softboard, hardboard and other plant fibreboards;
- paper
- iron and steel;
- stainless steel;
- aluminium;
- polyolefins;
- acrylic polymers;
- polystyrene and ABS;
- polyurethanes;
- polyester;
- polyamides;
- polycarbonates;
- resins and synthetic resins (such as urea, melamine, epoxy, alkyd resin and bakelite);
- rubbers: NR, NBR, SBR and EPM/EPDM;
- wool, cotton and other natural fibres;
- leather;
- mineral materials (for example glass, natural stone, ceramics, cement-like materials etcetera, with the exception of materials which contain asbestos).

Plate materials often consist of a combination of materials (for example synthetic material/woodfibre). Such composite materials are permitted if the separate components meet the material requirements set (unless they come under the materials which make up less than 5% of the furniture). Stone composites (synthetic materials, mineral materials) are also permitted. These materials are considered synthetic materials with a great deal of mineral filling.

In total 95% (m/m) of the materials used in the furniture, or in a functional (kitchen) furniture component (cupboard unit for example) must meet the following requirements.
Materials which make up a small percentage (up to 5% in total (m/m) of the furniture’s total mass (or the functional component of the furniture) are excluded from the material requirements (2.1 through 2.6). For these materials such as ornaments, decorative frames, coating, the type of materials used should be made known. Components made of lead are excluded from this rule. Lead may not be used.

2. Environmental requirements

2.1 Wood, bamboo, cane and plate materials, including thick laminated sheet.

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1 Forestry</td>
<td>Use of wood from managed sustainable forests a).</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.1.2 Chemical use</td>
<td>Impregnation and other treatments with pesticides and bleaching agents and the materials mentioned in the clarification are not permitted.</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.1.3 Heavy metals in varnish/coatings/resins</td>
<td>Arsenic, cadmium, chrome, copper, mercury, lead and zinc in the varnish, coatings and synthetic resins are not permitted to exceed the concentrations mentioned in the Dangerous Substances Designation Decision (BAGA) 3).</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.1.4 Emission organic materials for wet-varnish</td>
<td>Varnish solvent percentage &lt; 15%. If it can be demonstrated that this requirement cannot be met for specific applications, a so-called ‘best effort obligation’ applies to the producer; he/she must show that measures have been and/or are being taken to realise the reductions in emissions of solvents and to show which reductions in emissions have been achieved by this.</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.1.5 Varnish loss</td>
<td>Loss with varnish &lt; 40 % for surfaces &gt; 25 cm².</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.1.6 Plate materials: emission of organic materials into the air during blockboard production</td>
<td>Either NER requirements are met, or glue solvent percentage is &lt; 10%, or exhaust system has been equipped with a properly working air-treatment system which consists of an active carbon filter or after burner</td>
<td>Statement by the producer, signed by the managing director, or test report in accordance with NER.</td>
</tr>
<tr>
<td>2.1.7 Glued plate materials: formaldehyde emission</td>
<td>Meets E1 emission class 3).</td>
<td>Statement by producer, signed by the (managing) director.</td>
</tr>
</tbody>
</table>

a) Awaiting the decision by Stichting Milieukeur on criteria, all wood is permitted with the exception of:
- tropical wood and/or
- wood from forests created naturally (primaeval Forest),
unless it concerns wood which meets the FSC certification requirements of the Stichting Keurhout. Bamboo and cane are excluded from these requirements.

MK33
2.2 Metals

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1 Materials</td>
<td>Permitted: use of iron, (stainless) steel and aluminium.</td>
<td>Statement by the producer, signed by the (managing) director(^{1}).</td>
</tr>
<tr>
<td>2.2.2 Aluminium</td>
<td>Percentage recycled aluminium in cast aluminium-components ≥ 70%.</td>
<td>Statement by the producer, signed by the (managing) director(^{1}).</td>
</tr>
<tr>
<td>2.2.3 Galvanic</td>
<td>Galvanic processes, including electroless plating, anodising, chromating,</td>
<td>Statement by the producer, signed by the (managing) director(^{1}).</td>
</tr>
<tr>
<td>processes (including pre-treatment)</td>
<td>phosphatasing, passivating and chemical blackening, is permitted up to a maximum of 200 cm(^2) per furniture. For chairs the surface area of a possible damper is not taken into consideration. If the surface area is more than 200 cm(^2) the requirements included in the clarification under(^{3}) apply</td>
<td></td>
</tr>
<tr>
<td>2.2.4 Varnish/</td>
<td>Percentage organic solvents ≤ 15% m/m.</td>
<td>Statement by the producer, signed by the (managing) director(^{3}).</td>
</tr>
<tr>
<td>Coatings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.5 Loss of varnish</td>
<td>For powder varnish ≤ 10% and for wet varnish ≤ 30% (for surface areas ≥ 25 cm(^2)).</td>
<td>Statement by the producer, signed by the managing director(^{3}).</td>
</tr>
<tr>
<td>2.2.6 Varnish/</td>
<td>Arsenic, cadmium, chrome, copper, mercury, lead and zinc in varnish and</td>
<td>Statement by the producer, signed by the managing director(^{3}).</td>
</tr>
<tr>
<td>Coatings</td>
<td>coatings are not allowed to exceed the concentrations mentioned in the Dangerous Substances Designation Decision (BAGA)(^{3}).</td>
<td></td>
</tr>
</tbody>
</table>
2.3 Synthetic materials, synthetic resins and rubbers (excluding synthetic fibres, including so-called stone/synthetic composites)

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.1 Heavy materials</td>
<td>Additives, colours and pigments must not be added if the arsenic, cadmium, mercury, lead and zinc concentrations in the material exceed the limits set in the Dangerous Substances Designation Decision (BAGA)(^3). Zinc catalysts for latex foams are excluded from this. The limiting value for chrome VI in the material is a maximum of 100 ppm.</td>
<td>Statement by the producer, signed by the (managing) director(^{10}).</td>
</tr>
<tr>
<td>2.3.2 Halogenated fire retardant</td>
<td>Use of halogenated fire retardant is not permitted(^4).</td>
<td>Statement by the producer, signed by the (managing) director(^{10}).</td>
</tr>
<tr>
<td>2.3.3 Synthetic foams</td>
<td>Use of chlorinated organic compounds (for example CFCs, HCFCs and methylene chloride and HFCs as blowing agents are not permitted.</td>
<td>Statement by the producer, signed by the (managing) director(^{10}).</td>
</tr>
<tr>
<td>2.3.4 Imitation leather</td>
<td>Only imitation leather on the basis of PUR is permitted.</td>
<td>Statement by the producer, signed by the (managing) director(^{10}).</td>
</tr>
<tr>
<td>2.3.5 Synthetic material codes</td>
<td>Synthetic components (&gt;50 g) must be provided with a material indication in accordance with ISO-1043</td>
<td>Observation.</td>
</tr>
<tr>
<td>2.3.6 Use of recycled synthetic materials</td>
<td>If the furniture (selection) consists of more than 50% (m/m) of synthetic materials (with the exception of soft synthetic foam), these synthetic materials must consist of more than 10% of post-consumer recycled material</td>
<td>Statement by the producer, signed by the (managing) director(^{10}).</td>
</tr>
</tbody>
</table>

a) These requirements do not apply to these materials if post consumer synthetic materials are used as raw material. No harmful additives (heavy metals -compounds or halogenated fire retardants) may be used.
## Textiles

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4.1 Various environmental aspects</td>
<td>Textile which meets the requirements of one of the following hallmarks may be used without specific testing of the requirements 2.4.2 up to and including 2.4.4: - EKO hallmark (SKAL) - ökotex standard 100 (ökotex consortium); - Eco label Textiles (European Union).</td>
<td>The certification institute will verify and determine if sufficient proof has been supplied to meet the requirements concerned.</td>
</tr>
<tr>
<td>2.4.2 Chlorinated synthetic fibres</td>
<td>Use of chlorinated synthetic fibres is not permitted.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
<tr>
<td>2.4.3 Halogenated fire retardant</td>
<td>Use of halogenated fire retardant in textile is not permitted.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
<tr>
<td>2.4.4 Colours</td>
<td>No benzidine analogous colours may be added to the textile.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
</tbody>
</table>

## Leather

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5.1 Chrome emission</td>
<td>Chrome emission to water for tanning ≤ 0,33 g Cr/kg leather.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
<tr>
<td>2.5.2 Finish</td>
<td>The leather must be provided with a finish on a water basis.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
<tr>
<td>2.5.3 Colours</td>
<td>No benzidine analogous colours may be added to the leather.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
<tr>
<td>2.5.4 Heavy metals</td>
<td>Colours, pigments and additives (with the exception of chrome salt for tanning) which result in arsenic, cadmium, chrome, copper, mercury and lead concentrations in the leather exceeding the BAGA limit³, are not permitted.</td>
<td>Statement by the producer, signed by the (managing) director¹.</td>
</tr>
</tbody>
</table>

MK33
### 2.6 Stony materials (natural stone, concrete and ceramic materials)

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6.1 Extraction of natural stone</td>
<td>A landscape recovery plan must be drawn up based on an environmental effect report in accordance with EU directive 85/337 or an equivalent environmental research</td>
<td>Statement by the producer, signed by the (managing) director(^1).</td>
</tr>
<tr>
<td>2.6.2 Heavy metals in varnish, fillers and binding agents</td>
<td>The percentages of arsenic, cadmium, chrome, copper, mercury, lead and zinc in the varnish/fillers/binding agents used must not exceed the BAGA limit values(^2)</td>
<td>Statement by the producer, signed by the (managing) director(^3).</td>
</tr>
</tbody>
</table>
## 2.7 Assembly/disassembly/durability

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7.1 Solvent percentage systems</td>
<td>Exclusive application of glue systems with ≤ 10% organic solvent is permitted for gluing the furniture.</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.7.2 Life span</td>
<td>The life span of the construction (including moving parts) and the filling materials for normal use should be guaranteed for at least five years. For filling materials a loss in size or hardness of no more than 20% may occur within five years. A general three year guarantee applies for outdoor furniture.</td>
<td>Warranty</td>
</tr>
<tr>
<td>2.7.3 Maintenance</td>
<td>Products must be cleaned without organic solvents.</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>2.7.4 Repairability</td>
<td>All service components (hinges, wheels etc) of the furniture must be separately available for repair purposes, for a period of five years.</td>
<td>Statement by the producer signed by the (managing) director.</td>
</tr>
<tr>
<td>2.7.5 Disassembly/separability</td>
<td>All furniture components must be simple to disassemble. It must be possible to separate more than 90% of the furniture into the following separate components: metal/inert materials/flammable materials. Inert materials are stony and glass materials. Flammable materials are synthetic materials, textile, leather, raw fibres and wooden materials. Larger components of synthetic foam and massive synthetic material (&gt; 200 g) must also be separable. Blockboards with an synthetic or resin layer do not need to be separable in separate materials.</td>
<td>Professional opinion.</td>
</tr>
<tr>
<td>2.7.6 Disassembly/separability/seats</td>
<td>If the filling and/or the covering is attached to the base construction, then it must be easy to remove. The following considerations have been taken into account: - Glue surfaces, which are not easy to separate are not permitted. - Clamped joints are permitted, if the connections can also be used for new parts.</td>
<td>Professional opinion.</td>
</tr>
<tr>
<td>Environmental aspect</td>
<td>Requirement</td>
<td>Method</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
| 2.7.7 Disassembly/separability seats | If the covering forms a whole with part of the seat and/or back of chair, then this part needs to be easy to remove according to professional opinion. The professional will take the following into consideration when judging the connection between covering/filling and seat/back of chair:  
- Glue, screw and nail connections which are not easy to remove are not permitted.  
- Weld and melt connections are not permitted.  
- Clamped joints are permitted if these parts can also be used for new parts. | Professional opinion.          |
3. Functional Requirements

<table>
<thead>
<tr>
<th>Functional aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Quality of imitation leather covering</td>
<td>Imitation leather as covering material must meet the following requirements:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- strength/seam strength 40/30 N</td>
<td>- ISO 5081</td>
</tr>
<tr>
<td></td>
<td>- colourfastness &gt; 3</td>
<td>- ISO 105 B02</td>
</tr>
<tr>
<td></td>
<td>- tear strength &gt; 50 N</td>
<td>- ISO 9290</td>
</tr>
<tr>
<td>3.2 Quality of textile covering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Washable</td>
<td>4-5</td>
<td>ISO 105 C06 A25 (40°C)</td>
</tr>
<tr>
<td>- Water resistancy</td>
<td>4-5</td>
<td>ISO 105 E01</td>
</tr>
<tr>
<td>- Rubbing resistancy dry</td>
<td>4-5</td>
<td>ISO 105-X12</td>
</tr>
<tr>
<td>- wet</td>
<td>4 (pigment 3-4)</td>
<td>ISO 105-X12</td>
</tr>
<tr>
<td>- Colourfast</td>
<td>5</td>
<td>ISO 105-B02</td>
</tr>
<tr>
<td>- Shrink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. fabric</td>
<td>&lt; 2%</td>
<td>ISO 6330 6A (40 °C)</td>
</tr>
<tr>
<td>. stitching</td>
<td>&lt; 10%</td>
<td>ISO 6330 6A (40 °C)</td>
</tr>
<tr>
<td>- Strength/seam strength</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. fabrics</td>
<td>250/200 N</td>
<td>ISO 5081</td>
</tr>
<tr>
<td>. stitching</td>
<td>40/30 N</td>
<td>ISO 5081</td>
</tr>
<tr>
<td>- Wear resistance/ pilling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. fabrics</td>
<td>(20,000 cycles)</td>
<td>BS 5811</td>
</tr>
<tr>
<td>. stitching</td>
<td>(10,000 cycles)</td>
<td>BS 5811</td>
</tr>
<tr>
<td>- Resistancy to dry cleaning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or at least meet the requirement of 'intensive usage' by the KIM 7)</td>
<td>4-5</td>
<td>ISO 105 D01</td>
</tr>
</tbody>
</table>

a) Only with removable and washable textile furniture coverings
<table>
<thead>
<tr>
<th>Functional aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 Quality of leather covering</td>
<td>a) no stain forming</td>
<td>a) IUF/450:</td>
</tr>
<tr>
<td>Durability:</td>
<td></td>
<td>- dry felt: 500 rubbing movements</td>
</tr>
<tr>
<td>- rub resistancy</td>
<td></td>
<td>- Wet felt: 200 rubbing movements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Wet felt moisten with artificial sweat solution:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 rubbing movements (ILS-F9 and IUF/450: after repeated stretching to 30%, 100 rubbing movements with wet felt)</td>
</tr>
<tr>
<td></td>
<td>b) colour change: &gt; 3-4</td>
<td>b) grey scale IUF/132</td>
</tr>
<tr>
<td></td>
<td>c) damage &gt; 4</td>
<td>c) ILS-F64</td>
</tr>
<tr>
<td></td>
<td>d) difference in colour &gt; 4</td>
<td>d) grey scale IUF/131</td>
</tr>
<tr>
<td></td>
<td>- Resistancy to repeated folding nappa leather</td>
<td></td>
</tr>
<tr>
<td>- Colourfastness nappa leather</td>
<td>- finish or scumble: &gt; 4</td>
<td>ILS-F65</td>
</tr>
<tr>
<td>- Resistancy leather to repeated stretching</td>
<td>&gt; 3</td>
<td>ISO 105 B02 of IUF/402</td>
</tr>
<tr>
<td>- Stitching finish nappa leather</td>
<td>- finish, scumble, fibre: &gt; 4</td>
<td>ILS-F65</td>
</tr>
<tr>
<td></td>
<td>a) full fibre: &gt; 2,0 N/cm</td>
<td>IUF/470</td>
</tr>
<tr>
<td></td>
<td>corrected: &gt; 3,5 N/cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) slit with coating:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 5,0 N/cm</td>
<td></td>
</tr>
<tr>
<td>Resistance at tear site of leather (nappa)</td>
<td>- &gt; 50 N</td>
<td>ISO 9290 of IUF/8</td>
</tr>
</tbody>
</table>

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4. Additional Requirements

<table>
<thead>
<tr>
<th>Additional aspect</th>
<th>Requirement</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Reusability</td>
<td>All packaging must be made of recyclable material. This means that the packaging:</td>
<td>Statement by the producer, signed by the (managing) director.</td>
</tr>
<tr>
<td>packaging</td>
<td>- consists of one material (cardboard, paper, polyethylene, polypropene, polystyrene) or:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- is easily separable by hand into recyclable fractions, consisting of one material (cardboard, paper, polyethylene, polypropene, polystyrene).</td>
<td></td>
</tr>
<tr>
<td>4.2 Other ecological</td>
<td>Private eco logos are not permitted. Otherwise the requirement is: fulfil the Reclame Code (advertising code), particularly article 7.</td>
<td>Observation.</td>
</tr>
<tr>
<td>symbols</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) Burning ('thermal recycling') is not permitted.

5. Product information

The furniture should include maintenance instructions. For outdoor furniture the consumer must be provided with written information on maintenance and durability (including weather resistance) of the piece of furniture.

6. Quality control

The frequency of quality control is once a year. An interim check will take place when complaints give rise to this.

The statements can be tested before the eco-label is granted, by means of a company inspection. After granting of the eco-label inspections will be conducted within the scope of the control for the assessment of the company statement.

One piece of furniture must be offered to undergo the full series of tests, unless the certification institute has sufficient independently substantiated information by means of reports and documents that test results of the full series of tests are available.

The certification institute will determine by means of reports and documents if samples of deviating parts of the piece of furniture are to be offered for testing. Eco-label can be granted to a collection if all the requirements are met.
7. Appendix

1) "Statement by the producer" means that the manufacturer concerned has to be able to show by means of a technical document, where files on the design, construction, specifications of materials, laboratory research (preferably by third parties), certificates of suppliers etc., and/or by means of an annual report, accounting and/or other administrative documents to a certification institute that they meet the specific requirements.

2) The following materials are not permitted:
   - sulphur compounds;
   - kerosene/petrol/diesel fuel/turpentine/white spirit and other petrochemical products;
   - bleaching agents;
   - pesticides (substances which fall under the Pesticides act).

3) "BESLUIT AANWIJZING GEVAARLIJKE AFWALSTOFFEN (BAGA)" (Dangerous Substances Designation Decision) concerns the latest current version of this guideline.

4) "Nederlandse Emissie Richtlijnen (NER)" (Dutch Emission Guidelines) concern the latest current version of these guidelines, the threshold with regard to mass flow do not apply.

5) "E1 emission class" = emission value of formaldehyde ≤ 0,1 ppm.

6) Requirements with regard to galvanic processes, including electroless plating, anodising, chromatising, phosphatasing, passivating and chemical blackening (including cleaning and staining treatments):
   - cleaning may not be carried out with organic hydrocarbons. If the metal is polluted with oil or fat the waste water for cleaning is to be treated in an oil/water separator and in a biological waste water purification plant which function properly;
   - processing (all processes): the metal baths are to be separated by type of metal and to be drained off separately. If more baths are passed through in succession a so-called 'bath contents transfer restriction' is to be applied, and a flow back system used. No chrome VI compounds may be used;
   - processing of waste water: The waste water must undergo a treatment through to recover the metals (for example through electrolysis). After processing the waste water is to be discharged into a properly functioning waste water purification plant. This waste water must meet the following discharge standards for discharge into this water purification: Cr, Cu, Zn and Ni < 1 mg/l per metal;
   - chromium plating: For chromium plating the air above the galvanic bath is to be exhausted and treated in a properly functioning air treatment system, or the exhausted air must meet the NeR (<5mg/m³).

7) Kwaliiteitsinformatie Meubelstoffen (KIM) (furniture fabric quality information), if independent test institutes have been used.
Öko-Tex Standard 100

Allgemeine und spezielle Bedingungen

General and special conditions

Generelle og specielle betingelser
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<th>General and special conditions for the authorization to use the mark Öko-Tex Standard 100</th>
<th>Generelle og specielle betingelser for tilladelse til anvendelse af Öko-Tex Standard 100 mærket</th>
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<td>5.2 Limit of authorization</td>
<td>5.2 Varighed af mærknings- tilladelsen</td>
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<td>5.3 Entzug der Berechtigung</td>
<td>5.3 Withdrawal of authorization</td>
<td>5.3 Tilbagetrækning af mærknings- tilladelsen</td>
</tr>
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<td>5.4 Type of marking</td>
<td>5.4 Mærkningsstyper</td>
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<td>- Appendix</td>
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</tr>
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1 Zweck
Der Öko-Tex Standard 100 ist ein normatives Dokument, herausgegeben von der Internationalen Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie (Öko-Tex), die in Anhang Nr. 1 aufgeführten Institute angehören.

Der vorliegende Standard legt die allgemeinen und speziellen Bedingungen für die Vergabe der Berechtigung fest, Textilien mit der in Anhang Nr. 3 dargestellten Öko-Tex Standard 100 Kennzeichnung zu versehen.

2 Anwendung
Dieser Standard ist für textile und ledige Produkte sowie Artikel aller Produktionsstufen, inbegriffen aller textiler und nichttextiler Bestandteile, anwendbar.

Dieser Standard ist für Chemikalien, Hilfsmittel und Farbmittel nicht anwendbar.

3 Begriffe

3.1 Schadstoffe
Schadstoffe im Sinne dieses Standards, sind Stoffe, die in einem textilen Produkt oder einem Zubehörteil über einem festgelegten Ausmaß enthalten sind oder im normalen, vorgesehenen Gebrauch über ein festgelegtes Ausmaß entstehen und im normalen, vorgesehenen Gebrauch auf Menschen in irgendeiner Weise einwirken können und nach dem derzeitigen Stand der Wissenschaft für Menschen gesundheitsgefährdend sein können.

3.2 Öko-Tex Standard 100 Kennzeichnung
Die Öko-Tex Standard 100 Kennzeichnung "Textiles Vertrauen - Schadstoffgeprüfte Textilien nach Öko-Tex Standard 100" ist eine Kennzeichnung, mit der ein textiles Produkt oder Zubehörteil versehen werden kann, wenn die allgemeinen und speziellen Bedingungen für die Vergabe der Berechtigung erfüllt sind und wenn die Berechtigung für die Kennzeichnung des Produktes von einem Institut (Anhang 1) oder einer autorisierten Zertifizierungsstelle (Anhang 2) der Zertifizierungsstelle (Anhang 2) der beharingsdel, saftrem de generelle og die Kennzeichnung des Produktes an institute (appendix V ergabe der Berechtigung erfullt and if authorization to use this mark opfyldt, og satrernt tilladelsen zu versehen.

Zertifizierungsstelle (Anhang 2) der International Association for

2 Anwendbarkeit

2 Applicability

This standard is applicable for textile and leather products and articles of all levels of production, including textile and non textile accessories.

This standard is not applicable for chemicals, auxiliaries and dyes.

3 Begriffe

3 Terms and definitions

3.1 Harmful substances
Harmful substances within the context of this standard refer to substances which may be found in a textile product or accessory exceeding a maximum amount or evolve during normal and provided use exceeding a maximum amount and which may have some kind of effect on people during normal and provided use and may, according to current scientific knowledge, be injurious to human health.

3.2 Öko-Tex Standard 100 mark

The Öko-Tex Standard 100 mark "Confidence in Textiles - Tested for harmful substances according to Öko-Tex Standard 100" refers to marking which may be applied to a textile product or to an accessory if the general and special conditions for granting authorization are fulfilled and if authorization to use this mark on a product has been granted by an institute (appendix 1) or an authorized certification agency (appendix 2) belonging to the International Association for

3.2 Öko-Tex Standard 100 marken

Öko-Tex Standard 100 marken:

"TILTRO TIL TEXTILER – Indhold af sundhedsaskadelige stoffer kontrolleret efter Öko-Tex Standard 100" henfører til mærkning, som må anvendes på et tekstilprodukt eller en tilbehørsdel, såfremt de generelle og specielle betingelser for tilladelsen er opfyldt, og såfremt tilladel sen til anvendelse af dette mærke på et produkt er bevildet af et institut (Appendiks 1) eller et autoriseret certificeringsagentur (Appendiks 2), som tilhører International Forening til

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Ausgabe / Edition / Udgave 03/2000
28. April 2000
Internationalen Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie (Öko-Tex) ernannte.


Die Kennzeichnung "Textiles Vertrauen - Schadstoffgeprüfte Textilien nach Öko-Tex Standard 100" ist kein Gütezeichen. Die Kennzeichnung bezieht sich nur auf den Neuzustand des geprüften Textils und macht auch keine Aussage über andere Eigenschaften des Produktes, wie z.B. Gebrauchstauglichkeit, Pflegeverhalten, bekleidungsphysiologisches Verhalten, bauphysikalische Eigenschaften, Brennverhalten etc.

Die Kennzeichnung kann auch keine Aussage machen über Schadstoffbeeinträchtigungen einzelner Exemplare der gekennzeichneten Ware durch Transport- oder Lagerschäden (und unsachgemäße Reinigung nach solchen Schäden), verkaufsfördernde Manipulationen (z.B. Parfumierung) und unsachgemäße Aufstellung zum Verkauf (z.B. auf der Straße).

3.3 Hersteller
Hersteller eines textilen Produktes und/oder eines Zubehörteiles für ein textiles Produkt ist jenes Unternehmen, welches das Produkt herstellt oder in dessen Auftrag die Herstellung erfolgt.

3.4 Vertreiber
Vertreiber eines textilen Produktes und/oder eines Zubehörteiles für ein textiles Produkt ist jenes Unternehmen, welches das Produkt als Großhändler oder Detailverkäufer (Kaufhäuser, Versandhäuser etc.) in Verkehr bringt.

3.5 Produktbezeichnung
Die Produktbezeichnung ist jene Bezeichnung, die der Hersteller oder Vertreiber für das zu
3.6 Artikelgruppe

Unter einer Artikelgruppe ist grundsätzlich die Zusammenfassung von einzelnen Artikeln zu einer Gruppe zu verstehen, die in einem Zertifikat zusammengefasst werden können, z.B.:

- Textilien mit ausschließlich physikalischen Unterschieden, hergestellt aus definierten Ausgangsmaterialien
- Artikel, die ausschließlich aus zertifizierten Produkten physikalisch zusammengesetzt werden
- Veredelte Textilien aus gleichartigen Fasermaterialien (z.B. solche aus cellulösen Fasern, aus Mischungen von PES und CO, aus synthetischen Fasern etc.)

3.7 Produktklassen

Eine Produktklasse in Zusammenhang mit diesem Standard ist die Gruppierung verschiedener Artikel gemäß ihrem (späteren) Verwendungszweck. In den verschiedenen Produktklassen können nicht nur verkaufsfertige Artikel zertifiziert werden, sondern auch deren Vorprodukte in allen Verarbeitungsstufen (Fasern, Garne, Flachengebilde) sowie Zubehör. Die verschiedenen Produktklassen unterscheiden sich im Wesentlichen durch die zur Anwendung gelangenden produkt-spezifischen Anforderungen und Prüfverfahren.

3.7.1 Produkte für Babys (Produktklasse I)


3.7.2 Produkte mit Hautkontakt (Produktklasse II)

Als hautnah sind jene Artikel zu bezeichnen, die zu einem großen Teil direkt mit der Haut in Kontakt treten können (wie z.B. Blusen, Hemden, Unterwäsche u.ä.)

3.6 Article group

An article group is basically a combination of several articles to a group which may be joined in the same certificate, like e.g.:

- Textiles with physical differences only, made from well defined basic materials
- Articles which are physically composed of certified products only
- Finished textiles from the same kind of fibre material (for example those made from cellulose fibres, mixtures from PES and CO, from synthetic fibres etc.)

3.7 Product classes

A product class in context with this standard is a group of different articles according to their (future) utilization. In the different product classes not only the ready-to-sell articles may be certified but also their preliminary products of all levels of manufacturing (fibres, yarns, fabrics) and accessories. The different product classes differ in general by the requirements that the products have to fulfill and by the test methods applied.

3.7.1 Products for babies (Product class I)

Products for babies in the context of this standard are all articles, basic materials and accessories which are provided for the production of articles for babies and children up to two years old with the exception of leather clothing. Baby clothing refers to a conformations size of 92 (indicative only) or smaller.

3.7.2 Products with direct contact to skin (Product class II)

Skin contact articles are those which are worn with a large part of their surface in direct contact with the skin (e.g. blouses, shirts, underwear etc.)

3.6 Artikelgruppe

En artikelgruppe er grundlæggende en sammenfatning af enkel-artikler, som kan samles i samme certifikat, f.eks.

- Textiler, der udelukkende har fysiske forskelle og er fremstillet ud fra definerede udgangsmaterialer
- Artikler, der er fysisk sammensat af udelukkende certificerede produkter
- Forældrede textiler af samme type fibermaterialer (eksempelvis af cellulosefibre, af blanding af polyester og bomuld, af syntetiske fibre osv.)

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Hemden, Unterwäsche u.ä.)

3.7.3 Produkte ohne Hautkontakt
(Produktklasse III)

Als hautfern sind jene Artikel zu bezeichnen, die nur mit einer kleinen Oberfläche direkt mit der Haut in Kontakt treten (wie z.B. gefütterte Artikel, Einlagenstoffe u.ä.)

3.7.4 Ausstattungsmaterialien
(Produktklasse IV)


3.8 Biozidausrüstung


4 Bedingungen

4.1 Produktgruppenspezifische Anforderungen

Neben den allgemein gültigen Bedingungen zur Zertifizierung nach Öko-Tex Standard 100 müssen die produktspezifischen Anforderungen, die im Anhang 5 aufgelistet sind, für jeden Bestandteil erfüllt werden.

4.2 Antrag

Der Antrag für die Vergabe der Berechtigung, ein Produkt mit der Öko-Tex Standard 100 Kennzeichnung zu versehen, ist schriftlich auf dem hierfür vorgesehenen Antragsformular an ein Institut oder eine Zertifizierungsstelle der Internationalen Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie (Öko-Tex) zu stellen. (Siehe Anhang 1 und 2).

4.3 Mustermaterial

Für die Prüfung und als Belegmaterial ist vom Antragsteller ausreichendes und repräsentatives Mustermaterial des zu kennzeichnenden Produktes, etc.

3.7.3 Produkter uden hudkontakt
(produktklasse III)

Artikler, der kun med en lille del af overfladen kommer i direkte kontakt med huden, der betegnes som hudferne (f.eks. forede artikler, indlægsmateriale osv.)

3.7.4 Boligindretningens- og dekorationsmateriale
(produktklasse IV)

Boligindretningens- og dekorationsmateriale er efter denne standards betydning alle artikler, forprodukter og tilbehør, som er beregnet til boligindretnings- og dekorationsformål som f.eks. duge, tekstil vægbeklædning, gardiner og forhæng, mebelstoffer, textile gulvbelægninger og madrasser.

4 Conditions

4.1 Product specific requirements

In addition to the general requirements for certification according to Öko-Tex Standard 100, the product specific requirements given in appendix 5, have to be fulfilled by each component.

4.2 Application

The application for the granting of authorization to use the Öko-Tex Standard 100 mark has to be made by written on the respective application form to an institute or a certification agency of to the International Association for Research and Testing in the field of Textile Ecology (Öko-Tex). (See appendix 1 and 2).

4.3 Sample material

For test purposes and as a reference the applicant should provide sufficient and representative sample material of the product meant to receive the label. This is

4 Betingelser

4.1 Produktspecifikke krav

Ud over de generelle krav for certificering i henhold til Öko-Tex Standard 100 skal de produktspecifikke krav anførte i appendiks 5 værdef fulgt for alle bestanddele.

4.2 Ansøgning

Ansigle og ved tilfælde til anvendelse af Øko-Tex mærkning skal fremsendes skriftligt, ved brug af Øko-Tex ansøgningsskema, til et institut eller certificeringsagentur, der tilhører International Forening til Forskning og Prøvning på området Tekstiløkologi (Öko-Tex), (se appendiks 1 og 2).

4.3 Prøvemateriale

Til prøvning og referencen prøver må ansøgeren stille tilstrækkeligt og repræsentativt prøvemateriale til rådighed af det produkt, der skal mærkes. Dette gælder også ved
vorzulegen. Dies gilt auch bei der Beantragung einer Verlängerung des Zertifikates.

Die Richtlinien der Verpackungsanleitung (siehe Anhang 4) sind einzuhalten.

4.4 Abgabe einer Verpflichtungserklärung

Die rechtsverbindlich unterzeichnete Verpflichtungserklärung des Antragstellers ist erforderlicher Bestandteil des Antrages und hat folgendes zu enthalten:

- Haftung für die im Antrag gemachten Angaben.
- Verpflichtung, jede Änderung bezüglich Rohstoffeinsatz, Verfahrenstechnik und Rezepturen unverzüglich der Stelle, die die Berechtigung vergeben hat, zur Kenntnis zu bringen.
- Verpflichtung, nach Ablauf oder bei Widerruf der Berechtigung zur Kennzeichnung dafür zu sorgen, dass eine weitere Kennzeichnung unterbleibt.

4.5 Prüfung

Das vom Antragsteller übergebene Mustermaterial wird ebenso wie Proben, die am Herstellungsort entnommen wurden, vom beauftragten Institut geprüft. Art und Umfang dieser Prüfung hängen vom zu prüfenden Produkt und den Angaben des Antragstellers über das Produkt ab und werden durch das Institut festgelegt.

Prüflinge, die einen produktfremden Geruch bzw. einen Geruch aufweisen, der auf eine unsachgemäße Produktion schließen lässt, werden von der Prüfung ausgeschlossen und können keine Berechtigung zur Benutzung des Öko-Tex Standard 100 Kennzeichens erhalten.

Textile Einzelbestandteile von zu zertifizierenden Artikeln der Produktklassen II - IV bzw. alle Einzelbestandteile der Klassen III - IV, die weniger als 1.0 % des Gesamtgewichtes des zu zertifizierenden Artikels ausmachen, müssen nicht geprüft werden.

4.6 Qualitätsüberwachung

Der Antragsteller hat dem Institut darzulegen, welche Vorkehrungen er innerhalb seines Unternehmens auch die case for an application for prolongation of the certificate.

Guiding principles of the packing instruction are to be observed (see appendix 4).

4.6 Quality control

The applicant shall explain to the institute the precautions he has taken within his company to ensure

4.6 Kvalitetsovervågning

Over for instituttet har ansøgeren pligt til at fremføre hvilke forholdsregler, der er i verksam for at sikre, at

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4.7 Quality assurance

The applicant shall operate and maintain an effective quality assurance system to ensure that products manufactured and/or sold with conformity of the test sample, thereby ensuring and proving to the Öko-Tex institute that the products, e.g. from different lots or from different colours are spot-checked for compliance with the Öko-Tex Standard 100 series.

During the certificate’s period of validity, the institute is authorized to undertake two random tests on certified products. The testing costs are to the debit of the label taker. If random testing reveals a deviation from the limit values on which the tests are based upon, an additional test will be undertaken on a different sample for controlling. The relevant costs are likewise to the debit of the label taker. If further deviations are found, the testing institute may withdraw the authorization to label products with the Öko-Tex Standard 100 mark with immediate effect. The use of existing advertising materials, displays, labels, etc. is limited to two months from the time of withdrawal.
4.8 Conformity

The applicant who is either manufacturing or selling goods with an Oko-Tex Standard 100 mark must take sole responsibility in declaring that the product manufactured or sold complies with the limit values for harmful substances according to Oko-Tex Standard 100.

The acknowledgement of the credibility of the quality assurance system of the applicant is a presupposition to grant the permission to use the Oko-Tex Standard 100 mark.

5.1 Granting of authorization

If all the conditions of this standard are satisfied, if the tests do not demonstrate any deviations from the details provided by the applicant and if the test values do not exceed the given limit values, a certificate will be issued, entitling the applicant to label his products during the period of validity with the Oko-Tex Standard 100 mark.

In case the limiting values and/or the examination criteria alter, the validity of the respective certified products will remain effective for a transition period until the expiration date of the certificate. Once this period has elapsed, the prevailing conditions of prolongation must be fulfilled.

Die Berechtigung, ein Produkt mit der Oko-Tex Standard 100 Kennzeichnung zu versehen, ist

5.2 Limit of authorization

The authorization to mark a product with the Oko-Tex Standard 100 mark is limited to a maximum of one

Oko-Tex Standard 100

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longest up to one year be confined.
While the period of validity of the certificate the test standards and limiting values relevant at the time of granting the authorization are valid. On request of the applicant the starting of the authorization can be postponed for at least three months from the date of the test report.

After the authorization period of the Öko-Tex Standard 100 labelling has expired, the label taker is entitled to apply for a prolongation of the authorization for another year. The institute determines a reduced testing program for the 1st, 2nd, 4th, 5th etc. prolongation.

As soon as the conditions stated in the application form do not prove correct any longer, the authorization to mark the product with the Öko-Tex Standard 100 labelling expires. This is the case, so far as the institute has not been informed about modifications and could not confirm whether the requirements of the Öko-Tex Standard 100 are still satisfied.

The authorization to use the mark will be withdrawn, if it is determined by means of production controls, market controls or other methods that the details given by the applicant are not or are no longer correct or that amendment of the applied technical and/or manufacturing conditions were not reported immediately.

Authorization will also be withdrawn, when the mark does not comply with the conditions of this standard.

In a product continuing bearing the mark abusively after the withdrawal of authorization, the International Association for Research and Testing in the field of Textile Ecology is - after the second warning to abstain from marking - authorized to publish the withdrawal in a suitable form.

If a product continues bearing the mark abusively after the withdrawal of authorization, the International Organization for Forening to Forskning and Prøvning på området Textiløkologi (Öko-Tex) ret til, efter den anden varsling om at standse mærkningen er blevet udstedt, at offentliggøre tilbage- trækningen af tilladelsen på en passende måde.

Så snart betingelserne, der er oplyst i ansøgningen, ikke længere er korrekte, ophæver tilladelsen til at mærke produktet med Öko-Tex Standard 100 mærket. Dette er tillægt, hvis Institutet ikke er blevet informeret om ændringer og dermed ikke har kunnet fastslå om kravene i Öko-Tex Standard 100 stadig er opfyldt.

5.4 Mærkningstyper

Efter tilladelsen er blevet givet, er ansøgeren beregnet til at mærke produktet med et eller flere mærker,
Die Angaben bezüglich der Zertifikatsnummer und des Prüfinstitutes sind zwingend erforderlich und müssen mit dem entsprechenden Zertifikat übereinstimmen.

Die Verwendung einer anderen Form der Kennzeichnung ist nicht gestattet.

Bei der Kennzeichnung sind die nachfolgend beschriebenen Farben zu beachten:

- **grün** = RAL 6010 Grasgrün
  - = HKS 64
  - = Pantone: 362 C

- **gelb** = RAL 1016 Schwefelgelb
  - = HKS 5
  - = Pantone: 116 C

Jede Kennzeichnung hat so zu erfolgen, daß daraus eindeutig hervorgeht, auf welches Produkt sie sich die Kennzeichnung bezieht. Die Kennzeichnung kann z.B. in Kollektionen, Prospekten etc. erfolgen.

Sollte in besonderen Fällen die Kennzeichnung nur zweifarbig möglich sein, so können diese seltenen Ausnahmefälle nur mit Genehmigung des jeweiligen Prüfinstitutes erfolgen.

Sollte der Umlaut Ö in einer Landessprache nicht üblich sein für Druck oder Korrespondenz, so ist bei Bezug auf "Öko-Tex" und den entsprechenden Öko-Tex Standard 100 auch z.B. die Schreibweise "Oeko-Tex" oder "0ko-Tex" zulässig.


The declarations with respect to the certificate number and to the testing institute are obligatory and must correspond to the respective certificate.

The use of any other form of inscription is not allowed.

In the design of the mark the following colours have to be used:

- **green** = RAL 6010 grass-green
  - = HKS 64
  - = Pantone: 362 C

- **yellow** = RAL 1016 sulphurous
  - = HKS 5
  - = Pantone: 116 C

It must be clear from each marking to which product the mark refers to. The mark may appear in collections, catalogues, etc.

If the marking should be possible only in two colours it may be reproduced dichromatic in these rare cases with an extra allowance from the testing institute.

Should in a vernacular the vowel-mutation Ö not be in use for printing or correspondence in a particular language, it is permissible to use e.g. the writing "Oeko-Tex" or "Øko-Tex" respectively "Oko-Tex Standard 100".

The marks can be produced by the certificate holders on their own, but have to be shown to the certifying institute for approval. This approval is not necessary if the films for the labels are directly ordered from an advertising agency authorized by Öko-Tex. Further information is available from the institutes.

Certifikatindehaveren kan selv lade mærket fremstille, men skal forelægge dette til godkendelse hos det certificerende institut. En sådan godkendelsesprocedure er ikke nødvendig, hvis filmene til mærkerne/etiketterne bestilles direkte hos et Øko-Tex autoriseret reklameagentur. Yderligere information kan fås hos institutterne.
The following institutes currently belong to the International Association for Research and Testing in the Field of Textile Ecology (Öko-Tex):

- Forschungsinstitut Hohenstein
  Schloss Hohenstein
  D-74357 Bönningheim
  Phone +49-7143-271.0
  Telex +49-7143-271.51
  E-Mail: info@hohenstein.de

HÖHENSTEIN Ekoteks Tekstil Analiz ve Kontrol Hizmetleri Ltd. Şti.
Mahmut Sevket Pasa Mah. Kurucay Cad.
Eren Sok. No. 5
TR-Ökmeayani-Istanbul
Phone +90-212 23 801 40
Telex +90-212 23 801 41
E-Mail: turkey@hohenstein.org

HOHENSTEIN INSTITUTES
Textile Testing Services
9016 Oak Branch Drive
Apex, NC 27520, USA
Phone +1-919-363.5062
Telex +1-919-387.8326
E-Mail: usa@hohenstein.org

- Institut Textile de France ITF-Lyon
  Avenue Guy de Collongue, B.P. 60
  F-69132 Ecullay Cédex
  Phone +33-472-86.16.00
  Telex +33-478-43.39.66
  E-Mail: itf-lyon@worldnet.fr

- DTI Beklædnings og Tekstil
  Gregersensvej, Postboks 141
  DK-2630 Tastrup
  Phone +45-43-50 72.45
  E-Mail: textile@teknologisk.dk

- CITEVE, Centro Tecnológico das Indústrias Têxtil
  P-4760 Vila Nova de Famalicão
  Phone +351-252-300 300
  Telex +351-252-300 317
  E-Mail: citeve@mail.telepac.pt

- AITEX, Instituto Tecnológico Textil
  Plaza Emilio Sala 1
  E-03801 Alcoy
  Phone +34-96-554.22.00
  Telex +34-96-554.34.94
  E-Mail: info@aitex.es
Assoziiertes Öko-Tex Mitglied

Das folgende Institut gehört derzeit der Internationalen Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie (Öko-Tex) als assoziiertes Mitglied an:

- Innovatex, Gyömrői út 86., 1475 Bp., Pf.: 6 H-1103 Budapest X.,
  Telefax +36-1-261-52-60
  E-Mail: innova@mail.datanet.hu

- NissenKen, Japan Dyer’s Inspection Institute Foundation
  4-2-8, Tateishi, Katushika-ku, Tokyo 124-0012, Japan
  Telefax +81-3-5670-3751
  E-Mail: n-senken-c@hi-ho.ne.jp

Zertifizierungsstellen Öko-Tex

Die Zertifikate können von einem der Öko-Tex Institute oder einer der folgenden Zertifizierungsstellen ausgestellt werden:

- Association pour la promotion de l’Assurance Qualité dans la filière Textile-Habillement (ASQUAL)
  F-75013 Paris, 14 rue de Reculettes
  +33-1-44-08-19-00, Telefax +33-1-44-08-19-39

- Deutsche Zertifizierungsstelle Öko-Tex
  D-65760 Eschborn, Frankfurter Str. 10-14
  +49-61-96-966-230, Telefax +49-61-96-966-226

Sekretariat

Das offizielle Sekretariat der Internationalen Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie (Öko-Tex) kann unter der nachfolgenden Adresse erreicht werden:

- Öko-Tex Association c/o TESTEX
  CH-8027 Zürich, Gotthardstr. 61, Postfach 585
  +41-1-206 42 42, Telefax +41-1-206 42 30
  E-Mail: info@oeko-tex.com

Weitere Vertretungen

Weitere Vertretungen bestehen in:

- Polen
- Slowakei
- Süd-Afrika

Die Adressen werden auf Anfrage beim Öko-Tex Sekretariat bekanntgegeben.

Member associated to Öko-Tex

The following institute is an associated member to the International Association for Research and Testing in the Field of Textile Ecology (Öko-Tex):

- Innovatex, Gyömrői út 86., 1475 Bp., Pf.: 6 H-1103 Budapest X.,
  Telefax +36-1-261-52-60
  E-Mail: innova@mail.datanet.hu

- NissenKen, Japan Dyer’s Inspection Institute Foundation
  4-2-8, Tateishi, Katushika-ku, Tokyo 124-0012, Japan
  Telefax +81-3-5670-3751
  E-Mail: n-senken-c@hi-ho.ne.jp

Certification agencies Öko-Tex

The certificates may be issued by one of the Öko-Tex institutes or by one of the following certification agencies:

- Association pour la promotion de l’Assurance Qualité dans la filière Textile-Habillement (ASQUAL)
  F-75013 Paris, 14 rue de Reculettes
  +33-1-44-08-19-00, Telefax +33-1-44-08-19-39

- Deutsche Zertifizierungsstelle Öko-Tex
  D-65760 Eschborn, Frankfurter Str. 10-14
  +49-61-96-966-230, Telefax +49-61-96-966-226

Other representatives

Other representatives are located in:

- Poland
- Slovakia
- South-Africa

The addresses are given by the secretariat on request.

Associerede Øko-Tex medlemmer

Følgende organisationer er tilknyttet International Forening til Forskning og Prøvning på området Textiløkologi (Øko-Tex) som associerede medlemmer:

- NissenKen, Japan Dyer’s Inspection Institute Foundation
  4-2-8, Tateishi, Katushika-ku, Tokyo 124-0012, Japan
  Telefax +81-3-5670-3751
  E-Mail: n-senken-c@hi-ho.ne.jp

Certifikaterne kan udstedes af et af Øko-Tex institutterne eller af et af følgende certificerings-agenturer:

- Association pour la promotion de l’Assurance Qualité dans la filière Textile-Habillement (ASQUAL)
  F-75013 Paris, 14 rue de Reculettes
  +33-1-44-08-19-00, Telefax +33-1-44-08-19-39

- Deutsche Zertifizierungsstelle Öko-Tex
  D-65760 Eschborn, Frankfurter Str. 10-14
  +49-61-96-966-230, Telefax +49-61-96-966-226

Andre repræsentationer

Andre repræsentationer findes i

- Polen
- Slowakiet
- Syd-Afrika

Adresseerne oplyses af Øko-Tex sekretariatet efter anmodning.
Öko-Tex Standard 100
Kennzeichnung

Die landesübliche Kennzeichnung ist zu empfehlen, insbesondere in den skandinavischen Ländern. Im übrigen liegt die Kennzeichnung in der Eigenverantwortung der Antragsteller. Nachfolgend sind einige Beispiele aufgeführt:

Einsprachige Kennzeichnung

Für die einsprachige Kennzeichnung stehen verschiedene Sprachen zur Auswahl.

Mehrsprachige Kennzeichnung

Bei mehrsprachiger Kennzeichnung können verschiedene Sprachen kombiniert werden. Die deutsche Bezeichnung "Schadstoffgeprüfte Textilien" muss jedoch in jedem Fall aufgeführt werden.

Öko-Tex Standard 100 mark

The national marking is recommended, especially in Scandinavian countries. For the rest, the marking lies in the applicant's own responsibility. Following some examples of possible marks are shown:

Single language marking

The single language marking is possible in several languages.

Multiple language marking

In case of multilingual marking several languages may be combined. The German text "Schadstoffgeprüfte Textilien" must be quoted in any case.

Öko-Tex-märket

Det anbefales, at der i de enkelte lande benyttes det mærke, der er særegent for landet; dette gælder specielt i de skandinaviske lande. Ansvaret for mærkning påhveder ansøgeren. Følgende er eksempler på mulige mærker:

Enkeltsproget mærkning

Det enkeltsprogede mærke findes på adskillige sprog.

Flersproget mærkning

I tilfælde af flersproget mærkning kan flere forskellige sprog kombineres. Den tyske tekst „Schadstoffgeprüfte Textilien“ skal dog i alle tilfælde anføres.

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28. April 2000
Packing Instructions for sample material

The packing of the test samples should satisfy specific requirements in order to protect the samples and to guarantee exactness and reproducibility of the test results.

The individual samples must be packed in polyethylene foil or polyethylene bags of high tensile strength to avoid contamination during the transport of the goods.

Paking of samples in cardboard boxes and/or paper only is not allowed.

Emballeringsinstruktioner for prø vemateriale

Emballeringen af prø vemateriale skal opfylde bestemte kvalitetskrav for at beskytte prøverne og for at sikre korrekte og reproducerbare prøvningsresultater.

Hver enkelt prøve skal pakkes i polyethylen folie eller i polyethylen poser med høj brudstyrke for at undgå at der sker forurening under forsendelsen.

Emballeringen lukkes ved at fledge indpakningen og lukke tæt med klebebånd.

Emballering af prø vemateriale blot i papæsker og/eller papir er ikke tilladt.
### Grenzwerte und Echtheiten / Limit values and fastness / Grænseværdier og ægtheder

<table>
<thead>
<tr>
<th>Produktklasse</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby / Baby / Baby</td>
<td>mit Hautkontakt / in direct contact with skin / med hudkontakt</td>
<td>ohne Hautkontakt / with no direct contact with skin / uden hudkontakt</td>
<td>Ausstattungsmaterialien / decoration material / Boligindretnings- og dekorationstage</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH-Wert / pH value / pH-værdi</th>
<th>4.0 - 7.5</th>
<th>4.0 - 7.5</th>
<th>4.0 - 9.0</th>
<th>4.0 - 9.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyd / formaldehyd / formaldehyde [ppm]</td>
<td>20</td>
<td>75</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Emission / emission / emission²</td>
<td>0.1</td>
<td></td>
<td></td>
<td>0.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extrahierbare Schwermetalle / extractable heavy-metals / ekstraherbare tungmetaller [ppm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sb (Antimon / antimony / antimon)³</td>
</tr>
<tr>
<td>As (Arsen / arsenic / arsen)⁴</td>
</tr>
<tr>
<td>Pb (Blei / lead / bly)</td>
</tr>
<tr>
<td>Cd (Cadmium / cadmium / kadmium)</td>
</tr>
<tr>
<td>Cr (Chrom / chromium / krom)</td>
</tr>
<tr>
<td>Cr(VI)</td>
</tr>
<tr>
<td>Co (Cobalt / cobalt / kobolt)</td>
</tr>
<tr>
<td>Cu (Kupfer / copper / kobber)</td>
</tr>
<tr>
<td>Ni (Nickel / nickel / nikkel)⁴</td>
</tr>
<tr>
<td>Hg (Quecksilber / mercury / kviksolv)⁴</td>
</tr>
<tr>
<td>Pestizide / pesticides / pesticider [ppm]⁴</td>
</tr>
<tr>
<td>Summe / sum / total (inkl. / incl. PCP/TeCP)⁸</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chlorierte Phenole / chlorinated phenols / chlorphenoiler [ppm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentachlorphenol (PCP)</td>
</tr>
<tr>
<td>2,3,5,6-Tetrachlorphenol (TeCP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PVC-Weichmacher (Phthalate) / PVC plasticizers (phthalates) / PVC-blødgerere (phthalater) [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DINP, DNOP, DEHP, DIDP, BBP, DBP ⁸</td>
</tr>
<tr>
<td>Summe / sum / total</td>
</tr>
</tbody>
</table>

### Zinnorganische Verbindungen / organic tin compounds / tinorganiske forbindelser [ppm]

| TBT | 1.0 | 1.0 | 1.0 |
| DBT | 1.0 | | |

---

1. Für Produkte, die zwingend einer nachfolgenden Nassbehandlung unterworfen werden müssen ist ein pH Wert von 4.0 - 10.5 zulässig / Those products which must be treated wet during the further processing can have a pH value within 4.0 - 10.5 / For produkter der skal gives en vådbehandling i den videre fabrikation kan en pH-værdi i området 4.0 - 10.5 tillades.

2. Nur für Teppiche, Mattraten und schaumstoffbeschichtete Artikel / for carpets, mattresses and articles coated with foamed materials only / Kun for golvtepper, madrasser og skumbelagte artikler.

3. Für Produkte, die zwingend einer nachfolgenden Nassbehandlung unterworfen werden müssen, ist ein extrahierbarer Antimongehalt von 20 ppm zulässig / Those products which must be treated wet during the further processing can have an extractable antimony content of 20 ppm / For produkter der skal gives en vådbehandling i den videre fabrikation kan tillades et indhold af ekstraherbart antimon op til 20 ppm.

4. nur für native Fasen / for natural fibres only / kun for naturløber

5. keine Anforderung für Zubehör aus anorganischen Materialien / no requirement for accessory from anorganic materials/ ingen krav for tilbehør af uorganiske materialer.

6. Bestimmungsgrenzen: für Cr(VI) 0.5 ppm, für Arylamine 20 ppm, für allergisierende Farbstoffe 0.006 % / Quantification limits: for Cr(VI) 0.5 ppm, for arylamines 20 ppm, for allergenous dyestuffs 0.006 % / Bestemmelsesgrænser: for Cr(VI) 0.5 ppm, for alyaminer 20 ppm, for allergifremkaldende farvestoffer 0.006 %

7. Bei beschichteten metallischen Zubehörteilen wird der Prüfung vorgängig einer Korrosions-, bzw. Abriebprüfung gemäß prEN 12472 unterzogen / For coated metallic accessories the specimen need to undergo a preliminary corrosion and abrasion test according to prEN 12472 / Boligindretnings- og skidforbehandling i henhold til prEN 12472.

8. Für eine Auflistung der Einzelsubstanzen siehe Anhang 6 / For a compilation of the individual substances see annexe 6 / en liste over enkeltsubstanserne findes i appendiks 6

© Oko-Tex, Zürich
<table>
<thead>
<tr>
<th>Produktklasse</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product class</td>
<td>Baby / Baby / Baby</td>
<td>mit Hautkontakt / in direct contact with skin / med hudkontakt</td>
<td>ohne Hautkontakt / with no direct contact with skin / uden hudkontakt</td>
<td>Ausstattungsmaterialien / decoration material / Bolignings- og dekorationsmateri ler</td>
</tr>
</tbody>
</table>

**Farbmittel / dyes / farvestoffer og -pigmenter**

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abspaltbare Arylamine / cleavable arylamines</td>
<td></td>
<td>nicht verwendet / not used / ikke anvendt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>krebsserregende / cancerogenes / kærfremkaldende</td>
<td></td>
<td>nicht verwendet / not used / ikke anvendt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>allergisierende / allergenous / allergifremkaldende</td>
<td></td>
<td>nicht verwendet / not used / ikke anvendt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chlororganische Carrier / chlorinated organic carrier / klororganiske carrier (ppm)**

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biozidausrüstung / biocidal finish / biocid imprægnering</td>
<td>keine / none / ingen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammfestausrichtung / flame retardent finish / flammehæmmende imprægnering</td>
<td>keine / none / ingen</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Farbachtum (Anbluten) / colour fastness (staining) / farveægthet (afsmilting)**

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wassersehieht / towards water / vandægth</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Schwefsehieht / towards acidic perspiration / sur svedægthed</td>
<td>3-4</td>
<td>3-4</td>
<td>3-4</td>
<td>3-4</td>
</tr>
<tr>
<td>Schwefsehieht / towards alkalic perspiration / basisk svedægth</td>
<td>3-4</td>
<td>3-4</td>
<td>3-4</td>
<td>3-4</td>
</tr>
<tr>
<td>Reibsehieht / towards rubbing / dry / gndsehieht, tør</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Reibsehieht / towards rubbing, wet / gndsehieht, våd</td>
<td>2-3</td>
<td>2-3</td>
<td>2-3</td>
<td>2-3</td>
</tr>
<tr>
<td>Speichel- und Schwefsehieht / towards saliva and perspiration / spyt- og svedægth</td>
<td>echt / resistant / ægte</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Emission leuchtflüchtiger Komponenten / emission of volatiles / emission af flygtige forbindelser (mg/m³)**

<table>
<thead>
<tr>
<th>Stoff</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluol</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Styrol</td>
<td>0.005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinylcyclohexen</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-Phenylicyclohexen</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butadien</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinylchlorid</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aromatische Kohlenwasserstoffe</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aromatic hydrocarbons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aromatische kubrinter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flüchtige organische Stoffe / organic volatiles</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flüchtige organische forbindelser</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Geruchsprüfung / Determination of odors / Lugtafgivelse**

<table>
<thead>
<tr>
<th>Stoff</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generell / general / generelt</td>
<td>kein aussergewöhnlicher Geruch / no abnormal odor / ingen usædvanlig lug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNV 195 85112</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9 Bei Pigment-, Kupfer- oder Schwefelfarbstoffen ist eine Mindest-ReibachtumszähI von 3 un 3-2 zulässig. /
Für pigment-, vat or sulphurous dyes a minimum grade of colour fastness to rubbing of 3 (dry) and 2 (wet) is acceptable / For pigment-, kype- eller svovlfarver er tilladt en mindste gnedægthed tør 3 og våd 2.

10 Für alle Artikel ausser textiler Fussbodenbeläge / for all articles with the exception of textile floor coverings / for alle artikler med undtagelse af textile gulvebelægninger.

11 kein Geruch nach Schimmel, Schwerbenzin, Fisch, Aromaten oder Geruchsveredler / no odor from mould, high boiling fraction of petrol, fish, aromas, or perfume / ingen lug af skimmel (tåd, jordslaethed), petroleum, terpentin, naftalin, fisk, aromatiske kubrinter, parfume.

12 Nur für textile Fussbodenbeläge / for textile floor coverings only / kun for textile gulvebelægninger.
### Auflistung der Einzelsubstanzen / Compilation of the individual substances / Liste over enkeltsubstanser

#### Pesticides

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
<th>Navn</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,5-T</td>
<td>2,4,5-T</td>
<td>2,4,5-T</td>
<td>93-76-5</td>
</tr>
<tr>
<td>2,4-D</td>
<td>2,4-D</td>
<td>2,4-D</td>
<td>97-75-7</td>
</tr>
<tr>
<td>Aldrin</td>
<td>Aldrin</td>
<td>Aldrin</td>
<td>309-00-2</td>
</tr>
<tr>
<td>Carbaryl</td>
<td>Carbaryl</td>
<td>Carbaryl</td>
<td>63-25-3</td>
</tr>
<tr>
<td>DDD</td>
<td>DDD</td>
<td>DDD</td>
<td>53-19-0</td>
</tr>
<tr>
<td>DDE</td>
<td>DDE</td>
<td>DDE</td>
<td>72-54-8</td>
</tr>
<tr>
<td>DDT</td>
<td>DDT</td>
<td>DDT</td>
<td>50-29-3</td>
</tr>
<tr>
<td>Dieldrin</td>
<td>Dieldrine</td>
<td>Dieldrin</td>
<td>53-19-0</td>
</tr>
<tr>
<td>Endosulfan, α-</td>
<td>Endosulfan, α-</td>
<td>Endosulfan, α-</td>
<td>309-00-2</td>
</tr>
<tr>
<td>Endosulfan, β-</td>
<td>Endosulfan, β-</td>
<td>Endosulfan, β-</td>
<td>63-25-3</td>
</tr>
<tr>
<td>Endrin</td>
<td>Endrin</td>
<td>Endrin</td>
<td>53-19-0</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>Heptachlor</td>
<td>Heptachlor</td>
<td>63-25-3</td>
</tr>
<tr>
<td>Heptachlorepoxid</td>
<td>Heptachlorepoxid</td>
<td>Heptachlorepoxid</td>
<td>1024-57-3</td>
</tr>
<tr>
<td>Hexachlorbenzol</td>
<td>Hexachlorbenzol</td>
<td>Hexachlorbenzol</td>
<td>118-74-1</td>
</tr>
<tr>
<td>Hexachlorcyclohexan, α-</td>
<td>Hexachlorcyclohexan, α-</td>
<td>Hexachlorcyclohexan, α-</td>
<td>319-84-6</td>
</tr>
<tr>
<td>Hexachlorcyclohexan, β-</td>
<td>Hexachlorcyclohexan, β-</td>
<td>Hexachlorcyclohexan, β-</td>
<td>319-85-7</td>
</tr>
<tr>
<td>Lindan</td>
<td>Lindan</td>
<td>Lindan</td>
<td>319-86-8</td>
</tr>
<tr>
<td>Methoxychlor</td>
<td>Methoxychlor</td>
<td>Methoxychlor</td>
<td>58-89-9</td>
</tr>
<tr>
<td>Mirex</td>
<td>Mirex</td>
<td>Mirex</td>
<td>72-43-5</td>
</tr>
<tr>
<td>Toxaphen (Camphechlor)</td>
<td>Toxaphen (Camphechlor)</td>
<td>Toxaphen (Camphechlor)</td>
<td>8001-35-2</td>
</tr>
<tr>
<td>Trifluralin</td>
<td>Trifluralin</td>
<td>Trifluralin</td>
<td>1582-09-8</td>
</tr>
</tbody>
</table>

#### Phthalate

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
<th>Navn</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di-iso-Nonylphthalat</td>
<td>Di-iso-nonylphthalat</td>
<td>Di-iso-nonylphthalat</td>
<td>28553-12-0</td>
</tr>
<tr>
<td>Di-n-Octylphthalat</td>
<td>Di-n-octylphthalate</td>
<td>Di-n-octylphthalate</td>
<td>117-84-0</td>
</tr>
<tr>
<td>Di(2-Ethylhexyl)-Phthalat</td>
<td>Di(2-ethylhexyl)-phthalate</td>
<td>Di(2-ethylhexyl)-phthalate</td>
<td>117-81-7</td>
</tr>
<tr>
<td>Diisodecyphthalat</td>
<td>Diisodecyphthalate</td>
<td>Diisodecyphthalate</td>
<td>26761-40-0</td>
</tr>
<tr>
<td>Butylbenzylphthalat</td>
<td>Butylbenzylphthalate</td>
<td>Butylbenzylphthalate</td>
<td>85-68-7</td>
</tr>
<tr>
<td>Dibutylphthalat</td>
<td>Dibutylphthalate</td>
<td>Dibutylphthalate</td>
<td>84-74-2</td>
</tr>
</tbody>
</table>

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28. April 2000

**Ausgabe / Edition / Udgave 03/2000**
Liste der Arylamine, die unter reduktiven Bedingungen nicht aus Farbmitteln abspaltbar sein dürfen

<table>
<thead>
<tr>
<th>Name</th>
<th>MAK III A1</th>
<th>MAK III A2</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Aminodiphenyl</td>
<td>4-Aminodiphenyl</td>
<td>4-amino-biphenyl</td>
<td>92-67-1</td>
</tr>
<tr>
<td>Benzidin</td>
<td>Benzidine</td>
<td>benzidin</td>
<td>92-87-5</td>
</tr>
<tr>
<td>4-Chlor-o-toluid</td>
<td>4-Chloro-o-toluidine</td>
<td>4-chlor-o-toluidin</td>
<td>95-69-2</td>
</tr>
<tr>
<td>2-Naphthylamin</td>
<td>2-Naphthylamine</td>
<td>2-naphthylamin</td>
<td>91-59-8</td>
</tr>
</tbody>
</table>

List of the arylamines that are not allowed to be split off from dyes under reductive conditions

<table>
<thead>
<tr>
<th>Name</th>
<th>MAK III A1</th>
<th>MAK III A2</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-Aminoazotoluol</td>
<td>o-Aminoazotoluene</td>
<td>o-aminoazotoluene</td>
<td>97-58-3</td>
</tr>
<tr>
<td>2-Amino-4-nitrotoluol</td>
<td>2-Amino-4-nitrotoluene</td>
<td>2-amino-4-nitrotoluene</td>
<td>99-55-8</td>
</tr>
<tr>
<td>p-Chloranilin</td>
<td>p-Chloraniline</td>
<td>4-chloranilin</td>
<td>106-47-8</td>
</tr>
<tr>
<td>2,4-Diaminoanisol</td>
<td>2,4-Diaminoanisole</td>
<td>2,4-diaminoanisol</td>
<td>615-05-4</td>
</tr>
<tr>
<td>4,4'-Diaminodiphenylmethan</td>
<td>Diaminodiphenylmethane</td>
<td>Diaminodiphenylmethan</td>
<td>91-94-1</td>
</tr>
<tr>
<td>3,3'-Dichlorbenzidin</td>
<td>3,3'-Dichlor benzidin</td>
<td>3,3'-dichlorbenzidin</td>
<td>119-90-4</td>
</tr>
<tr>
<td>3,3'-Dimethoxybenzidin</td>
<td>3,3'-Dimethoxybenzidine</td>
<td>3,3'-dimethoxybenzidin</td>
<td>119-93-7</td>
</tr>
<tr>
<td>2,4-Toluylendiamin</td>
<td>2,4-Toluylendiamine</td>
<td>2,4-toluylendiamin</td>
<td>137-17-7</td>
</tr>
<tr>
<td>o-Anisidin</td>
<td>o-Anisidine</td>
<td>o-anisidin</td>
<td>90-04-0</td>
</tr>
</tbody>
</table>

List over arylaminer, der ikke må kunne afspaltes fra farvestoffer og-pigmenter under reduktive betingelser

<table>
<thead>
<tr>
<th>Name</th>
<th>MAK III A1</th>
<th>MAK III A2</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-Aminoazotoluol</td>
<td>o-Aminoazotoluene</td>
<td>o-aminoazotoluene</td>
<td>97-58-3</td>
</tr>
<tr>
<td>2-Amino-4-nitrotoluol</td>
<td>2-Amino-4-nitrotoluene</td>
<td>2-amino-4-nitrotoluene</td>
<td>99-55-8</td>
</tr>
<tr>
<td>p-Chloranilin</td>
<td>p-Chloraniline</td>
<td>4-chloranilin</td>
<td>106-47-8</td>
</tr>
<tr>
<td>2,4-Diaminoanisol</td>
<td>2,4-Diaminoanisole</td>
<td>2,4-diaminoanisol</td>
<td>615-05-4</td>
</tr>
<tr>
<td>4,4'-Diaminodiphenylmethan</td>
<td>Diaminodiphenylmethane</td>
<td>Diaminodiphenylmethan</td>
<td>91-94-1</td>
</tr>
<tr>
<td>3,3'-Dichlorbenzidin</td>
<td>3,3'-Dichlor benzidin</td>
<td>3,3'-dichlorbenzidin</td>
<td>119-90-4</td>
</tr>
<tr>
<td>3,3'-Dimethoxybenzidin</td>
<td>3,3'-Dimethoxybenzidine</td>
<td>3,3'-dimethoxybenzidin</td>
<td>119-93-7</td>
</tr>
<tr>
<td>2,4-Toluylendiamin</td>
<td>2,4-Toluylendiamine</td>
<td>2,4-toluylendiamin</td>
<td>137-17-7</td>
</tr>
<tr>
<td>o-Anisidin</td>
<td>o-Anisidine</td>
<td>o-anisidin</td>
<td>90-04-0</td>
</tr>
</tbody>
</table>

Als krebs erregend eingestufte Farbstoffe

Dyestuffs classified to be carcinogenic

<table>
<thead>
<tr>
<th>C.I. Generic Name</th>
<th>C.I. Structure number</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I. Acid Red 26</td>
<td>C.I. 16 150</td>
<td>3761-53-3</td>
</tr>
<tr>
<td>C.I. Basic Red 9</td>
<td>C.I. 42 500</td>
<td>25620-78-4</td>
</tr>
<tr>
<td>C.I. Direct Black 38</td>
<td>C.I. 30 235</td>
<td>1937-37-7</td>
</tr>
<tr>
<td>C.I. Direct Blue 6</td>
<td>C.I. 22 610</td>
<td>2602-46-2</td>
</tr>
<tr>
<td>C.I. Direct Red 28</td>
<td>C.I. 22 120</td>
<td>573-58-0</td>
</tr>
<tr>
<td>C.I. Disperse Blue 1</td>
<td>C.I. 64 500</td>
<td>2475-45-8</td>
</tr>
<tr>
<td>C.I. Disperse Yellow 3</td>
<td>C.I. 11 865</td>
<td>2832-40-8</td>
</tr>
</tbody>
</table>

Das Krebsgefahrstoffkatalog von der Öko-Tex Standard 100

Dyestuffs classified to be carcinogenic

<table>
<thead>
<tr>
<th>C.I. Generic Name</th>
<th>C.I. Structure number</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I. Acid Red 26</td>
<td>C.I. 16 150</td>
<td>3761-53-3</td>
</tr>
<tr>
<td>C.I. Basic Red 9</td>
<td>C.I. 42 500</td>
<td>25620-78-4</td>
</tr>
<tr>
<td>C.I. Direct Black 38</td>
<td>C.I. 30 235</td>
<td>1937-37-7</td>
</tr>
<tr>
<td>C.I. Direct Blue 6</td>
<td>C.I. 22 610</td>
<td>2602-46-2</td>
</tr>
<tr>
<td>C.I. Direct Red 28</td>
<td>C.I. 22 120</td>
<td>573-58-0</td>
</tr>
<tr>
<td>C.I. Disperse Blue 1</td>
<td>C.I. 64 500</td>
<td>2475-45-8</td>
</tr>
<tr>
<td>C.I. Disperse Yellow 3</td>
<td>C.I. 11 865</td>
<td>2832-40-8</td>
</tr>
</tbody>
</table>

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## Dyestuffs classified to be allergenous

<table>
<thead>
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## Chlorinated organic carrier

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Ausgabe / Edition / Udgave 03/2000

28. April 2000
Österreichisches Umweltzeichen

Richtlinie UZ 34
Bürostühle und Bürodrehstühle

Ausgabe vom 1. Juli 2000
Für weitere Informationen kontaktieren Sie bitte eine der Umweltzeichen-Adressen

Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft
Abteilung II/3 U
DI Andreas Tschulik
Stubenring 1, A-1010 Wien
Tel: +43 (1) 515 22-1650; Fax: Dw. 7649
e-m@il: andreas.tschulik@bmu.gv.at

VKI, Verein für Konsumenteninformation, Abteilung Dienstleistungen
DI Gerhard Plunder
Linke Wienzeile 18, A-1060 Wien
Tel: +43 (1) 588 77-255, Fax: Dw. 99 255
e-m@il: ecolabel@vki.or.at
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Einleitung


Die aus den Produktionsprozessen resultierenden Auswirkungen auf Umwelt und Gesundheit werden durch entsprechende Anforderungen so gering wie möglich gehalten.

Ergonomische Kriterien ermöglichen zudem, daß ausgezeichnete Produkte über deren Umweltverträglichkeit hinaus den gesundheitlichen Ansprüchen der Benutzer gerecht werden.
1 Produktgruppedefinition

1.1 Bürodrehstühle

Definition gemäß Punkt 2 der ÖNORM A 1675 [1]

1.2 Bürostühle

Definition in Anlehnung an ÖNORM A 1600 Teil 1 [2]: Bürosessel (-stuhl) mit Rückenlehne, optionaler Polsterung, mit oder ohne Armlehnen.

2 Gesundheits- und Umweltkriterien

2.1 Allgemeine Regelungen für Roh-, Hilfs- und Einsatzstoffe

Alle Stoffe und Zubereitungen die am Produktionsstandort zur Herstellung des Produktes eingesetzt werden, sind der begutachtenden Prüfstelle bekannt zu geben und im Gutachten hinsichtlich der unten angeführten Gesundheits- und Umweltkriterien zu bewerten.


  „sehr giftig" (T+ mit R26, R27, R28 oder R39)
  „giftig" (T mit R23, R24, R25 R39 oder R48)
  „krebserzeugend" (nach EU-Kategorie 1 oder 2: T mit R45 oder R49; nach EU-Kategorie 3: Xn mit R40)
  „erbguverändernd" (nach EU-Kategorie 1 oder 2: T mit R46; nach EU-Kategorie 3: Xn mit R40)
  „fortpflanzungsgefährdend" (nach EU-Kategorie 1 oder 2: T mit R60 oder R61; nach EU-Kategorie 3: Xn mit R62 oder R63)
  „umweltgefahren" (N mit R50, R50/53, R51/53 oder R59)
• Stoffe, die als „krebserzeugende Arbeitsstoffe“ (III A1, III A2) in der MAK-Werte­Liste [5] eingestuft sind, dürfen als Bestandteil von Zubereitungen oder in Reinform zu maximal 0,1 Massen% eingesetzt werden. Bei Einstufung „mit begründetem Verdacht auf krebserzeugendes Potential“ (III B) beträgt die maximale Einsatzmenge 1 Massen%.

• Stoffe, die gemäß Liste oder Selbsteinstufung der Verwaltungsvorschrift wasser­gefährdende Stoffe [6] unter die Wassergefährdungsklasse 2 oder 3 fallen, dürfen als Bestandteil von Zubereitungen oder in Reinform zu maximal 1 Massen% eingesetzt werden.

2.2 Spezifische Regelungen für Roh-, Hilfs- und Einsatzstoffe

Für Hauptsystemteile ist die Verwendung der unter Punkt 2.2.1 bis 2.2.6 angeführten Materialien zulässig.\(^1\)

Eine der beiden folgenden Anforderungen muss erfüllt werden:

- Mindestens 50% der Masse der Nichtmetallteile des Produktes auf Basis nachwachsender Rohstoffe
- Mindestens 50% der Masse der Nichtmetallteile des Produktes aus Recyclingmaterial\(^2\)

2.2.1 Metalle

- Eisen und Stahl
- Aluminium und Aluminiumlegierungen
  Der Recyclinganteil des verwendeten Aluminiums ist in Abhängigkeit der Gebrauchstauglichkeitsanforderungen zu maximieren. Anzustreben ist ein Anteil von 50 Massen%, mindestens sind jedoch 30 Massen% Sekundäraluminium einzusetzen\(^2\).

2.2.2 Kunststoffe

Es dürfen maximal 4 kg Kunststoffe (inkl. Bezugsmaterialien) eingesetzt werden. Werden nachweislich Kunststoffe mit Recyclinganteil\(^2\) verwendet, so ist zur Ermittlung der Masse nur der Primäranteil heranzuziehen. Insgesamt darf der Kunststoffanteil am Gesamtprodukt 50% der Masse nicht überschreiten.

Zulässig sind:

- Polypropylen (PP)
- Polyethylen (PE)

\(^1\) Für Materialien, deren Gesamtmasse im Produkt 50g überschreitet

\(^2\) Die Anforderung muss in den Ausschreibungskriterien für den Zukauf der Systemteile enthalten sein, der Nachweis über die Einhaltung ist durch Bestätigung des Rohstoffherstellers oder Vertreibers zu erbringen
• Polyamide (PA)
• Polyurethan (PU)

Weichschaumteile: Ausschluss von FCKW, H-FCKW oder FKW als Treibmittel
Hartschaumteile³: Ausschluss von FCKW oder H-FCKW als Treibmittel

2.2.3 **Holz und Holzwerkstoffe**

Es ist eine Aufstellung über die eingesetzten Holzarten (ausgenommen für Holzspan- und Holzfaserplatten) zu erbringen.


2.2.4 **Bezugsmaterialien**²

• Zur Färbung der Bezugsmaterialien dürfen keine Farbstoffe auf Basis der Schwermetalle Cadmium, Chrom \( {}^6 \), Quecksilber, Blei oder deren Verbindungen verwendet werden.
• Azo-Farbstoffe, die Amine abspalten können und die gemäß österreichischer MAK-Werte-Liste mit III A1, III A2 oder III B eingestuft sind, dürfen nicht zum Einsatz kommen.
• Die Verwendung halogenierter Flammschutzmittel ist untersagt
• Ausschluss von chromgegerbtem Leder
• Ausschluss halogenierter synthetischer Bezugsmaterialien

2.2.5 **Polsterung**

• Polstermaterialien auf Basis nachwachsender Rohstoffe
• Für synthetische Weichschäume sind die Anforderungen gemäß Pkt. 2.2.2 (Treibmittel) einzuhalten

³ Der Einsatz von PU-Hartschaumteilen ist für Formteile im Sitz und Rückenbereich zulässig, wenn nur dadurch eine Verklebung von Polsterung und Bezugsmaterialien vermieden werden kann.
2.2.6 Beschichtungsstoffe

Für die zum Einsatz kommenden Beschichtungsstoffe sind die entsprechenden Sicherheitsdatenblätter bzw. technischen Merkblätter vorzulegen.

• Keine Verwendung von Beschichtungsstoffen denen die Schwermetalle Cadmium, Chrom $^{6+}$, Quecksilber, Blei oder deren Verbindungen zugesetzt wurden.

• Der Anteil an organischen Lösungsmittel darf max. 10 Massen% des Beschichtungsstoffes betragen.

2.3 Produktion

Behördliche Auflagen und gesetzliche Regelungen, insbesondere die Materien Luft, Wasser, Abfall, Umweltinformation sowie ArbeitnehmerInnenschutz betreffend, sind für jene Produktionsstätten nachweislich einzuhalten an denen folgende Fertigungsschritte der Hauptsystemteile vorgenommen werden:

• Schäumung von Kunststoffformteilen
• Oberflächenbehandlung und -beschichtung
• Fertigstellung des Produkts

Sowohl für inländische als auch für ausländische Produktionsstätten sind die jeweiligen nationalen Bestimmungen zu erfüllen. Sofern EU-Regelungen über nationale Bestimmungen hinausgehen, sind jedenfalls diese einzuhalten.


---

4 die Anforderungen gelten nicht für galvanische Beschichtungen

5 Fußteil (Gestell, Drehkreuz, Teleskop)
Sitz (Sitzschale, Sitzplatte, Polsterung)
Rückenlehne (Halterung, Schale, Einlegeplatte, Polsterung)
Armlehne (Halterung, Bügel, Auflage)
Mechanik
2.3.1 Oberflächenbehandlung von Metallen

Zulässige Verfahren zur Oberflächenbehandlung von Metallen

- Eisen und Stahl:
  Polieren
  Pulverlackbeschichtung
  Galvanisieren

- Aluminium und Aluminiumlegierungen:
  Polieren
  Pulverlackbeschichtung bei Aluminiummechanikteilen

2.3.2 Oberflächenbehandlung von Holzteilen

Die Anlage zur Oberflächenbeschichtung muss so ausgeführt sein, dass aus dem Overspray mindestens 50% des Festkörperanteils rückgewonnen werden können.

2.4 Verpackung

Eingesetzte Kunststoffe müssen frei von halogenierten organischen Verbindungen sein.

Inverkehrsetzer von Verpackungen haben diese entweder selbst zurückzunehmen und zu verwerten oder nachweislich an einem Sammel- und Verwertungssystem teilzunehmen. Es gelten die Bestimmungen der Verpackungsverordnung [15].

3 Konstruktive Anforderungen

Die Verbindung unterschiedlicher Materialien muss so gestaltet sein, dass diese mit geringem Aufwand sortenrein voneinander getrennt werden können.

Klebeverbindungen zwischen Holz und Holzwerkstoffen untereinander sind zulässig, der Einsatz von Verbundmaterialien ist nicht gestattet.

Die Verklebung verschiedenartiger Stoffe ist nur dann zulässig, wenn dies auf Grund der ergonomischen Gestaltung der Rückenlehne notwendig ist.

4 Entsorgung der Stühle

Der Hersteller bzw. Vertreiber muss sich zur Rücknahme des Produkts nach Gebrauchsende verpflichten.

5 Sicherheits- und Gebrauchstauglichkeitsanforderungen


Wird zur Höhenverstellung eine Gasfeder eingesetzt, muss diese nachweislich den gesetzlich vorgeschriebenen Sicherheitsanforderungen entsprechen [19].

Textile Bezugsmaterialien müssen bei Prüfung mittels Martindale Verfahren, gemäß ÖNORM EN ISO 10077-2 [20], mindestens 30 000 Scheuertouren ohne Probenzerstörung (Lochbildung) erreichen.

6 Ergonomische Anforderungen

Die unter diesem Punkt gestellten Anforderungen gelten für Bürodrehstühle, gemäß Definition laut Punkt 1.1.

6.1 Allgemeine Anforderungen

Prüfung gemäß Anforderungen der ÖNORM A 1675.

Polsterung der Sitz- und Rückenlehnenflächen (ausgenommen bei Drehstühlen für Labors, Werkstätten und dgl.)

Die dem jeweiligen Bodenbelag entsprechenden Rollen sind leicht und schnell einsetzbar. Das Bremssverhalten entspricht den nötigen Sicherheitsanforderungen gemäß den einschlägigen Normen.

Stoß wird beim Hinsetzen in jeder Höhenstellung, vor allem in der untersten Sitzposition, federnd abgefangen
6.2 Verstellbarkeit

Alle Verstellmechanismen möglichst selbsterklärend, ohne großen Kraftaufwand und in der Sitzposition bedienbar.
Ausnahme: der Bedienteil für die Rückstellung der Rückenlehne muss nicht unbedingt in Sitzposition leicht erreicht werden können.
Es müssen Einstellrichtungen im Bereich der Rückenlehne vorhanden sein, die eine gute Abstützung unterschiedlich großer Personen im Brust- und Lendenwirbelbereich ermöglichen. Dies kann durch eine Höhenverstellung der Rückenlehne, aber auch durch eine Verstellung eines Lendenwulstes im Bereich des Ackerboom-Knicks realisiert werden.

6.3 Armlehnen

Armstützen vorhanden, falls keine Armstüze vorhanden, ist die Möglichkeit der Nachrüstung gegeben.

6.4 Materialeigenschaften

Hinreichende Luft- und Wasserdampfdurchlässigkeit der Polsterung und der Bezugsstoffe zur Vermeidung von Wärme- und Feuchtigkeitsstau im körpernahen Bereich
Durch eine ergonomisch entsprechende Kombination von Bezugstoff, Polsterausformung und Sitzflächenneigung soll eine - auch subjektiv so empfundene - rutschsichere Sitzposition eingenommen werden können und eine volle Ausnutzung der Sitzfläche initiiert werden.

6.5 Information über "richtiges" Sitzen

Mitlieferung eines Informationsblattes über "richtiges" Sitzen

6.6 Dynamisches Sitzprinzip

Aus ergonomischer Sicht sollte dynamisches Sitzen durch eine entsprechende Sesselkonstruktion gefördert werden. Entscheidend für die Realisierung dieses dynamischen Sitzprinzips ist eine Rückenlehne, welche der Oberkörperbewegung über Federdruck angeführt wird und in jeder Oberkörperposition eine adäquate Abstützung im Lendenwirbelbereich garantiert. Dafür ist es notwendig den Abstützpunkt der Rückenlehne (Lendenbauschwölbung) in der Höhe zu verstellen, um diesen der jeweiligen Körpergrösse anzupassen und die Federkraft der Neigungsmechanik auf das Körpergewicht einzustellen.
7 Deklaration

Über die in der ÖNORM A 1675 geforderten Angaben bezüglich Hersteller und Gebrauchsanleitung hinaus, ist am Stuhl dauerhaft eine Kontaktadresse für Service und Rücknahme des Produktes anzugeben.

8 Mitgeltende Vorschriften, Gesetze und sonstige Regelungen


[1] ÖNORM A 1675, Büromöbel; Bürodrehstuhl; Abmessungen, Anforderungen, Prüfung, Nominalbezeichnung, Schlussentwurf vom 1. März 1990

[2] ÖNORM A 1675, Teil 1, Möbel; Arten und Einteilung, 1. April 1982


http://www.bmawf.gv.at/

http://www.umweltbundesamt.de/uba-info-daten/vwvws.htm


http://www.bmub.gv.at/abfall/leitfaden_awk.htm


[16] DIN 4551, Büromöbel; Bürodrehstühle und Bürodrehsessel; Sicherheitstechnische Anforderungen, Prüfung, 1. Juni 1988

RESOLUCIÓ de 9 de maig de 2000, per la qual s'estableixen els criteris mediambientals per a l'atorgament del distintiu de garantia de qualitat ambiental als productes de cuir.

Atès que entre els objectius del distintiu de garantia de qualitat ambiental cal destacar que s'ha de proporcionar als consumidors i usuaris una informació millor i més fiable sobre la qualitat ambiental dels productes i serveis que els orienti en les seves decisions d'ús o de compra;

Tenint en compte que la pell és un producte natural i renovable i que dins d'aquest sector els seus transformats poden formar una categoria de productes prou àmplia adreçada tant al consumidor final com a productes intermedius;

Atès que cal fomentar la reducció de la incidència ambiental dels processos de transformació de la pell i amb l'objectiu de sostenir els constants esforços realitzats per mantenir i millorar la qualitat del medi ambient, i minimitzar al mateix temps les incidències de la contaminació generada per la producció de residus;

D'acord amb el Decret 316/1994, de 4 de novembre, sobre l'atorgament del distintiu de garantia de qualitat ambiental per la Generalitat de Catalunya, modificat posteriorment pel Decret 296/1998, de 17 de novembre, pel qual s'amplia l'àmbit del distintiu de garantia de qualitat ambiental als serveis, i amb la finalitat de promoure la fabricació, la comercialització, l'ús i el consum de productes de cuir que minimitzin l'impacte ambiental en els seus processos de producció;

En ús de les facultats que m'atorga l'article 5 del citat Decret, d'acord amb l'informe previ del Consell de Qualitat Ambiental,

Resol:

Definir la categoria i els criteris de qualitat ambiental dels diferents tipus de cuirs per optar al distintiu de garantia de qualitat ambiental, que es regeixen pels apartats següents:

—1 Categoría de productes

1.1 Els productes inclosos en aquesta categoria són tots aquells productes del mercat derivats del cuir, finals o intermedis, des de la pell adobada fins al producte final acabat. S'entenen com a tal els cuirs provinents del procés d'adobament, que es defineix a l'apartat 1 de l'annex.

La categoria de producte està formada per les dues subcategories que s'indiquen a continuació:

a) Subcategoría de cuirs acabats.

Pertanyen a aquesta subcategoría les pells adobades i acabades una vegada tractades per les fàbriques d'adobats.

b) Subcategoría de cuirs manufacturats.

Inclou tots aquells cuirs que s'han transformat en objectes concrets. Són exemples de la
subcategoria els productes de confecció (vestits de pell i cortines) i els productes de marroquineria (cinturons, portamonedes, bosses de mà, maletes i altres articles de talabarder).

1.2 Queden exclosos d’aquesta categoria tots aquells productes derivats de la pell que tinguin categoria pròpia dins del sistema d’etiqueta ecològica de la Unió Europea i també els productes de pelleteria que compleixin completament la definició de l’apartat 1.5 de l’annex.

Els criteris mediambientals s’aplicaran exclusivament als cuirs continguts en el producte final, però no als complements, entenen com a tals les parts metàl·liques, plàstiques o d’altres materials aliens a la pell.

—2 Sol·licitants

Poden sol·licitar el distintiu de garantia de qualitat ambiental els fabricants amb instal·lacions industrials emplaçades a Catalunya i els distribuidors de productes amb marca pròpia, o els fabricants amb instal·lacions industrials no emplaçades a Catalunya, sempre que els productes es comercialitzin a Catalunya.

—3 Criteris

Les propietats o característiques de qualitat ambiental específiques de la categoria de productes definida en l’apartat 1 s’avaluen segons els criteris i el sistema d’avaluació establerts a l’annex.

—4 Període de validesa

La definició de la categoria de productes i dels criteris específics per a aquesta categoria tenen un període màxim de validesa de tres anys a partir de la data de publicació d’aquesta resolució al Diari Oficial de la Generalitat de Catalunya.

—5 Número de codi

A efectes administratius, el númer de codi assignat a la categoria de productes és:

Codi 121: Subcategoria de cuirs acabats.

Codi 122: Subcategoria de cuirs manufacturats.

—6 Ús de la marca

6.1 L’ús de la marca s’ha d’adecuar a les especificacions indicades en les Normes gràfiques establertes pel Departament de Medi Ambient per a la utilització del distintiu de garantia de qualitat ambiental.

6.2 La llegenda que ha de figurar en el distintiu de garantia de qualitat ambiental és, per a la categoria de productes: “Cuir de baix impacte ambiental”.

Barcelona, 9 de maig de 2000

Josep Maria Pelegri i Aixut

Director general de Qualitat Ambiental

Annex

http://www.gencat.es/mediamb/lleis/etiecol/etiec041.htm
— 1 Definicions

1.1 Pell en brut és la pell de l'animal, procedent de l'escorxador. Aquest concepte també inclou la pell que ha estat sotmesa a un tractament de conservació. És la matèria primera utilitzada en els processos de fabricació o transformació de la pell en brut en cuir.

1.2 El procés de fabricació consisteix en les diferents operacions que serveixen per transformar les pells en brut en cuir semiacabat o acabat.

1.3 S'anomena cuir la pell de l'animal que ha sofert un procés d'adobament. El cuir prové de la pell d'anims domèstics, principalment ovi, bovi i cabrum, procedents de la ramaderia.

1.4 Pells acabades són les que han rebut la transformació i el tractament corresponent a les últimes fases del procés (acabats).

1.5 Productes de pelleteria: són les pells adobades que conserven el pel i que pertanyen a espècies com visons, llúdries, guineus, martes, etc. que han estat criades i sacrificades només per a l'aprofitament de la pell.

— 2 Criteris globals per a la categoria de productes

Per obtenir el distintiu de garantia de qualitat ambiental, el producte ha de complir els criteris especificats en aquest annex, els quals tenen per objectiu la fabricació o transformació dels productes de pell, mitjançant l'ús racional i l'estalvi de recursos, la minimització de residus i la reducció en la utilització de certes substàncies susceptibles de produir impactes ambientals significatius.

2.1 Envàs del producte.

Si el producte es ven envasat, l'envàs del producte ha de seguir els principis establerts a la Llei 11/1997, de 24 d'abril, d'envasos i residus d'envasos.

2.2 Compliment de la legislació ambiental.

Totes les etapes de la fabricació i la distribució han de ser realitzades d'acord amb la legislació mediambiental vigent allà on es realitzen.

2.3 Aptitud per a l'ús.

El producte ha de tenir una qualitat equivalent a la resta de productes de la mateixa categoria existents en el mercat i al mateix temps ha de complir els requeriments de la norma específica per a cada subcategoria de productes, en cas que aquesta existeixi.

Els cuirs hauran de superar les proves de qualitat següents:

Resistència a l'esquinç.

Criteri de valoració: força superior a 30 newton/mm.

La verificació es realitzarà mitjançant l'aplicació de la norma IUP-8.

Resistència a la flexió en sec en condicions estàndard.

Criteri de valoració: el nombre de flexions que ha de suportar el cuir sense que s'apreciïn

http://www.gencat.es/mediamb/lleis/etiecol/etiec041.htm 10-09-00
danys visibles serà superior a 20.000.

L'avaluació de conformitat la realitzarà l'entitat col·laboradora per assaig mitjançant l'aplicació de la norma IUP-20.

2.4 Criteris ambientals.

Criteri núm. 1: Contingut en metalls pesants.

Els cuirs no poden contenir:

Més de 10 ppm de cadascun dels metalls: arsenic, cadmi, coure i plom,

Més de 5 ppm de cadascun dels metalls: crom hexavalent i mercuri.

L'avaluació de conformitat la farà l'entitat col·laboradora per assaig mitjançant l'aplicació de la norma SLC 22 (IUC 18) de la International Union of Leather Technologist & Chemist Societies (IULTCS) i es realitzarà en el producte final (cuirs acabats i transformats).

Criteri núm. 2: aigües residuals en el processos humits de transformació del cuir.

Tal com es manifesta a l'apartat 2.2 de l'annex d'aquesta resolució, totes les etapes de producció han de ser realitzades d'acord amb la legislació mediambiental vigent on es duguin a terme. Especialment, i tenint en compte que en el procés d'elaboració dels productes de cuir tenen lloc etapes de tractaments humits, i considerant l'impacte ambiental potencial d'aquestes activitats, el sol·licitant haurà d’informar de les empreses que fan els tractaments humits i que aquests es realitzen d'acord amb un comportament de bones pràctiques ambientals.

Per poder-les valorar, s’observaran els valors de DQO, matèries en suspensió i metalls pesants en les aigües residuals dels processos humits de la transformació de la pell en cuir. Aquests valors hauran de ser, com a mínim, els fixats per l’administració competent en el permís d’abocament d’aigües residuals.

L’avaluació de conformitat es farà per declaració del fabricant prèvia comprovació de l’entitat col·laboradora, la qual, en cas de dubte raonable, realitzarà els assaigs d’aigües residuals adients.

Criteri núm. 3: Reducció dels residus durant el procés de producció i/o distribució.

La quantitat de residus produïda en el darrer any, en relació amb la producció i/o distribució total del sol·licitant, haurà de ser inferior en un 10% a les quantitats corresponents a la mitjana dels darrers tres anys.

L’avaluació de conformitat es realitzarà per declaració del sol·licitant prèvia comprovació de l’entitat col·laboradora.

Criteri núm. 4: Contingut en substàncies perilloses.

Els productes de cuir no podran contenir cap de les substàncies següents:

Pentaclorofenol, així com les seves sais i èsters.

En els tractaments de la pell no s’ha d’usar aquest compost. El valor límit d’aquesta substància en el cuir no pot sobrepassar les 5 ppm.

L’avaluació de conformitat, la realitzarà l’entitat col·laboradora per assaig mitjançant l’aplicació
de la norma DIN 53313.

Colorants azoics.

En els processos de transformació de la pell, no es permet l'ús de colorants azoics que puguin produir amines aromàtiques cancerígenes si la quantitat que contenen d'aquestes és superior a 30 ppm.

Llistat de substàncies prohibides (núm. CAS):

4-aminodifenil (92-67-1)
benzidina (92-87-5)
4-clor-o-toluidina (95-69-2)
2-naftilamina (91-59-8)
o-aminoazotoluè (97-56-3)
2-amino-4-nitrotoluè (99-55-8)
p-cloranilina (106-47-8)
2,4-diaminoanisol (615-05-4)
4,4'-diaminodifenilmetà (101-77-9)
3,3'-dichlorobenzidina (91-94-1)
3-3'-dimetoxybenzidina (119-90-4)
3-3'-dimetilbenzidina (119-93-7)
3-3'-dimetil-4-4'-diaminodifenilmetà (838-88-0)
p-cresidina (120-71-8)
4,4'-metil-bis-(2-cloranilina) (101-14-4)
4,4'-oxidyalinina (101-80-4)
4,4'-tiodianilina (139-65-1)
o-toluidina (95-53-4)
2,4-toluendiamina (95-80-7)
2,4,5-trimetilamina (137-17-7)
4-aminoazobenzè

http://www.gencat.es/mediamb/lleis/etiecol/etiec041.htm 10-09-00
o-anisidina

Aquesta llista és susceptible de modificació conforme es vagin coneixent noves substàncies perilloses d’acord amb la legislació vigent.

L’avaluació de conformitat es farà per declaració del fabricant i, en cas de dubte raonable, l’entitat col·laboradora la realitzarà per assaig mitjançant l’aplicació de la norma DIN 53316. A causa de les dificultats analítiques derivades del desenvolupament d’aquest mètode d’anàlisi, es recomana confirmar-ne els resultats amb una altra d’equivalent.

Formaldehid.

La concentració màxima de formaldehid per a tota la categoria de productes no pot superar les 150 ppm.

L’avaluació de conformitat, la realitzarà per assaig l’entitat col·laboradora mitjançant l’aplicació de la norma DIN 53315.

Dissolvents orgànics.

Es controlaran a la subcategoria de cuirs manufacturats.

En cap de les diferents etapes de l’elaboració del producte s’han d’utilitzar substàncies que continguin compostos orgànics volatils.

L’avaluació de conformitat es realitzarà per declaració del fabricant, que està obligat a portar un registre del tipus de substàncies amb dissolvents que utilitza.

Criteri núm. 5: Matèries minerals rentables.

El contingut de matèries minerals rentables en els cuirs no ha de superar l’1% en pes.

L’avaluació de conformitat, la realitzarà per assaig l’entitat col·laboradora segons el mètode de la IULTCS (IUC-6).

3 Sistema d’avaluació de conformitat

El sol·licitant ha de presentar la sol·licitud per al distintiu de garantia de qualitat ambiental acompanyada de mostres del producte i de la documentació complementària que es descriu a continuació.

Per a l’avaluació de les sol·licituds i la comprovació del compliment dels criteris establerts a l’annex, s’ha de tenir en compte la implantació per part de l’empresa de sistemes reconeguts de gestió ambiental (EMAS o ISO 14001).

3.1 Mostres del producte.

3.1.1 El sol·licitant ha de trametre a la Direcció General de Qualitat Ambiental un mínim d’una unitat de venda amb el seu corresponent envàs, si s’escau, a fi de comprovar el compliment del criteri d’envàs del producte. S’entén per unitat de venda el producte tal com és adquirit pel consumidor. Si el volum és excessiu, n’hi haurà prou amb la presentació de documentació tècnica del producte.

3.1.2 El sol·licitant ha de presentar a la Direcció General de Qualitat Ambiental una declaració en què garanteixi, sota la seva responsabilitat, que els productes per als quals sol·licita el
distintiu són conformes a les mostres lliurades i al dossier tècnic, i compleixen els requisits
exigits en la present Resolució.

3.2 Documentació complementària.

3.2.1 Dossier tècnic.

Els sol·licitants del distintiu per als productes inclosos en les dues subcategoríes han de
trametre a la Direcció General de Qualitat Ambiental i a una entitat col·laboradora del
Departament de Medi Ambient, degudament acreditada, un dossier tècnic, el contingut del qual
s’especifica a continuació, que el sol·licitant ha de mantenir actualitzat durant el període de
validesa del distintiu.

L’entitat col·laboradora ha d’examinar el dossier i comprovar en el centre de producció
mitjançant inspecció que el producte és fabricat d’acord amb la documentació tècnica lliurada, i
emetre’n el certificat corresponent.

El dossier tècnic consta de:

a) Descripció general del producte. El sol·licitant haurà d’especificar els percentatges de pell, el
tipus de pell emprada i la resta de materials utilitzats en el producte final.

b) El llibre de registre de les coles emprades.

c) Esquemes del procés de producció amb les explicacions i descripcions adequades per a la
seva comprensió.

d) Informes i resultats dels assaigs i les inspeccions realitzats.

e) Declaració mitjançant la qual s’especificarà especialment el país de procedència de la
primera matèria emprada per a la producció amb còpia dels comprovants de compra.

El Departament de Medi Ambient es reserva el dret de visitar sense avis previ les instal·lacions
de producció, amb llibertat d’accés al dossier tècnic actualitzat i als dossiers de fabricació i
control de qualitat que consideri necessaris.

3.2.2 Certificats i normativa d’assaig a realitzar.

El sol·licitant ha de presentar en el moment de la sol·licitud els resultats dels assaigs i/o les
inspeccions previstos per a cadascun dels criteris que han de ser realitzats i degudament
signats per l’entitat col·laboradora del Departament de Medi Ambient.

Els metodes d’assaig a emprar són els especificats en aquesta Resolució, si bé també se’n
podran emprar d’altres, prèvia comunicació a la Direcció General de Qualitat Ambiental,
sempre que en la documentació aportada quedi clara l’equivalència amb els metodes
especificats en aquesta Resolució.

3.3 Selecció de l’entitat col·laboradora.

Les analyses i els controls han de ser realitzats per una de les entitats col·laboradores del
Departament de Medi Ambient degudament acreditades per a aquest camp d’ actuació, una
relació actualitzada de les quals es lliurarà al sol·licitant.

Si no n’hi ha, el Consell de Qualitat Ambiental pot avalar expressament i per a aquest supòsit
concret una entitat imparcial.

http://www.gencat.es/mediamb/lleis/etiecol/etiec041.htm 10-09-00
Per a cuirsprodukts fora de Catalunya, el sol·licitant ha de presentar els certificats corresponents emesos per una entitat degudament acreditada a la comunitat autònoma o país d’origen. Els certificats dels resultats dels assaigs també poden ser realitzats per una entitat col·laboradora del Departament de Medi Ambient.

(00.125.106)

Tornar a l’inici    Index qualificació ambiental

Pàgina creada el 30.5.2000

http://www.gencat.es/mediamb/lleis/etiecol/etiec041.htm   10-09-00
Official Journal of the Autonomous Government of Catalonia No 3150 (30/5-2000)

Decree of 9 May 2000 establishing the award of the Emblem of Guarantee of Environmental Quality for Leather Products

Product categories: From semi-manufactured (tanned) leather to final leather products.

Subcategory a): Leather from tanned to finished leather
Subcategory b): Leather products

Leather with hair on/fur is not included.

The award for leather products refers to the leather only, not to other components.

General criteria: The whole manufacturing schedule, from the raw hide through to the final product must ensue in accordance with the relevant legislation.

Functional requirements of the leather:

Tearing load (IUP/8): min. 30 N/mm

Flexing endurance, dry (IUP/20): min. 20,000 flexes

Environmental criteria for the leather:

Content of heavy metals: As, Cd, Cu, Pb: max 10 ppm

CrVI, Hg: max. 5 ppm

1. Waste water from leather production:

Details must be given of the discharge of COD, suspended solids and heavy metals with the wastewater from the entire leather production process. If the applicant does not carry out the wet operations related to leather production, details have to be provided on all suppliers back to the raw hide stage.

As a minimum demand, discharge must comply with the regulations set by the competent authority.

2. The amount of (solid) wastes generated per unit produces must be at least 10% less than the average amount over the previous three years.

3. Content of dangerous substances:

Pentachlorophenol, its salts and esters: max 5 ppm
Azo dyestuffs generating carcinogenic amines:
Amines (according to list): max. 30 ppm
Formaldehyde: max. 150 ppm
Organic solvents: solvents used must be declared
Extractable substances: max 1%.

The emblem is awarded on the basis of declarations and verification by an accredited third party.
16. ECOMARK CRITERIA FOR FINISHED LEATHER

(The Gazette of India, Extraordinary, Part II-Section 3(i). No.58, Jan 27, 2000)

1. GENERAL REQUIREMENTS:

1.1 The manufacturers shall produce consent clearance as per the provisions of the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, along with the authorisation for Hazardous Waste Management, if required under the Environment (Protection) Act, 1986, for seeking Ecomark certification from the Bureau of Indian Standards.

1.2 The product packaging shall display in brief the criteria based on which the product has been labelled environment friendly.

1.3 The material used for product packaging shall be recyclable or reusable or biodegradable.

2. PRODUCT SPECIFIC REQUIREMENTS:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters*</th>
<th>Limits</th>
<th>Test method, As per</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>pH of aqueous extract of leather</td>
<td>Not less than 3.5 &amp; if less than 3.5, the pH difference on dilution by a factor of 10 differential number, should not be more than 0.6</td>
<td>LC:18 of IS 582: 1970</td>
</tr>
<tr>
<td>2.</td>
<td>Formaldehyde, mg/kg, Max</td>
<td>200</td>
<td>**</td>
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<tr>
<td>3.</td>
<td>Pentachlorophenol (PCP), mg/kg, Max</td>
<td>5#</td>
<td>IS 14575:1998</td>
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<tr>
<td>4.</td>
<td>Aryl amines released from Azo-dyes (Sum parameters)***, mg/kg, Max</td>
<td>30#</td>
<td>**</td>
</tr>
</tbody>
</table>

http://envfor.nic.in/cpcb/ecomark/leather.html 21-09-00
* The Eco-mark for leather certifies that only Eco-related parameters are assured and the quality related parameters are through self-declaration complying buyer’s requirements. In such cases, the finished leather shall carry only Eco-logo (without ISI mark). In case the buyer’s requirement calls for conformity to Indian Standards, the manufacturer shall have to apply for BIS Standard mark also.

** Indian standards on the methods of test are being developed by BIS in line with acceptable international norms.

*** The list of Aryl Amines is appended in Appendix-A.

# Prevailing detectable limits.

**APPENDIX -A**

List of Aryl Amines

1. 4-Aminodiphenyl
2. Benzidine
3. 4-Chloro-o-toluidine
4. 2-Naphthylamine
5. p-Chloraniline
6. 2,4-Diaminocanisole
7. 4,4-Diaminodiphenylmethane
8. 3,3-Dichlorobenzidine
9. 3,3-Dimethoxy-benzidine
10. 3,3-Dimethylbenzidine
11. 3,3-Dimethyl-4,4-diaminodiphenylmethane
12. p-Cresidin (2-Methoxy 5-methylaniline)
13. 4,4-Methylene-bis (2-chloraniline)
14. 4,4-Oxdianiline
15. 4,4-Thiodianiline
16. o-Toluidine
17. 2,4-Toluenediamine
18. 2,4,5-Trimethylaniline

http://envfor.nic.in/cpcb/ecomark/leather.html
The incorporation of the Ecomark requirements in a separate BIS standard, is under process.
### ECOLABELLING CRITERIA FOR VARIOUS SUBSTANCES IN LEATHER

<table>
<thead>
<tr>
<th>Scheme (No.)</th>
<th>ICT (1)</th>
<th>Indonesia (2)</th>
<th>SG (3)</th>
<th>LGR (4)</th>
<th>EU (5)</th>
<th>Netherlands Footwear (6)</th>
<th>Netherlands Furniture (7)</th>
<th>Öko-Tex (8)</th>
<th>Austria (9)</th>
<th>Brazil (10)</th>
<th>Catalonia (11)</th>
<th>India (12)</th>
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<tbody>
<tr>
<td>Certain azo dyestuffs(^1)</td>
<td>X</td>
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<td>Benzidine based dyestuffs</td>
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<td>Dyestuffs with high LD(^2)</td>
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<td>2,3,5,6-tetrachlorophenol</td>
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<td>Halogenated fire-retardants</td>
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</tbody>
</table>

\(^1\) Certain azo dyestuffs are substances that may cause allergic reactions in some people.

\(^2\) Benzidine based dyestuffs are those that may cause lung cancer.

\(^3\) Certain substances may not be present in Öko-Tex products.
ECOLABELLING CRITERIA FOR VARIOUS SUBSTANCES IN LEATHER (CONTINUED)

<table>
<thead>
<tr>
<th>Scheme (No.)</th>
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<th>Ōko-Tex (8)</th>
<th>Austria (9)</th>
<th>Catalonia (Spain) (11)</th>
<th>India (12)</th>
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“Heavy metals” (except chromium) | X |

Notes:
1) Azo dyestuffs which may generate specific amines (see Chapter IX). The lists are not identical.
2) Specified
3) In pigments
4) For infants, only
of 17 July 2000
on a revised Community eco-label award scheme

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty (3),

Whereas:

(1) The aims of Council Regulation (EEC) No 880/92 of 23 March 1992 on a Community eco-label award scheme (4) were to establish a voluntary Community eco-label scheme intended to promote products with a reduced environmental impact during their entire life cycle and to provide consumers with accurate, non-deceptive and scientifically based information on the environmental impact of products.

(2) Article 18 of Regulation (EEC) No 880/92 provides that within five years from its entry into force the Commission should review the scheme in the light of the experience gained during its operation and should propose any appropriate amendments to the Regulation.

(3) The experience gained during the implementation of the Regulation has shown the need to amend the scheme in order to increase its effectiveness, improve its planning and streamline its operation.

(4) The basic aims for a voluntary and selective Community eco-label award scheme are still valid; in particular such an award scheme should provide guidance to consumers on products with a potential for reducing environmental impact when viewed through its entire life-cycle, and should provide information on the environmental characteristics of labelled products.

(5) For the acceptance by the general public of the Community eco-label award system it is essential that environmental NGOs and consumer organisations play an important role and are actively involved in the development and setting of criteria for Community eco-labels.

(6) It is necessary to explain to consumers that the eco-label represents those products which have the potential to reduce certain negative environmental impacts, as compared with other products in the same product group, without prejudice to regulatory requirements applicable to products at a Community or a national level.

(7) The scope of the Scheme should include products and environmental factors which are of interest from the point of view both of the internal market and of the environment; for the purpose of this Regulation, products should also include services.

(8) The procedural and methodological approach for setting eco-label criteria should be updated in the light of scientific and technical progress and of the experience gained in this area, to ensure consistency with relevant internationally recognised standards which are evolving in this area.

(9) The principles for establishing the selectivity level of the eco-label should be clarified, in order to facilitate consistent and effective implementation of the Scheme.

(10) The eco-label should include simple, accurate, non-deceptive and scientifically based information on the key environmental aspects which are considered in the award of the label, in order to enable consumers to make informed choices.

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In the various stages of the award of an eco-label, efforts must be made to ensure the efficient use of resources and a high level of environmental protection.

It is necessary to provide more information on the label about the reasons for the award in order to assist consumers in understanding the significance of the award.

The eco-label scheme should in the long term be mainly self-financing. Financial contributions from the Member States should not increase.

It is necessary to assign the task of contributing to setting and reviewing eco-label criteria as well as assessment and verification requirements to an appropriate body, the European Union Eco-Labelling Board (EUEB), in order to achieve an efficient and neutral implementation of the scheme; the EUEB should be composed of the competent bodies already designated by the Member States under Article 9 of Regulation (EEC) No 880/92, and of a consultation forum which should provide for a balanced participation of all relevant interested parties.

It is necessary to ensure that the Community eco-label award scheme is consistent and coordinated with the priorities of the Community environmental policy and with other Community labelling or quality-certification schemes such as those established by Council Directive 92/75/EEC of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances (1) and by Council Regulation (EEC) No 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs (2).

While existing as well as new eco-label schemes in the Member States may continue to exist, provision should be made to ensure coordination between the Community eco-label and other eco-label schemes in the Community, in order to promote the common objectives of sustainable consumption.

It is necessary to guarantee transparency in the implementation of the scheme and to ensure consistency with relevant international standards in order to facilitate access to, and participation in, the Scheme by manufacturers and exporters of countries outside the Community.

The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred to the Commission (3).

Regulation (EEC) No 880/92 should be replaced by this Regulation in order to introduce in the most effective way the necessary revised provisions for the reasons mentioned above, while appropriate transitional provisions ensure continuity and smooth transition between the two Regulations.

HAVE ADOPTED THIS REGULATION:

Article 1

Objectives and principles

1. The objective of the Community eco-label award scheme (hereafter referred to as the Scheme) is to promote products which have the potential to reduce negative environmental impacts, as compared with the other products in the same product group, thus contributing to the efficient use of resources and a high level of environmental protection. This objective shall be pursued through the provision of guidance and accurate, non-deceptive and scientifically based information to consumers on such products.

For the purpose of this Regulation:
— the term ‘product’ is taken to include any goods or services,
— the term ‘consumer’ is taken to include professional purchasers.

2. The environmental impacts shall be identified on the basis of examination of the interactions of products with the environment, including the use of energy and natural resources, during the life cycle of the product.

3. Participation in the Scheme shall be without prejudice to environmental or other regulatory requirements of Community or national law applicable to the various life stages of goods, and where appropriate to a service.

4. The implementation of the Scheme shall comply with the provisions of the Treaties, including the precautionary principle, with the instruments adopted pursuant thereto and the Community environmental policy, as specified in the Community Programme of Policy and Action in relation to the Environment and Sustainable Development Fifth Action Programme established by the Resolution of 1 February 1993 (4), and shall be coordinated with other labelling or quality certification arrangements as well as schemes such as, in particular, the Community Energy Labelling Scheme established by Directive 92/75/EEC and the Organic Agriculture Scheme established by Regulation (EEC) No 2092/91.

Article 2

Scope

1. The Community eco-label may be awarded to products available in the Community which comply with the essential environmental requirements referred to in Article 3 and the eco-label criteria referred to in Article 4. The eco-label criteria shall be set out by product group.

Product group means any goods or services which serve similar purposes and are equivalent in terms of use and consumer perception.

2. In order to be included in this Scheme, a product group must fulfil the following conditions:

(a) it shall represent a significant volume of sales and trade in the internal market;

(b) it shall involve, at one or more stages of the product's life, a significant environmental impact on a global or regional scale and/or of a general nature;

(c) it shall present a significant potential for effecting environmental improvements through consumer choice as well as an incentive to manufacturers or service providers to seek a competitive advantage by offering products which qualify for the eco-label; and

(d) a significant part of its sales volume shall be sold for final consumption or use.

3. A product group may be subdivided into sub-groups, with a corresponding adaptation of eco-label criteria, when this is required by the characteristics of the products and with a view to ensuring the optimal potential of the eco-label for effecting environmental improvements.

The eco-label criteria related to the various sub-groups of a single product group, covered by the same criteria document, published in accordance with Article 6(5), shall become applicable at the same time.

4. The eco-label may not be awarded to substances or preparations classified as very toxic, toxic, dangerous to the environment, carcinogenic, toxic for reproduction, or mutagenic in accordance with Council Directive 67/548/EEC (1) or Directive 1999/45/EC of the European Parliament and of the Council (2) nor to goods manufactured by processes which are likely to significantly harm man and/or the environment, or in their normal application could be harmful to the consumer.

5. This Regulation shall not apply to food, drink, pharmaceuticals nor to medical devices as defined by Council Directive 93/42/EEC (3), which devices are intended only for professional use or to be prescribed or supervised by medical professionals.

Article 3

Environmental requirements

1. The eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects, which are linked to the objectives and principles set out in Article 1. These environmental aspects shall be identified in the light of the indicative assessment matrix in Annex I and shall meet the methodological requirements set out in Annex II.

2. The following provisions shall apply:

(a) in evaluating the comparative improvements, consideration shall be given to the net environmental balance between the environmental benefits and burdens, including health and safety aspects, associated with the adaptations throughout the various life stages of the products being considered. The evaluation shall also take into account the possible environmental benefits related to the utilisation of the products considered;

(b) the key environmental aspects shall be determined by identifying the categories of environmental impact where the product under examination provides the most significant contribution from a life cycle perspective, and among such aspects the ones for which a significant potential for improvement exists;

(c) the pre-production stage of the life-cycle of goods includes extraction or the production and processing of raw materials and energy production. Those aspects shall be taken into account, as far as is technically feasible.

Article 4

Eco-label criteria and assessment and verification requirements

1. Specific eco-label criteria shall be established according to product groups. These criteria will set out the requirements for each of the key environmental aspects mentioned in Article 3, which a product must fulfil in order to be considered for the award of an eco-label, including requirements relating to the product's fitness in meeting the needs of the consumers.

2. The criteria shall seek to ensure a selectivity basis on the following principles:

(a) the product's prospects of market penetration in the Community shall, during the period of validity of the criteria, be sufficient to effect environmental improvements through consumer choice;

(b) the selectivity of the criteria shall take into account the technical and economic feasibility of adaptations needed to comply with them within a reasonable period of time;
(c) the selectivity of the criteria shall be determined with a view to achieving the maximum potential for environmental improvement.

3. Requirements for assessing the compliance of specific products with the eco-label criteria and for verifying the conditions for the use of the eco-label referred to in Article 9(1), shall be established for each product group together with the eco-label criteria.

4. The period of validity of the criteria, and the assessment and verification requirements, shall be specified within each set of eco-label criteria for each product group.

The review of the eco-label criteria as well as of the assessment and verification requirements related to the criteria shall take place in due time before the end of the period of validity of the criteria specified for each product group and shall result in a proposal for prolongation, withdrawal or revision.

Article 5

Working plan

In accordance with the objectives and principles set out in Article 1, a Community eco-label working plan shall be established by the Commission within one year from the entry into force of this Regulation, following prior consultation of the European Union Eco-Labelling Board (hereinafter referred to as the EUEB) provided for in Article 13, in accordance with the procedure laid down in Article 17. The working plan shall include a strategy for the development of the Scheme, which should set out for the subsequent three years:

— objectives for the environmental improvement and the market penetration which the scheme will seek to achieve,
— a non-exhaustive list of product groups which will be considered as priorities for Community action,
— plans for coordination and cooperation between the Scheme and other eco-label award schemes in Member States.

The working plan shall take particular account of the development of joint actions to promote products awarded the eco-label and the creation of a mechanism for the exchange of information on existing and future product groups at national and at European Union level.

The working plan shall also provide measures for the implementation of the strategy and shall include the planned financing of the Scheme.

It shall also outline the services to which the Scheme is not applicable, taking into account the Regulation of the European Parliament and of the Council allowing voluntary participation by organisations in a Community eco-management and audit system (EMAS).

The working plan shall be reviewed periodically. The first review of the working plan shall include a report on how the plans for coordination and cooperation between the Community system and the national environmental labelling systems have been implemented.

Article 6

Procedures for the setting of eco-label criteria

1. The conditions for awarding the eco-label shall be defined according to product group.

The specific ecological criteria for each product group and their respective periods of validity shall be established in accordance with the procedure laid down in Article 17 following consultation of the EUEB.

2. The Commission shall begin the procedure on its own initiative or at the request of the EUEB. It shall give mandates to the EUEB to develop and periodically review the eco-label criteria as well as the assessment and verification requirements related to those criteria, applying to the product groups coming within the scope of this Regulation. A deadline for completion of work shall be provided in the mandate.

The Commission shall, when drafting the mandate, take due account of

— the working plan laid down in Article 5,
— the methodological requirements referred to in Annex II.

3. On the basis of the mandate the EUEB shall draft the eco-label criteria in respect of the product group and the assessment and verification requirements related to those criteria, as outlined in Article 4 and Annex IV, by taking into account the results of feasibility and market studies, life cycle considerations and the improvement analysis referred to in Annex II.

4. The Commission shall be informed of the draft criteria referred to in paragraph 3 and shall decide whether the mandate:

— has been fulfilled and the draft criteria can be submitted to the regulatory Committee in accordance with Article 17, or
— has not been fulfilled and in that event the EUEB shall continue its work on the draft criteria.

5. The Commission shall publish the eco-label criteria, and updates thereof, in the Official Journal of the European Communities (L series).

Article 7

Awarding the eco-label

1. Applications for the eco-label may be submitted by manufacturers, importers, service providers, traders and retailers. The two last-named may submit applications only in respect of products placed on the market under their own brand names.

2. The application may refer to a product placed on the market under one or more brand names. No new application will be required for modifications in the characteristics of products which do not affect compliance with the criteria. The competent bodies shall however be informed about significant modifications.
3. The application shall be presented to a competent body in accordance with the following:

(a) where a product originates in a single Member State, the application shall be presented to the competent body of that Member State;

(b) where a product originates in the same form in several Member States, the application may be presented to a competent body in one of those Member States. In such cases the competent body concerned, in assessing the application, shall consult the competent bodies in those other Member States;

(c) where a product originates outside the Community, the application may be presented to a competent body in any one of the Member States in which the product is to be or has been placed on the market.

4. The decision to award the label shall be taken by the competent body receiving the application, after:

(a) verifying that the product complies with the criteria published under Article 6(5);

(b) verifying that the application conforms with the assessment and verification requirements; and

(c) consulting competent bodies where necessary under paragraph 3.

5. Where eco-label criteria require production facilities to meet certain requirements they shall be met in all facilities where the product is manufactured.

6. Competent bodies shall recognise tests and verifications performed by bodies which are accredited under the standards of EN 45000 series or equivalent international standards. Competent bodies shall collaborate in order to ensure the effective and consistent implementation of the assessment and verification procedures.

Article 8

The eco-label

The form of the eco-label shall be in accordance with Annex III. Specifications for the environmental information relevant to each product group and for the presentation of that information on the eco-label shall be included in the criteria set under Article 6. In each case the information shall be clear and comprehensible.

The Commission shall consult national consumer associations represented in the Consumer Committee established by Commission Decision 95/260/EC (1), before 24 September 2005, in order to assess how effectively the eco-label and the additional information meets the information needs of consumers. On the basis of this assessment, the Commission shall introduce any appropriate modifications as regards the information to be included in the eco-label, in accordance with the procedure set out in Article 17.

Article 9

Terms of use

1. The competent body shall conclude a contract with the applicant for an eco-label, covering the terms of use of the label. These shall include provisions for withdrawing the authorisation to use the label. The authorisation shall be reconsidered and the contract revised or terminated, as appropriate, following any revision of the eco-label criteria applicable to a given product. This contract shall state that participation in the Scheme shall be without prejudice to environmental or other regulatory requirements of Community or national law applicable to the various life stages of goods, and where appropriate to a service.

To facilitate this a standard contract shall be adopted in accordance with the procedure laid down in Article 17.

2. The eco-label may not be used, and references to the eco-label in advertising may not be made, until a label has been awarded and then only in relation to the specific product for which it has been awarded.

Any false or misleading advertising or the use of any label or logo which may lead to confusion with the Community eco-label as introduced by this Regulation is prohibited.

Article 10

Promotion of the eco-label

Member States and the Commission shall, in cooperation with the members of the EUEB, promote the use of the Community eco-label by awareness-raising actions and information campaigns for consumers, producers, traders, retailers and the general public, thus supporting the development of the Scheme.

In order to encourage the use of eco-labelled products the Commission and other institutions of the Community, as well as other public authorities at national level should, without prejudice to Community law, set an example when specifying their requirements for products.

Article 11

Other eco-label schemes in the Member States

The Commission and the Member States shall act in order to ensure the necessary coordination between this Community Scheme and national schemes in the Member States, in particular, in the selection of product groups as well as in the development and revision of criteria at Community and national level. For this purpose cooperation and coordination measures shall be established according to the procedure laid down in Article 17, including, inter alia, those envisaged in the working plan produced in accordance with Article 5.

Where a product carries both the Community eco-label and the national label the two logos shall be displayed side by side on the product.

In this respect, existing as well as new eco-label schemes in the Member States may continue to co-exist with the Scheme.

Article 12
Costs and fees

Every application for the award of an eco-label shall be subject to payment of a fee relating to the costs of processing the application.

The use of the eco-label shall entail payment of an annual fee by the applicant.

The level of application and annual fees shall be established in accordance with Annex V and under the procedure laid down in Article 17.

Article 13
European Union Eco-Labelling Board

The Commission shall establish a European Union Eco-Labelling Board (EUEB) consisting of the competent bodies mentioned in Article 14 and of the Consultation Forum referred to in Article 15. The EUEB shall in particular contribute to the setting and review of eco-label criteria as well as the assessment and verification requirements in accordance with Article 6.

The rules of procedure of the EUEB shall be established by the Commission in accordance with the procedure laid down in Article 17 and taking into account the procedural principles set out in Annex IV.

Article 14
Competent bodies

1. Each Member State shall ensure that the body or bodies (hereinafter referred to as the competent body or competent bodies), responsible for carrying out the tasks provided for in this Regulation, is/are designated and operational. Where more than one competent body is designated, the Member State shall determine those bodies’ respective powers and the coordination requirements applicable to them.

2. Member States shall ensure that:

(a) the composition of the competent bodies is such as to guarantee their independence and neutrality;

(b) the rules of procedure of the competent bodies ensure, at national level, the active involvement of all interested parties and an appropriate level of transparency;

(c) the competent bodies shall apply correctly the provisions of this Regulation.

Article 15
Consultation forum

The Commission shall ensure that in the conduct of its activities the EUEB observes, in respect of each product group, a balanced participation of all relevant interested parties concerned with that product group such as industry and service providers, including SMEs, crafts and their business organisations, trade unions, traders, retailers, importers, environmental protection groups and consumer organisations. These parties shall meet in a consultation forum. The rules of procedure of the forum shall be established by the Commission in accordance with the procedure laid down under Article 17.

Article 16
Adaptation to technical progress

The Annexes to this Regulation may be adapted to technical progress including progress in the relevant international standardisation activities, in accordance with the procedure laid down in Article 17.

Article 17
Committee procedure

1. The Commission shall be assisted by a committee.

2. Where reference is made to this Article, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. The Committee shall adopt its rules of procedure.

Article 18
Infringements

Member States shall take appropriate legal or administrative measures in case of non-compliance with the provisions of this Regulation and communicate these measures to the Commission.

Article 19
Transitional provisions

Regulation (EEC) No 880/92 is hereby repealed. However, it shall continue to apply to contracts concluded under Article 12(1) thereof. The decisions based upon Regulation (EEC) No 880/92 remain in force until they are revised or have expired.

Article 20
Revision

Before 24 September 2005, the Commission shall review the Scheme in the light of the experience gained during its operation.

The Commission shall propose any appropriate amendments to this Regulation.
Article 21

Final provisions

This Regulation shall enter into force on the third day following the date of its publication in the Official Journal of the European Communities.

This Regulation shall be binding in its entirety and directly applicable in all Member States.


For the European Parliament
The President
N. FONTAINE

For the Council
The President
J. GLAVANY
### INDICATIVE ASSESSMENT MATRIX

**Life cycle of products**

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ANNEX II

METHODOLOGICAL REQUIREMENTS FOR SETTING ECO-LABEL CRITERIA

Introduction
The process of identifying and selecting the key environmental aspects as well as setting the eco-label criteria will include the following steps:

- feasibility and market study,
- life cycle considerations,
- improvement analysis,
- proposal of the criteria.

Feasibility and market study
The feasibility and market study will consider the various types of product groups in question on the Community market, the quantities produced or provided, imported and sold, and the structure of the market in the Member States. Internal and external trade will also be considered.

Consumer perception, functional differences between types of products and the need for identifying subgroups will be assessed.

Life cycle considerations (LCC)
Key environmental aspects for which criteria will need to be developed will be defined through the use of life cycle considerations, and will be performed in accordance with internationally recognised methods and standards. The principles laid down in EN ISO 14040 and ISO 14024 will be duly taken into account, where appropriate.

Improvement analysis
The improvement considerations will take into account in particular the following aspects:

- the theoretical potential for environmental improvement in conjunction with possible changes induced in the market structures. This will be based on the improvement assessment from life cycle considerations,
- the technical, industrial and economic feasibility and market modifications,
- consumer attitudes, perceptions and preferences, which may influence the effectiveness of the eco-label.

Proposal of the criteria
The final ecological criteria proposal will take into account the relevant environmental aspects related to the product group.
Shape of the eco-label

The eco-label will be awarded to products which comply with the criteria, for all the selected key environmental aspects. It will include information for consumers in accordance with Article 8 and to the following scheme.

The label consists of two parts: box 1 and box 2, as follows:

Box 2 contains information about the reasons for the award of the eco-label. This information must relate to at least one and not more than three environmental impacts. The information will be in the form of a brief description in words.

This is an example:

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<tr>
<th>*</th>
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<td>*</td>
<td>energy efficient</td>
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<tr>
<td>*</td>
<td>reduced toxicity</td>
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Box 1 and box 2 will be used together where this is practical but, where consideration of space is an important factor with regard to small goods, box 2 may be omitted on some applications, provided that the full label is used in other applications relating to the same good. For example, box 1 may be used on its own on the product itself if the full label appears elsewhere on the packaging, information leaflets or other point-of-sale material.

ANNEX IV

PROCEDURAL PRINCIPLES FOR ESTABLISHING ECO-LABEL CRITERIA

For the development of eco-label criteria as well as the assessment and verification requirements related to those criteria, the following principles will apply:

1. Interested parties involvement
   (a) A specific ad hoc working group involving the interested parties referred to in Article 15 and the competent bodies referred to in Article 14 will be established within the EUEB for the development of eco-label criteria for each product group.
   (b) Interested parties will be involved in the process of identifying and selecting key environmental aspects, and especially in the following phases:
      (i) feasibility and market study;
      (ii) life cycle considerations;
      (iii) improvement analysis;
      (iv) proposal of the criteria.
   All reasonable efforts will be made to achieve a consensus throughout the process, while aiming at high levels of environmental protection.
   A working paper summarising the main findings of each phase will be issued and distributed in good time to the participants before the meeting of the ad hoc working group.

2. Open consultation and transparency
   (a) A final report containing the main results will be issued and published. Interim documents reflecting the results of the different stages of work will be made available to those interested and comments on them will be considered.
   (b) An open consultation on the content of the report will be carried out. A period of at least 60 days for the submission of comments on the draft criteria will be allowed before submission of the criteria to the committee, according to the procedure established by Article 17. Any observations received will be taken into consideration.
   On request, information on the follow-up to the comments will be provided.
   (c) The report will include an executive summary and Annexes with detailed inventory computations.

3. Confidentiality
   The protection of confidential information provided by individuals, public organisations, private companies, interest groups, interested parties or other sources will be ensured.
ANNEX V

FEES

1. Application fees

An application for the award of an eco-label will be subject to payment of a fee relating to the costs of processing the application. A minimum and a maximum fee will be fixed.

In the case of SMEs (1) and also product manufacturers as well as service providers of developing countries the application fee will be reduced by at least 25 %.

2. Annual fees

Each applicant who has been awarded an eco-label will pay an annual fee for the use of the label to the competent body which has awarded the label.

The period covered by the fee will begin with the date of the award of the eco-label to the applicant.

The annual fee will be calculated in relation to the annual volume of sales within the Community of the product awarded the eco-label. A minimum and a maximum fee will be fixed.

In the case of SMEs (1) and also product manufacturers as well as service providers of developing countries, the annual fees will be reduced by at least 25 %.

Applicants who have already received certification under EMAS or ISO 14001 may be granted additional reductions in the annual fee.

Further fee reductions may, where appropriate, be granted pursuant to the provisions of Article 17.

3. Costs for testing and verification

Neither the application fee nor the annual fee will include any cost towards testing and verification which may be necessary for products which are the subject of applications. Applicants will meet the cost of such testing and verification themselves.

In drawing up the assessment and verification requirements the objective of keeping costs to a strict minimum must be observed. This is particularly important in order to facilitate participation by SMEs in the Community eco-label system and thus to contribute to the wider dissemination of the system.

(Information)

COUNCIL

COMMON POSITION (EC) No 21/2000

adopted by the Council on 28 February 2000

with a view to adopting Regulation (EC) No .../2000 of the European Parliament and of the Council of ... allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)

(2000/C 128/01)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty (3),

Whereas:

(1) Article 2 of the Treaty stipulates that the Community shall have among its tasks to promote throughout the Community sustainable growth and the resolution of 1 February 1993 (4) stresses the importance of such sustainable growth.

(2) The programme 'Towards sustainability', submitted by the Commission and approved as to its general approach by the resolution of 1 February 1993, underlines the role and responsibilities of organisations, both to reinforce the economy and to protect the environment throughout the Community.

(3) The programme 'Towards sustainability' calls for broadening the range of instruments in the field of environmental protection and for using market-mechanisms to commit organisations to adopt a proactive approach in this field beyond compliance with all relevant regulatory requirements regarding the environment.

(4) The Commission should promote a coherent approach between the legislative instruments developed at Community level in the field of environmental protection.


(2) OJ C 209, 22.7.1999, p. 43.
(6) The experience gathered from the implementation of Regulation (EEC) No 1836/93 should be used to enhance the ability of the Community eco-management and audit scheme (EMAS) to bring about an improvement in the overall environmental performance of organisations.

(7) EMAS should be made available to all organisations having environmental impacts, providing a means for them to manage these impacts and to improve their overall environmental performance.

(8) In accordance with the principles of subsidiarity and proportionality referred to in Article 5 of the Treaty, the effectiveness of EMAS in contributing to improved environmental performance of European organisations can be better achieved at Community level; this Regulation limits itself to ensuring an equal implementation of EMAS throughout the Community by providing for common rules, procedures and essential requirements regarding EMAS while the measures that can be adequately performed at national level are left to the Member States.

(9) Organisations should be encouraged to participate in EMAS on a voluntary basis and may gain added value in terms of regulatory control, cost savings and public image.

(10) It is important that small and medium-sized enterprises participate in EMAS and that their participation should be promoted by facilitating access to information, to existing support funds and to public institutions and by establishing or promoting technical assistance measures.

(11) The information provided by Member States should be used by the Commission to assess the need for developing specific measures aimed at greater participation in EMAS by organisations, in particular small and medium-sized enterprises.

(12) The transparency and credibility of organisations implementing environmental management systems are enhanced when their management system, audit programme and environmental statement are examined to verify that they meet the relevant requirements of this Regulation and when the environmental statement and its subsequent updates are validated by accredited environmental verifiers.

(13) It is therefore necessary to ensure the competence of the environmental verifiers by providing for an independent and neutral accreditation system and an appropriate supervision of their activities in order to ensure the overall credibility of EMAS; close cooperation between the national accreditation bodies should accordingly be set up.

(14) Organisations should be encouraged to produce and make publicly available periodic environmental statements providing the public and other interested parties with information on their environmental performance.

(15) In addition to the general requirements of the environmental management system EMAS places special significance on the following elements: legal compliance, improvement of environmental performance and also external communication and employee involvement.

(16) The Commission should adapt the Annexes to this Regulation, with the exception of Annex V, recognise European and international standards for environmental issues of relevance to EMAS and establish guidelines in partnership with EMAS interested parties for the purpose of ensuring consistent implementation of the EMAS requirements across Member States.

(17) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (1).

(18) This Regulation should be revised, if appropriate, in the light of experience gained after a certain period of operation.

(19) The European institutions should endeavour to adopt the principles laid down in this Regulation.

(20) This Regulation takes over and replaces Regulation (EEC) No 1836/93 which should therefore be repealed.

HAVE ADOPTED THIS REGULATION:

Article 1

The eco-management and audit scheme and its objectives

1. A Community eco-management and audit scheme allowing voluntary participation by organisations, hereafter referred to as 'EMAS', is established for the evaluation and improvement of the environmental performance of organisations and the provision of relevant information to the public and other interested parties.

2. The objective of EMAS shall be to promote continual improvements in the environmental performance of organisations by:

(a) the establishment and implementation of environmental management systems by organisations;

(b) the systematic, objective and periodic evaluation of the performance of such systems;

(c) the provision of information on environmental performance and an open dialogue with the public and other interested parties;

(d) the active involvement, including appropriate training, of employees.

Article 2

Definitions

For the purposes of this Regulation:

(a) 'environmental policy' shall mean an organisation's overall aims and principles of action with respects to the environment including compliance with all relevant regulatory requirements regarding the environment and also a commitment to continual improvement of environmental performance; the environmental policy provides the framework for setting and reviewing environmental objectives and targets;

(b) 'continual improvement of environmental performance' shall mean the process of enhancing, year by year, the measurable results of the environmental management system related to an organisation's management of its significant environmental aspects, based on its environmental policy, objectives and targets; the enhancing of the results need not take place in all spheres of activity simultaneously;

(c) 'environmental performance' shall mean the results of an organisation's management of its environmental aspects;

(d) 'prevention of pollution' shall mean use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution;

(e) 'environmental review' shall mean an initial comprehensive analysis of the environmental issues, impact and performance related to activities of an organisation, (Annex VII);

(f) 'environmental aspect' shall mean an element of an organisation's activities, products or services that can interact with the environment, (Annex VI); a significant environmental aspect is an environmental aspect that has or can have a significant environmental impact;

(g) 'environmental impact' shall mean any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services;

(h) 'environmental programme' shall mean a description of the measures (responsibilities and means) taken or envisaged to achieve environmental objectives and targets and the deadlines for achieving the environmental objectives and targets;

(i) 'environmental objective' shall mean an overall environmental goal, arising from the environmental policy, that an organisation sets itself to achieve, and which is quantified where practicable;

(j) 'environmental target' shall mean a detailed performance requirement, quantified where practicable, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objective;

(k) 'environmental management system' shall mean the part of the overall management system that includes the organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy;

(l) 'environmental audit' shall mean a management tool comprising a systematic, documented, periodic and objective evaluation of the performance of the organisation, management system and processes designed to protect the environment with the aim of:

(i) facilitating management control of practices which may have an impact on the environment;

(ii) assessing compliance with the environmental policy, including environmental objectives and targets of the organisations, (Annex II);
(m) 'audit cycle' shall mean the period of time in which all the activities in an organisation are audited, (Annex II);

(n) 'auditor' shall mean an individual or a team, belonging to the organisation personnel or external to the organisation, acting on behalf of the organisation's top management, possessing, individually or collectively, the competences referred to in Annex II, point 2.4 and being sufficiently independent of the activities they audit to make an objective judgement.

(o) 'environmental statement' shall mean the information detailed in Annex III point 3.2 ((a) to (g));

(p) 'interested party' shall mean an individual or group, including authorities, concerned with or affected by the environmental performance of an organisation;

(q) 'environmental verifier' shall mean any person or organisation independent of the organisation being verified, who has obtained accreditation, in accordance with the conditions and procedures referred to in Article 4;

(r) 'accreditation system' shall mean a system for the accreditation and supervision of environmental verifiers operated by an impartial institution or organisation designated or created by the Member State (accreditation body), with sufficient resources and competency and having appropriate procedures for performing the functions defined by this Regulation for such a system;

(s) 'organisation' shall mean a company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administrations.

The entity to be registered as an organisation under EMAS shall be agreed with the environmental verifier, taking account of Commission guidance, established in accordance with the procedure laid down in Article 14, but shall not exceed the boundaries of one Member State. The smallest entity to be considered shall be a site. Under exceptional circumstances identified by the Commission in accordance with the procedure laid down in Article 14, the entity to be considered for registration under EMAS may be smaller than a site;

(t) 'site' shall mean all land at a distinct geographic location under the management control of an organisation covering activities, products and services. This includes all infrastructure, equipment and materials;

(u) 'competent bodies' shall mean the bodies designated by Member States, whether national, regional or local, in accordance with Article 5, to perform the tasks specified in this Regulation.

Article 3

Participation in EMAS

1. EMAS shall be open to the participation of any organisation dedicated to improving its overall environmental performance.

2. In order for an organisation to be registered under EMAS it shall:

(a) conduct an environmental review of its activities, products and services in accordance with Annex VII addressing the issues contained in Annex VI and, in the light of the results of that review, implement an environmental management system covering all the requirements referred to in Annex I.

However, organisations which have a certified environmental management system, recognised according to the requirements of Article 9, do not need to conduct a formal environmental review when moving on to EMAS implementation, if the necessary information for the identification and evaluation of the environmental aspects set out in Annex VI is provided by the certified environmental management system;

(b) carry out, or cause to be carried out, environmental auditing in accordance with the requirements set out in Annex II. The audits shall be designed to assess the environmental performance of the organisation;

(c) prepare, in accordance with Annex III, point 3.2, an environmental statement. The statement shall pay particular attention to the performance of an organisation against its environmental objectives and targets;

(d) have the environmental review, if appropriate, management system, audit procedure and environmental statement examined to verify that they meet the relevant requirements of this Regulation and have the environmental statement validated by the environmental verifier to ensure it meets the requirements of Annex III;

(e) forward the validated environmental statement to the competent body of the Member State in which the organisation seeking registration is located and, after registration, make it publicly available.

3. In order for an organisation to maintain registration to EMAS it shall:

(a) have the environmental management system and audit programme verified in accordance with the requirements of Annex V, point 5.6;

(b) forward the yearly validated updates of its environmental statement of the competent body and make them publicly available. Deviations from the frequency with which updates shall be performed can be made under circumstances laid down in Commission guidance adopted in accordance with the procedure laid down in Article 14(2).
Article 4

Accreditation system

1. Member States shall establish a system for the accreditation of independent environmental verifiers and for the supervision of their activities. To this end, Member States may either use existing accreditation institutions or the competent bodies referred to in Article 5 or designate or set up any other body with an appropriate status.

Member States shall ensure that the composition of these systems is such as to guarantee their independence and neutrality in the execution of their tasks.

2. Member States shall ensure that these systems are fully operational within 12 months of the date of entry into force of this Regulation.

3. Member States shall ensure appropriate consultation of parties involved, in setting up and directing the accreditation systems.

4. The accreditation of environmental verifiers and supervision of their activities shall be in accordance with the requirements of Annex V.

5. Environmental verifiers accredited in one Member State may perform verification activities in any other Member State in accordance with the requirements laid down in Annex V.

6. Member States shall inform the Commission of the measures taken pursuant to this Article and communicate relevant changes in the structure and procedures of the accreditation systems.

7. The Commission shall, in accordance with the procedure laid down in Article 14(2), promote collaboration between Member States in order, in particular, to avoid inconsistency between Annex V and the criteria, conditions and procedures which the national accreditation bodies apply for the accreditation and supervision of environmental verifiers to ensure a consistent quality of environmental verifiers.

8. A forum, constituted of all accreditation bodies, shall be set up by the accreditation bodies with the aim of providing the Commission with the elements and means to fulfil its obligation under paragraph 7. It shall meet at least once per year in the presence of a representative of the Commission.

The forum shall, as appropriate, develop guidance on issues in the field of accreditation, competence and supervision of environmental verifiers. Guidance documents produced shall be submitted to the procedure laid down in Article 14(2).

In order to ensure a harmonised development of the functioning of accreditation bodies and the verification process in all the Member States, the forum shall develop procedures for a peer review process. The aim of the peer review shall be to ensure that the accreditation systems of Member States meet the requirements of this Regulation. A report of the peer review activities shall be transmitted to the Commission which shall forward it for information to the Committee referred to in Article 14(2) and make it publicly available.

Article 5

Competent bodies

1. Within three months of the entry into force of this Regulation, each Member State shall designate the competent body responsible for carrying out the tasks provided for in this Regulation, in particular in Articles 6 and 7 and shall inform the Commission thereof.

2. Member States shall ensure that the composition of the competent bodies is such as to guarantee their independence and neutrality and that the competent bodies apply the provisions of this Regulation in a consistent manner.

3. Member States shall have guidelines for suspension and deletion of the registration of organisation, for the use of competent bodies. Competent bodies shall, in particular, have procedures:

   — for considering observations from interested parties concerning registered organisations, and

   — for refusal of registration, deletion or suspension of organisations from registration.

4. The competent body shall be responsible for the registration of organisations under EMAS. It shall therefore control the entry and maintenance of organisations on the register.

5. Competent bodies from all Member States shall meet, at least once a year in the presence of a representative of the Commission. The objective of these meetings is to ensure the consistency of procedures relating to the registration of organisations under EMAS, including suspension and deletion of registration. A peer review process shall be put in place by the competent bodies for the purpose of developing a common understanding of their practical approach towards registration. A report of the peer review activities shall be transmitted to the Commission which shall forward it for information to the Committee referred to in Article 14(2), and make it publicly available.
Article 6

Registration of organisations

Registration of organisations shall be dealt with by competent bodies on the basis of the following cases.

1. If a competent body
   — has received a validated environmental statement, and
   — has received a completed form, which includes at least the minimum information set out in Annex VIII, from the organisation, and
   — has received any registration fee that may be payable under Article 16, and
   — is satisfied, on the basis of evidence received, that the organisation meets all the requirements of this Regulation,

it shall register the applicant organisation and give it a registration number. The competent body shall inform the organisation's management that the organisation appears on the register.

2. If a competent body receives a supervision report from the accreditation body which gives evidence that the activities of the environmental verifier were not performed adequately enough to ensure that the requirements of this Regulation are met by the applicant organisation, registration shall be refused or suspended as appropriate until assurance of the organisation's compliance with EMAS is obtained.

3. If an organisation fails to submit to a competent body, within three months of being required to do so,
   — the yearly validated updates of the environmental statement, or
   — a completed form, which includes at least the minimum information set out in Annex VIII from the organisation, or
   — any relevant registration fees,

the organisation shall be suspended or deleted from the register, as appropriate, depending on the nature and scope of the failure. The competent body shall inform the organisation's management of the reasons for the measures taken.

4. If, at any time, a competent body concludes, on the basis of evidence received, that the organisation is no longer complying with one or more of the conditions of this Regulation, the organisation shall be suspended or deleted from the register, as appropriate, depending on the nature and scope of the failure.

5. Refusal of registration, suspension or deletion of organisations from the register shall require the consultation of the appropriate interested parties, in order to provide the competent body with the necessary elements of evidence for taking its decision. The competent body shall inform the organisation's management of the reasons for the measures taken and of the process of discussion with the competent enforcement authority.

6. Refusal or suspension shall be lifted if the competent body has received satisfactory information that the organisation is in compliance with the requirements of EMAS or if it has received satisfactory information from the competent enforcement authority that the breach has been rectified and that the organisation has made satisfactory arrangements with the aim of ensuring that it does not recur.

Article 7

List of registered organisations and environmental verifiers

1. The accreditation body shall establish, revise and update a list of environmental verifiers and their scope of accreditation in their Member State and shall directly, or via the national authorities as decided by the Member State concerned, communicate changes in this list each month to the Commission and to the competent body.

2. The competent bodies shall establish and maintain a list of registered organisations in their Member State and update this list on a monthly basis. The competent bodies shall directly, or via the national authorities as decided by the Member State concerned, communicate changes in the list each month to the Commission.

3. The register of environmental verifiers and EMAS registered organisations shall be maintained by the Commission which shall make it publicly available.

Article 8

Logo

1. Organisations participating in EMAS may use the logo set out in Annex IV only if they have a current EMAS registration. Technical specifications regarding the reproduction of the logo shall be adopted in accordance with the procedure laid down in Article 14(2) and published by the Commission.

2. The EMAS logo may be used by organisations in the following cases:

(a) on validated information as described in Annex III, point 3.5, under circumstances defined in Commission guidance adopted under the procedure laid down in Article 14(2) which shall ensure that there is no confusion with environmental product labels (version 2 of the logo, as given in Annex IV, shall be used in this case):
8.5.2000

Relationship with other environmental legislation in the Community

1. EMAS shall be without prejudice to:

(a) Community law, or

(b) national laws or technical standards not governed by Community law and

(c) the duties of organisations under those laws and standards regarding environmental controls.

2. Member States should consider how registration under EMAS in accordance with this Regulation may be taken into account in the implementation and enforcement of environmental legislation in order to avoid unnecessary duplication of effort by both organisations and competent enforcement authorities.

Member States shall inform the Commission of the measures taken in this regard.

Article 11

Promotion of organisations' participation, in particular of small and medium-sized enterprises

1. Member States shall promote organisations' participation in EMAS and shall, in particular consider the need to ensure the participation of small and medium-sized enterprises (SMEs) by:

— facilitating the access to information, existing support funds and public institutions,

— establishing or promoting technical assistance measures, especially in conjunction with initiatives from appropriate professional or local points of contact (e.g. local authorities, chambers of commerce, trade or craft associations).

In order to promote participation of SMEs, including those concentrated in well defined geographical areas, local authorities, in participation with industrial associations, chambers of commerce and interested parties may provide assistance in the identification of significant environmental impacts. SMEs may then use this in defining their environmental programme and setting the objectives and targets of their EMAS management system. In addition, programmes designed to encourage the participation of SMEs, such as a step-by-step approach which will eventually lead to EMAS registration, may be developed at regional or national level.

Article 9

Relationship with European and international standards

1. Organisations implementing European or international standards for environmental issues relevant to EMAS and certified, according to appropriate certification procedures, as complying with those standards shall be considered as meeting the corresponding requirements of this Regulation, provided that:

(a) the standards are recognised by the Commission acting in accordance with the procedure laid down in Article 14(2);

(b) the accreditation requirements for the certification bodies are recognised by the Commission acting in accordance with the procedure laid down in Article 14(2).

The references of the recognised standards (including the relevant sections of EMAS to which they apply) and recognised accreditation requirements shall be published in the Official Journal of the European Communities.

2. To enable organisations referred to in paragraph 1 to be registered under EMAS, the organisations concerned shall demonstrate to the environmental verifier compliance with requirements not covered by the recognised standards.
2. In order to encourage organisations' participation in EMAS the Commission and other institutions of the Community as well as other public authorities at national level should consider, without prejudice to Community law, how registration under EMAS may be taken into account when setting criteria for their procurement policies.

3. Member States shall inform the Commission of the measures taken under this Article.

Article 12

Information

1. Each Member State shall take appropriate measures to ensure that:
(a) organisations are informed of the content of this Regulation;
(b) the public is informed of the objectives and principal components of EMAS.

Member States shall in particular use professional publications, local journals, promotion campaigns or any other functional means to promote general awareness of EMAS.

2. Member States shall inform the Commission of the measures taken under this Article.

3. The Commission shall be responsible for promoting EMAS at Community level. It shall, in particular, examine in consultation with the members of the Committee referred to in Article 14(1) the possibility of disseminating best practice by appropriate ways and means.

Article 13

Infringements

Member States shall take appropriate legal or administrative measures in case of non-compliance with the provisions of this Regulation and communicate these measures to the Commission.

Article 14

Committee

1. The Commission shall be assisted by a committee, (hereinafter referred to as 'the committee').

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period referred to in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. The committee shall adopt its rules of procedure.

Article 15

Revision

1. The Commission shall review EMAS in the light of the experience gained during its operation and international developments no later than five years after the entry into force of this Regulation, and shall, if necessary, propose to the European Parliament and Council the appropriate amendments.

2. All the Annexes to this Regulation, with the exception of Annex V, shall be adapted by the Commission, acting in accordance with the procedure laid down in Article 14(2) in the light of experience gained in the operation of EMAS and in response to identified needs for guidance on EMAS requirements.

3. The Commission shall in particular evaluate, in cooperation with the Member States, no later than five years after the entry into force of this Regulation, the use, recognition and interpretation, especially by the public and other interested parties, of the EMAS logo and assess whether there is a need to revise the logo and the requirements for its use.

Article 16

Costs and fees

1. A system of fees in accordance with arrangements established by Member States may be set up for the administrative costs incurred in connection with the registration procedures for organisations and the accreditation and supervision of environmental verifiers and other related costs of EMAS.

2. Member States shall inform the Commission of the measures taken under this Article.

Article 17

Repeal of Regulation (EEC) No 1836/93

1. Regulation (EEC) No 1836/93 shall be repealed as from the date of entry into force of this Regulation, subject to paragraphs 2 to 5 of this Article.

2. National accreditation systems and competent bodies set up pursuant to Regulation (EEC) No 1836/93 shall modify the procedures followed by accreditation systems and competent bodies under the corresponding provisions of this Regulation. Member States shall ensure that these systems are fully operational within 12 months of the date of entry into force of this Regulation.
3. Environmental verifiers accredited in accordance with Regulation (EEC) No 1836/93 may continue to perform their activities in accordance with the requirements established by this Regulation.

4. Sites registered in accordance with Regulation (EEC) No 1836/93 will remain on the EMAS register. The new requirements of this Regulation shall be checked at the time of the next verification of a site. If the next verification is to be carried out sooner than six months after entry into force of this Regulation, the date of the next verification may be extended by six months in agreement with the environmental verifier and the competent bodies.

5. Paragraphs 3 and 4 shall also apply to environmental verifiers accredited and sites registered in accordance with Article 14 of Regulation (EEC) No 1836/93, provided that the responsible accreditation bodies and competent bodies have agreed that the environmental verifiers and registered sites comply with all the requirements of Regulation (EEC) No 1836/93 and notify this to the Commission.

Article 18

Entry into force

This Regulation shall enter into force on the third day following its publication in the Official Journal of the European Communities.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at ...

For the European Parliament For the Council
The President The President
ANNEX I

A. Environmental management system requirements

The environmental management system shall be implemented according to section 4 of the EN/ISO 14001:1996 European standard for environmental management systems (1).

B. Issues to be addressed by organisations implementing EMAS

1. Legal compliance

Organisations shall be able to demonstrate that:
(a) they have identified, and know the implications to the organisation of, all relevant environmental legislation;
(b) they provide for legal compliance with environmental legislation;
(c) they have procedures in place that enable the organisation to meet these requirements on an ongoing basis.

2. Performance

Organisations shall be able to demonstrate that the management system and the audit procedures address the actual environmental performance of the organisation with respect to the aspects identified from Annex VI. The performance of the organisation against its objectives and targets shall be evaluated as part of the management review process. The organisation shall also commit itself to the continual improvement of its environmental performance. In doing so, the organisation may base its action on local, regional and national environmental programmes.

The means to achieve the objectives and targets cannot be environmental objectives.

If the organisation comprises one or more sites, each of the sites to which EMAS applies shall comply with all the requirements of EMAS including the continual improvement of environmental performance as defined in Article 2(b).

3. External communication and relations

Organisations shall be able to demonstrate an open dialogue with the public and other interested parties including local communities and customers with regard to the environmental impact of their activities, products and services in order to identify the public’s and other interested parties’ concerns.

4. Employee involvement

In addition to the requirements in Annex I, Section A employees shall be involved in the process aimed at continually improving the organisation's environmental performance. Appropriate forms of participation such as the suggestion-book system or project-based group works on environmental committees could be used for this purpose. Organisations shall take note of Commission guidance on best practice in this field.

(1) The full text of EN/ISO standard 14001:1996 will be inserted in this Annex as soon as the copyright agreement has been signed between the Commission and CEN. The translations of the text of the standard will be those provided by CEN.
ANNEX II

REQUIREMENTS CONCERNING INTERNAL ENVIRONMENTAL AUDITING

2.1. General requirements

Internal audits ensure that the activities carried out by an organisation are being conducted in accordance with established procedures. The audit may also identify any problems with those established procedures or any opportunities for improving those procedures. The scope of audits carried out within an organisation may vary from the audit of a simple procedure to the audit of complex activities. Over a period of time all activities in a particular organisation shall be subject to an audit. The period of time taken to complete audits of all activities is known as the audit cycle. For small non-complex organisations, it may be possible to audit all activities at one time. For these organisations the audit cycle is the interval between these audits.

Internal audits shall be carried out by persons sufficiently independent of the activity being audited to ensure an impartial view. They may be carried out by employees of the organisation or by external parties (employees from other organisations, employees from other parts of the same organisation or consultants).

2.2. Objectives

The organisation’s environmental auditing programme shall define in writing the objectives of each audit or audit cycle including the audit frequency for each activity.

The objectives shall include, in particular, assessing the management systems in place, and determining conformity with the organisation’s policy and programme, which shall include compliance with relevant environmental regulatory requirements.

2.3. Scope

The overall scope of the individual audits, or of each stage of an audit cycle where appropriate, shall be clearly defined and shall explicitly specify the:

1. subject areas covered;
2. activities to be audited;
3. environmental criteria to be considered;
4. period covered by the audit.

Environmental audit includes assessment of the factual data necessary to evaluate performance.

2.4. Organisation and resources

Environmental audits shall be performed by persons or groups of persons with appropriate knowledge of the sectors and fields audited, including knowledge and experience on the relevant environmental, management, technical and regulatory issues, and sufficient training and proficiency in the specific skills of auditing to achieve the stated objectives. The resources and time allocated to the audit shall be commensurate with the scope and objectives of the audit.

The top organisation management shall support the auditing.

The auditors shall be sufficiently independent of the activities they audit to make an objective and impartial judgement.
2.5. Planning and preparation for an audit

Each audit shall be planned and prepared with the objectives, in particular, of:

— ensuring the appropriate resources are allocated,

— ensuring that each individual involved in the audit process (including auditors, management, and staff) understands his or her role and responsibilities.

Preparation shall include familiarisation with activities of the organisation and with the environmental management system established there and review of the findings and conclusions of previous audits.

2.6. Audit activities

Audit activities shall include discussions with personnel, inspection of operating conditions and equipment and reviewing of records, written procedures and other relevant documentation, with the objective of evaluating the environmental performance of the activity being audited to determine whether it meets the applicable standards, regulations or objectives and targets set and whether the system in place to manage environmental responsibilities is effective and appropriate. Inter alia, spot-checking of compliance with these criteria should be used to determine the effectiveness of the entire management system.

The following steps, in particular, shall be included in the audit process:

(a) understanding of the management systems;
(b) assessing strengths and weaknesses of the management systems;
(c) gathering relevant evidence;
(d) evaluating audit findings;
(e) preparing audit conclusions;
(f) reporting audit findings and conclusions.

2.7. Reporting audit findings and conclusions

1. A written audit report of the appropriate form and content shall be prepared by the auditors to ensure full, formal submission of the findings and conclusions of the audit, at the end of each audit and audit cycle. The findings and conclusions of the audit shall be formally communicated to the top organisation management.

2. The fundamental objectives of a written audit report are:

(a) to document the scope of the audit;
(b) to provide management with information on the state of compliance with the organisations' environmental policy and the environmental progress at the organisation;
(c) to provide management with information on the effectiveness and reliability of the arrangements for monitoring environmental impacts of the organisation;
(d) to demonstrate the need for corrective action, where appropriate.

2.8. Audit follow-up

The audit process shall culminate in the preparation and implementation of a plan of appropriate corrective action.

Appropriate mechanisms shall be in place and in operation to ensure that the audit results are followed up.
2.9. **Audit frequency**

The audit or audit cycle shall be completed, as appropriate, at intervals no greater than three years. The frequency with which any activity is audited will vary depending on the:

(a) nature, scale and complexity of the activities;

(b) significance of associated environmental impacts;

(c) importance and urgency of the problems detected by previous audits;

(d) history of environmental problems.

More complex activities with a more significant environmental impact shall be audited more frequently.

An organisation shall define its own audit programme and audit frequency taking account of Commission guidance adopted in accordance with the procedure laid down in Article 14(2).
ANNEX III

ENVIRONMENTAL STATEMENT

3.1. Introduction

The aim of the environmental statement is to provide environmental information to the public and other interested parties regarding the environmental impact and performance of the organisation. It is also a vehicle to address the stakeholder requirements identified as a result of Annex I, section B(3) and considered as significant by the organisation (Annex VI, point 6.4 (d)). Environmental information shall be presented in a clear and coherent manner in printed form for those who have no other means of obtaining this information. On its first registration and every three years thereafter, the organisation is required to make available the information detailed under point 3.2 in a consolidated printed version.

The Commission shall adopt guidance about the environmental statement in accordance with the procedure laid down in Article 14(2).

3.2. Environmental statement

On its first registration an organisation shall produce environmental information, taking into account the criteria of point 3.5 to be referred to as the environmental statement, to be validated by the environmental verifier. This information shall be submitted to the competent body following validation, and then be made publicly available. The environmental statement is a tool for communication and dialogue with the public and other interested parties regarding environmental performance. The organisation shall consider the information needs of the public and other interested parties when writing and designing the environmental statement.

The minimum requirements for this information shall be as follows:

(a) a clear and unambiguous description of the organisation registering under EMAS and a summary of its activities, products and services and its relationship to any parent organisations as appropriate;

(b) the environmental policy and brief description of the environmental management system of the organisation;

(c) a description of all the significant direct and indirect environmental aspects which result in significant environmental impacts of the organisation and an explanation of the nature of the impacts as related to these aspects (Annex VI);

(d) a description of the environmental objectives and targets in relation to the significant environmental aspects and impacts;

(e) a summary of the data available on the performance of the organisation against its environmental objectives and targets with respect to its significant environmental impacts. The summary may include figures on pollutant emissions, waste generation, consumption of raw material, energy and water, noise as well as other aspects indicated in Annex VI. The data should allow for year-by-year comparison to assess the development of the environmental performance of the organisation;

(f) other factors regarding environmental performance including performance against legal provisions with respect to their significant environmental impacts;

(g) the name and accreditation number of the environmental verifier and the date of validation.

3.3. Criteria for environmental performance reporting

The raw data generated by an environmental management system will be used in a number of different ways to show the environmental performance of an organisation. Organisations are encouraged to use environmental performance indicators where appropriate. If an organisation uses environmental performance indicators (e.g. energy usage per tonne of product), it shall ensure that any performance indicators it selects:
(a) give an accurate appraisal of the organisation's performance;
(b) are understandable and unambiguous;
(c) allow for year-on-year comparison to assess the development of the organisation's performance;
(d) allow for comparison with sector, national or regional benchmarks as appropriate;
(e) allow for comparison with regulatory requirements as appropriate.

3.4 Maintenance of publicly available information

The organisation shall update the information detailed in point 3.2 and shall have any changes validated by an environmental verifier, on a yearly basis. Deviations from the frequency with which updates shall be performed may be made under circumstances laid down in Commission guidance adopted in accordance with the procedure laid down in Article 14(2). After validation changes shall also be submitted to the competent body and be made publicly available.

3.5 Publication of information

Organisations may wish to address different audiences or interested parties with the information generated by its environmental management system and use only selected information from the environmental statement. Any environmental information published by an organisation may bear the EMAS logo provided it has been validated by an environmental verifier as being:
(a) accurate and non-deceptive;
(b) substantiated and verifiable;
(c) relevant and used in an appropriate context or setting;
(d) representative of the overall environmental performance of the organisation;
(e) unlikely to result in misinterpretation;
(f) significant in relation to the overall environmental impact,
and makes reference to the organisation's latest environmental statement from which it was drawn.

3.6 Public availability

The information generated in point 3.2(a) to (g) which forms the environmental statement for an organisation and the updated information specified in point 3.4 shall be available to the public and other interested parties. To this end, organisations are encouraged to use all methods available (electronic publication, libraries, etc.). The organisation shall be able to demonstrate to the environmental verifier that anybody interested in the organisation's environmental performance can easily and freely gain access to the information required in point 3.2(a) to (g) and point 3.4.

3.7 Local accountability

Organisations registering under EMAS may wish to produce one corporate environmental statement covering a number of different geographic locations. The intention of EMAS is to ensure local accountability and thus organisations shall ensure that the significant environmental impacts of each site are clearly identified and reported within the corporate statement.
The logo may be used by an EMAS registered organisation in any of the 11 languages provided the following wording is used:

<table>
<thead>
<tr>
<th>Language</th>
<th>Version 1</th>
<th>Version 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danish</td>
<td>'verifiseret miljøledelse'</td>
<td>'bekræftede oplysninger'</td>
</tr>
<tr>
<td>German</td>
<td>'geprüftes Umweltmanagement'</td>
<td>'geprüfte Information'</td>
</tr>
<tr>
<td>Greek</td>
<td>'επιθετημένη περιβαλλοντική διοίκηση'</td>
<td>'επιθετημένες πληροφορίες'</td>
</tr>
<tr>
<td>Spanish</td>
<td>'Gestión ambiental verificada'</td>
<td>'información validada'</td>
</tr>
<tr>
<td>Finnish</td>
<td>'vahvistetun ympäristöasioiden hallinta'</td>
<td>'vahvistettua tietoa'</td>
</tr>
<tr>
<td>French</td>
<td>'Management environnemental vérifié'</td>
<td>'information validée'</td>
</tr>
<tr>
<td>Italian</td>
<td>'Gestione ambientale verificata'</td>
<td>'informazione convalidata'</td>
</tr>
<tr>
<td>Dutch</td>
<td>'Geverifieerd milieuorganisatie'</td>
<td>'gevalideerde informatie'</td>
</tr>
<tr>
<td>Portuguese</td>
<td>'Gestão ambiental verificada'</td>
<td>'informação validada'</td>
</tr>
<tr>
<td>Swedish</td>
<td>'Kontrollerat miljöledningssystem'</td>
<td>'godkänd information'</td>
</tr>
</tbody>
</table>

Both versions of the logo shall always bear the registration number of the organisation.

- in three colours (Pantone No 355 Green; Pantone No 109 Yellow; Pantone No 286 Blue);
- in black on white or
- in white on black.
ANNEX V

Accreditation, supervision and function of the environmental verifiers

5.1. General

The accreditation of environmental verifiers shall be based on the general principles of competence set out in this Annex. Accreditation bodies may choose to accredit individuals, organisations or both, as environmental verifiers. The procedural requirements and detailed criteria for accrediting environmental verifiers are defined pursuant to Article 4 by national accreditation systems in accordance with these principles. Conformity with these principles shall be ensured through the peer review process established by Article 4.

5.2. Requirements for the accreditation of environmental verifiers

5.2.1. The following competence constitutes the minimum requirements with which an environmental verifier, individual or organisation, shall comply:

(a) knowledge and understanding of the Regulation, the general functioning of environmental management systems, relevant standards and guidance issues by the Commission, under Articles 4 and 14(2), for the use of this Regulation;

(b) knowledge and understanding of the legislative and regulatory requirements relevant to the activity subject to verification;

(c) knowledge and understanding of environmental issues;

(d) knowledge and understanding of the technical aspects, relevant to environmental issues, of the activity subject to verification;

(e) understanding of the general functioning of the activity subject to verification in order to assess the appropriateness of the management system;

(f) knowledge and understanding of environmental auditing requirements and methodology;

(g) knowledge of information audit (environmental statement).

In addition, the environmental verifier shall be independent, in particular of the organisation's auditor or consultant, impartial and objective in performing his or her activities.

The individual environmental verifier or verification organisation shall ensure that he or she or the organisation and its staff is free of any commercial, financial or other pressures which might influence their judgement or endanger trust in their independence of judgement and integrity in relation to their activities, and that they comply with any rules applicable in this respect.

The environmental verifier shall have documented methodologies and procedures, including quality control mechanisms and confidentiality provisions, for the verification requirements of this Regulation.

In case the environmental verifier is an organisation, the environmental verifier shall have and make available on request an organisation chart detailing structures and responsibilities within the organisation and a statement of legal status, ownership and funding sources.

5.2.2. Scope of accreditation

The scope of accreditation of environmental verifiers shall be defined according to the classification of economic activities (NACE codes) as established by Council Regulation (EEC) 3037/90(1). The scope of accreditation shall be limited by the competence of the environmental verifier. The scope of accreditation shall also take into account the size and complexity of the activity, where appropriate; this will be assured through supervision.

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5.2.3. Additional requirements for the accreditation of individual environmental verifiers performing verifications on their own

Individual environmental verifiers performing verification on their own, in addition to complying with the requirements of points 5.2.1 and 5.2.2 shall have:

— all the necessary competence to perform verifications, in their accredited fields,
— a limited scope of accreditation dependent on their personal competence.

Compliance with these requirements shall be ensured through the assessment carried out prior to the accreditation and through the supervisory role of the accreditation body.

5.3. Supervision of environmental verifiers

5.3.1. Supervision of environmental verifiers carried out by the accreditation body which granted their accreditation

The environmental verifier shall immediately inform the accreditation body of all changes which have a bearing on the accreditation or its scope.

Provision shall be made, at regular intervals not exceeding 24 months, to ensure that the environmental verifier continues to comply with the accreditation requirements and to monitor the quality of the verifications undertaken. Supervision may consist of office audit, witnessing in organisations, questionnaires, review of environmental statements validated by the environmental verifiers and review of verification report. It should be proportionate with the activity undertaken by the environmental verifier.

Any decision taken by the accreditation body to terminate or suspend accreditation or curtail the scope of accreditation shall be taken only after the environmental verifier has had the possibility of a hearing.

5.3.2. Supervision of environmental verifiers performing verification activities in a Member State other than that where their accreditation was granted

An environmental verifier accredited in one Member State, before performing verification activities in another Member State, shall provide to the accreditation body of the latter Member State, at least four weeks in advance, notification of:

— his or her accreditation details, competences and team composition if appropriate,
— when and where the verification will occur: address and contact details of the organisation, measures taken to deal with legal and language knowledge if necessary.

The accreditation body may request further clarification of the necessary legal and language knowledge as detailed above.

This notification shall be communicated before each new verification.

The accreditation body shall not require other conditions which would prejudice the right of the environmental verifier to provide services in a Member State other than the one where accreditation was granted. In particular, discriminatory fees for notification shall not be charged. The accreditation body shall also not use the notification procedure to delay the arrival of the environmental verifier. Any difficulty to supervise the environmental verifier on the date communicated shall be adequately justified. If costs for supervision arise, the accreditation body is allowed to charge appropriate fees.

If the supervising accreditation body is not satisfied with the quality of the work done by the environmental verifier, the supervision report shall be transmitted to the environmental verifier concerned, the accreditation body which granted the accreditation, to the competent body where the organisation being verified is located and, in case of any further dispute, to the forum of accreditation body.
Organisations may not refuse the right of accreditation bodies to supervise the environmental verifier through witnessed assessments during the verification process.

5.4. The function of environmental verifiers

5.4.1. The function of the environmental verifier is to check, without prejudice to the enforcement powers of Member States in respect of regulatory requirements:

(a) compliance with all the requirements of this Regulation: initial environmental review if appropriate, environmental management system, environmental audit and its results and the environmental statement;

(b) the reliability, credibility and correctness of the data and information in:

— the environmental statement (Annex III, point 3.2 and point 3.3),

— environmental information to be validated (Annex III, point 3.4).

The environmental verifier shall, in particular, investigate in a sound professional manner, the technical validity of the initial environmental review, if appropriate, or audit or other procedures carried out by the organisation, without unnecessarily duplicating those procedures. Inter alia, the environmental verifier should use spot-checks to determine whether the results of the internal audit are reliable.

5.4.2. At the time of the first verification, the environmental verifier shall, in particular, check that the following requirements are met by the organisation:

(a) a fully operational environmental management system in accordance with Annex I;

(b) a fully planned audit programme, which has already begun in accordance with Annex II so that at least areas with the most significant environmental impact have been covered;

(c) completion of one management review;

(d) the preparation of an environmental statement in accordance with Annex III, point 3.2.

5.4.3. Legal compliance

The environmental verifier shall ensure that an organisation has procedures in place to control those aspects of its operations subject to relevant Community or national laws and that these procedures are capable of delivering compliance. The checks of the audit, shall in particular, provide for evidence of the capability of the procedures in place to deliver legal compliance.

The environmental verifier shall not validate the environmental statement, if during the verification process he observes, for example through spot-checks, that the organisation is not in legal compliance.

5.4.4. Organisation definition

When verifying the environmental management system and validating the environmental statement, the environmental verifier shall ensure that the components of the organisation are unambiguously defined and correspond to a real division of the activities. The content of the statement shall clearly cover the different parts of the organisation to which EMAS applies.

5.5. Conditions for the environmental verifier to perform his/her activities

5.5.1. The environmental verifier shall operate within his/her scope of accreditation, on the basis of written agreement with the organisation which defines the scope of the work, enables the environmental verifier to operate in an independent professional manner and commits the organisation to providing the necessary cooperation.
5.5.2. The verification shall involve examination of documentation, a visit to the organisation including, in particular, interviews with personnel, preparation of a report to the organisations' management and the organisations' solution of the issues raised by the report.

5.5.3. The documentation to be examined in advance of the visit shall include basic information about the organisation and activities there, the environmental policy and programme, the description of the environmental management system in operation in the organisation, details of the environmental review or audit carried out, the report on that review or audit and on any corrective action taken afterwards, and the draft environmental statement.

5.5.4. The environmental verifier shall prepare a report for the organisation's management. This report shall specify:

(a) all issues relevant to the work carried out by the environmental verifier;

(b) the starting point of the organisation towards implementation of an environmental management system;

(c) in general, cases of non-conformity with the provisions of this Regulation, and in particular:

- technical defects in the environmental review, or audit method, or environmental management system, or any other relevant process,

- points of disagreement with the draft environmental statement, together with details of the amendments or additions that should be made to the environmental statement,

(d) the comparison with the previous statements and the performance assessment of the organisation.

5.6. Verification frequency

In consultation with the organisation the environmental verifier shall design a programme to ensure that all elements required for registration with EMAS are verified in a period not exceeding 36 months. In addition the environmental verifier shall, at intervals not exceeding 12 months, validate any updated information in the environmental statement. Deviations from the frequency with which updates shall be performed may be made under circumstances laid down in Commission guidance adopted in accordance with the procedure laid down in Article 14(2).
ANNEX VI

ENVIRONMENTAL ASPECTS

6.1. General

An organisation shall consider all environmental aspects of its activities, products and services and decide on the basis of criteria, defined by the organisation, which of its environmental aspects have a significant impact, as a basis for setting its environmental objectives and targets. These criteria shall be publicly available.

An organisation shall consider both direct and indirect environmental aspects of its activities, products and services.

6.2. Direct environmental aspects

These cover the activities of an organisation over which it has management control and may include, but is not limited to:

(a) emissions to air;
(b) releases to water;
(c) avoidance, recycling, reuse, transportation and disposal of solid and other wastes, particularly hazardous wastes;
(d) use and contamination of land;
(e) use of natural resources and raw materials (including energy);
(f) local issues (noise, vibration, odour, dust, visual appearance, etc.);
(g) transport issues (both for goods and services and employees);
(h) risks of environmental accidents and impacts arising, or likely to arise, as consequences of incidents, accidents and potential emergency situations;
(i) effects on biodiversity.

6.3. Indirect environmental aspects

As a result of the activities, products and services of an organisation there may be significant environmental aspects over which it may not have full management control.

These may include, but are not limited to:

(a) product-related issues (design, development, packaging, transportation, use and waste recovery/disposal);
(b) capital investments, granting loans and insurance services;
(c) new markets;
(d) choice and composition of services (e.g. transport or the catering trade);
(e) administrative and planning decisions;
(f) product range compositions;
(g) the environmental performance and practices of contractors, subcontractors and suppliers.

Organisations must be able to demonstrate that the significant environmental aspects associated with their procurement procedures have been identified and that significant impacts associated with these aspects are addressed within the management system. The organisation should endeavour to ensure that the suppliers and those acting on the organisation’s behalf comply with the organisation’s environmental policy within the remit of the activities carried out for the contract.
In the case of these indirect environmental aspects, an organisation shall consider how much influence it can
have over these aspects, and what measures can be taken to reduce the impact.

6.4. **Significance**

It is the responsibility of the organisation to define criteria for assessing the significance of the environmental
aspects of its activities, products and services, to determine which have a significant environmental impact.
The criteria developed by an organisation shall be comprehensive, capable of independent checking,
reproducible and made publicly available.

Considerations in establishing the criteria for assessing the significance of an organisation's environmental
aspects may include, but are not limited to:

(a) information about the condition of the environment to identify activities, products and services of the
organisation that may have an environmental impact;

(b) the organisation's existing data on material and energy inputs, discharges, wastes and emissions in terms
of risk;

(c) view of interested parties;

(d) environmental activities of the organisation that are regulated;

(e) procurement activities;

(f) design, development, manufacturing, distribution, servicing, use, reuse, recycling and disposal of the
organisation's products;

(g) those activities of the organisation with the most significant environmental costs, and environmental
benefits.

In assessing the significance of the environmental impact of the organisation's activities the organisation shall
think not only of normal operating conditions but also of start-up and shutdown conditions and of reasonably
foreseeable emergency conditions. Account shall be taken of past, present and planned activities.
7.1. **General**

An organisation that has not supplied the necessary information needed to identify and assess the significant environmental aspects according to Annex VI must establish its current position with regard to the environment by means of a review. The aim should be to consider all environmental aspects of the organisation as a basis for establishing the environmental management system.

7.2. **Requirements**

The review should cover five key areas:

(a) legislative, regulatory and other requirements to which the organisation subscribes;

(b) an identification of all environmental aspects with a significant environmental impact in accordance with Annex VI, qualified and quantified as appropriate, and compiling a register of those identified as significant;

(c) a description of the criteria for assessing the significance of the environmental impact in accordance with Annex VI, point 6.4;

(d) an examination of all existing environmental management practices and procedures;

(e) an evaluation of feedback from the investigation of previous incidents.
ANNEX VIII

REGISTRATION INFORMATION

Minimum requirements

Name of the organisation: .................................................................

Address of the organisation: .............................................................

Contact person: ...............................................................................

NACE code of activity: .................................................................

Number of employees: .................................................................

Name of the environmental verifier: ...................................................

Accreditation number: .................................................................

Scope of accreditation: .................................................................

Date of the next environmental statement: ........................................

Name and contact details of the competent enforcement authority, or authorities, for the organisation: ...................

.................................................................

Done at .................................. 2000

.................................................................

Signature of the representative of the organisation
STATEMENT OF THE COUNCIL'S REASONS

I. INTRODUCTION

1. On 3 November 1998 the Commission forwarded to Council a proposal for a Council Regulation allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), based on Article 130s(1) of the Treaty (Amsterdam Treaty: Article 175(1)).

2. The European Parliament and the Economic and Social Committee delivered their opinions on 15 April 1999 and on 26 May 1999 respectively.

3. The Committee of the Regions decided on 28 June 1999 not to deliver an opinion on this proposal.


5. On 28 February 2000 the Council adopted its common position in accordance with Article 251 of the Treaty (former Article 189c).

II. OBJECTIVE

The Regulation aims to broaden the scope of the original EMAS scheme as established by Council Regulation (EEC) No 1863/93 of 29 June 1993 by widening participation of interested organisations from the industry sector to all economic sectors. By so doing, the Regulation is also intended to increase the potential of EMAS to contribute to sustainable development and rationalise the relationship between EMAS and the international standards now existing in the field of environmental management.

It also intends to enhance the involvement of employees, increase the visibility of participation in EMAS for business as well as the consistency of the implementation of EMAS across the Member States.

III. ANALYSIS OF THE COMMON POSITION

A. AMENDED COMMISSION PROPOSAL

In its amended proposal the Commission accepted, in their entirety, in part or in principle, 18 of the 59 amendments proposed by the European Parliament in the first reading.

A good number of the EP amendments accepted by the Commission were incorporated wholly, partly or in principle in the common position.

Some further explanations for those amendments not accepted by Council are given below under the relevant sections.
B. MAIN CHANGES INTRODUCED BY COUNCIL

General comments

The following general comments concern terminological and editorial changes across the text of the common position and are indicated here at the beginning for reasons of simplicity:

- the concept of 'stakeholders' has been replaced throughout the text with that of 'interested parties' for reasons of compatibility with ISO 14001. A definition of interested parties has therefore been inserted in Article 2;

- when mention is made to Commission guidance in the text, the adoption of these guidance documents has been subject to the procedure laid down in Article 14 of the Regulation.

Preamble

The Preamble has been modified to bring it in line with the amended text of the common position, to highlight the specificity of EMAS and to take into account some of the amendments proposed by the European Parliament and accepted by the Commission in its amended proposal.

Amendments 4 (recital 14a) and 5 (recital 14c) of the European Parliament have not been retained as the Council has estimated that their implications were not clear, neither with regard to the incentives for organisations beyond the measures already provided for in this Regulation to encourage the organisations' participation in EMAS, nor with regard to the necessary structures in the candidate countries since no special provision concerning such countries is contained in this Regulation.

Article 1

This Article in the common position contains now greater emphasis on the active involvement of employees, with an explicit reference to their training. Furthermore, the clause contained previously in the last paragraph of this Article is now incorporated in the new Article 10.

Article 2

Main changes include the following:

- the definitions of 'interested party', 'environmental performance', 'continual improvement of environmental performance' and 'prevention of pollution' have been added in line with ISO 140001 definitions,

- the definition of 'environmental policy' has been adapted so as to include the commitment to continual improvement of environmental performance and to state more clearly that it 'will provide a framework for setting and reviewing environmental targets and objectives',

- the definition of 'environmental programme' has been modified to better clarify its relationship with environmental objectives and targets,

- the definition of 'organisation' has been amended to better clarify its link with the 'site' for registration purposes,

- furthermore, the definition of 'competent bodies' has taken into account the amendment proposed by the European Parliament and incorporated in the Commission amended proposal.
Article 3

The text has been modified in paragraph 2, concerning the maintenance of EMAS registration by the organisations, where the common position provides for the possibility of deviations from the frequency of yearly validated updates of the organisations' environmental statements under circumstances to be defined in Commission guidance.

Article 4

This Article has been reorganised in the common position. Main changes include:

— extension of the deadline by which the system shall be operational to 12 months following the date of entry into force of the Regulation in order to give greater flexibility to the organisations concerned given the enlarged scope of the Regulation,

— a simplified wording concerning the efforts to improve consistency of EMAS requirements with regard to accreditation and supervision of environmental verifiers across Member States,

— reduced frequency with which the forum of the accreditation bodies shall meet ('at least once a year'),

— request to the Commission to forward the report of the peer review activities it receives also to the Article 14 committee and to make the report publicly available.

Articles 5, 6 and 7

These Articles have been reorganised for reasons of greater clarity without substantial changes in the common position.

In particular, the redrafting of Article 6 is intended to group together and make clearer the conditions for registration, refusal of registration, suspension or deletion of organisations from the register.

Article 8

The Article on the logo has been modified by the Council.

The Council has agreed on the EMAS logo as given in Annex IV. Further technical specifications concerning the reproduction of the logo are left to the procedure laid down in Article 14 of the Regulation. Article 8(2) lists the cases in which the use of the logo (and which version of the logo) by organisations is allowed. In particular, the use of the EMAS logo on adverts for products, activities and services, excluded in the Commission proposal, has been retained by the Council as admissible only under circumstances to be defined in Commission guidance and provided that no confusion with environment products labels is created. The same conditions apply to the use of the logo on validated information as described in Annex III.

The Article also excludes the use of the logo in the cases listed in the subsequent paragraph 3.

It is however foreseen that the Commission shall, as part of the evaluation exercise undertaken under Article 15 of the Regulation, consider under which exceptional circumstances the logo may be used and subsequently adopt guidance texts, again ensuring that there is no confusion with environment product labels.
Article 10

This is a new Article introduced by the Council to cover the relationship with other Community environmental legislation: it incorporates text previously contained in Article 1(1) and Article 10 of the Commission proposal (paragraph 2). Paragraph 2 is addressed to Member States that should consider how registration to EMAS may be taken into account in implementing and enforcing environmental legislation in order to avoid unnecessary duplication of efforts by both the organisations and the competent enforcement authorities. Member States are also requested to inform the Commission of the measures taken in this regard.

Article 11

The common position incorporates, in the first paragraph, some of the amendments proposed by the European Parliament with regard to this Article and all accepted by the Commission in its amended proposal. As far as the proposed amendments not retained in the common position are concerned, the Council has considered difficult to ensure their application in practice with regard to the 'non excessive burden' and the 'reasonable fees'. Measures to promote the participation of organisations in EMAS, and in particular of SMEs, are dealt with in the whole Article 11 and costs and fees relating to this Regulation are covered by Article 16 whereby a system of fees 'in accordance with modalities established by Member States' is foreseen.

Some of the last paragraphs of this Article as contained in the Commission proposal are now in Article 10 and in the Preamble (old paragraph 4) of the common position.

Article 11 of the Council text contains a new paragraph 2 that invites the EC institutions and other public authorities to consider, without prejudice to Community law, how the registration to EMAS may be taken into account when setting criteria for procurement policies as one of the means to encourage organisations' participation in EMAS.

Article 12

The Council has considered particularly important the provisions on information, given that one of the objectives of the Regulation is to increase the visibility of the EMAS scheme. Article 12 has been therefore strengthened by the Council by including in its paragraph 3 a request to the Commission to examine, in consultation with the members of the Article 14 committee, the possibility of disseminating best practice by appropriate ways and means.

Article 14

The Council has decided on a regulatory committee in accordance with the procedure laid down in the new Decision 1999/468/EC adopted by the Council on 28 June 1999.

Article 15

The Article on the revision of the Regulation was modified by the Council with regard to:

— the new paragraph 2, which, for reasons of simplification, incorporates a large part of the text previously in a separate Article concerning the Annexes to the Commission proposal (Article 13). The modified text of the common position allows for adaptation of all Annexes to the Regulation by the Commission in accordance with the procedure laid down in Article 14 of this Regulation, with the exception of Annex V concerning the accreditation, supervision and function of the environmental verifiers,
the new paragraph 3, which provides for an evaluation by the Commission in cooperation with the Member States no later than five years after the entry into force of the Regulation on 'the use, recognition and interpretation, especially by the public and other interested parties, of the EMAS logo' and an assessment of 'whether there is a need to revise the logo and the requirements for its use'.

Article 17

This Article has been modified in the common position as follows:

— paragraph 2: the deadline is brought in line with the new deadline of 12 months in Article 4,

— paragraph 4: a supplementary period of six months is given in certain cases to sites registered under the current EMAS scheme to allow the shift to the new scheme introduced by this Regulation,

— paragraph 5: sites outside the industry sector 'experimentally' registered under the current EMAS scheme are now allowed to be registered under the new scheme, provided that comply with all the requirements of this Regulation.

Article 18

The deadline for application has been removed in the common position in order to avoid confusion as different provisions allow for different application deadlines in the Regulation.

Annexes

Annex I (Environmental management system requirements)

Main modifications in this Annex concern: (a) a clarification of the aspects related to the organisation's legal compliance measured against environmental legislation; (b) a reference to organisation's commitment to continual improvement of its environmental performance and the reference to local, regional and national environmental programmes in this context and (c) the obligation to comply with all EMAS requirements for each of the sites that an organisation may constitute.

The incorporation of the text of the ISO standard EN 14001:1996 in this Annex will depend on the conclusion of a copyright agreement between the Commission and CEN.

An additional section 4 concerning the involvement of employees and some practical modalities for appropriate forms of employees' participation reflects the amendments made in this regard to Article 3 of the Regulation.

Annex II (Requirements concerning internal environmental auditing)

Apart from some editorial changes (point 2.3), the section on the audit frequency in the Council text (point 2.9), specifically requires now that the audit or audit cycle be completed, as appropriate, at intervals no longer than three years. The factors to be taken into account when determining the frequency with which every activity is to be audited remain the same, as well as the principle that more complex activities with a more significant environmental impact shall be audited more frequently.
Annex III (Environmental statement)

Main changes made by the Council include:

- section 3.1: more precise requirements with regard to the way in which environmental information is presented to the public and other interested parties, the intent being to be able to provide information in printed form to those that have no other means of obtaining such information while at the same time not creating an excessive burden on organisations,

- section 3.2: the character of the environmental statement as a dialogue and communication tool with the public and other interested parties has been emphasised, by incorporating in the Council text an amendment of the European Parliament accepted by the Commission in its amended proposal. The minimum requirements for the environmental statement have been complemented and made more precise by the Council in line with the modified Annex VI, in particular with regard to the relationship between environmental aspects and impacts and the kind of data to be provided on the environmental performance of the organisation,

- section 3.3: the Council has estimated it useful to encourage organisations to make use of environmental performance indicators where appropriate, and in those cases, criteria for environmental performance reporting are given; they are unchanged with respect to the Commission list with the exception of an adjustment to the criterion listed under (c)). The rewording is in line in principle with the amendment of the European Parliament.

The numbering and sequence of sections has been reorganised by the Council.

Annex IV (Logo)

This Annex contains the EMAS logo, given in two versions (written part only), depending on the specific circumstances for its use as detailed in Article 8 of this Regulation.

Annex V (Accreditation, supervision and function of the environmental verifiers)

Major changes made by the Council include:

- with regard to the requirements for accreditation (section 5.2): verifiers are requested to have a general understanding of the functioning of the environmental management system; furthermore, the independence of verifiers has been considered particularly important by the Council and therefore further specifications are given to ensure it in practice; the competence of the verifiers has been clearly indicated as one factor for defining the scope of the accreditation; furthermore, compliance with the additional requirements set out in this Annex shall be ensured also through the assessment carried out prior to accreditation,

- with regard to the supervision of verifiers (section 5.3): intervals for regular quality controls on the verifiers and their activities are now extended to 24 months; as to the right of verifiers to exercise their activities in other Member States it is now explicitly indicated that such right should not be hampered by charging discriminatory fees for notification; it is additionally foreseen that supervision can include witnessed assessments,

- with regard to the function of verifiers (section 5.4): the use of spot-checks by verifiers is foreseen in order to check the reliability of the results of the internal audit,

- with regard to the verification frequency (section 5.6): the text has been brought in line with the amended Article 3, which allows for deviations from the established frequency through Commission guidance.
Annex VI (Environmental aspects)

This Annex has been reorganised and modified by the Council.

The requirement for an organisation to consider both direct and indirect environmental aspects of its activities, products and services, defined in terms of management control, has been made more explicit. The relationship between environmental aspects and significant environmental impacts for the purpose of setting the organisation's objectives and targets has been further developed with the intention of making it clearer throughout the text.

The list of direct environmental aspects has been complemented and broadened so as to include, for instance, risks of environmental accidents and related impacts, as well as effects on biodiversity. The list of indirect environmental aspects now cover also the 'environmental performance and practices of contractors, subcontractors and suppliers'. The section on significance (6.4) has been reorganised and simplified, while not touching on the substance of the factors listed.

Annex VII (Initial environmental review)

This Annex has been adjusted following the modification of Annex VI and therefore considerably shortened to avoid duplication.

Annex VIII (Registration information minimum requirements)

Only minor editorial changes.

The Commission has agreed to all changes made by the Council.
COMMON POSITION (EC) No 22/2000

adopted by the Council on 28 February 2000

with a view to adopting a Directive 2000/.../EC of the European Parliament and of the Council of ... on certain legal aspects of information society services, in particular electronic commerce, in the internal market (‘Directive on electronic commerce’)

(2000/C 128/02)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Articles 47(2), 55 and 95 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

Acting in accordance with the procedure laid down in Article 251 of the Treaty (3),

Whereas:

(1) The European Union is seeking to forge ever closer links between the States and peoples of Europe, to ensure economic and social progress; in accordance with Article 14(2) of the Treaty, the internal market comprises an area without internal frontiers in which the free movements of goods, services and the freedom of establishment are ensured; the development of information society services within the area without internal frontiers is vital to eliminating the barriers which divide the European peoples.

(2) The development of electronic commerce within the information society offers significant employment opportunities in the Community, particularly in small and medium-sized enterprises, and will stimulate economic growth and investment in innovation by European companies, and can also enhance the competitiveness of European industry, provided that everyone has access to the Internet.

(3) Community law and the characteristics of the Community legal order are a vital asset to enable European citizens and operators to take full advantage, without consideration of borders, of the opportunities afforded by electronic commerce; this Directive therefore has the purpose of ensuring a high level of Community legal integration in order to establish a real area without internal borders for information society services.

(4) It is important to ensure that electronic commerce could fully benefit from the internal market and therefore that, as with Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities (4), a high level of Community integration is achieved.

(5) The development of information society services within the Community is hampered by a number of legal obstacles to the proper functioning of the internal market which make less attractive the exercise of the freedom of establishment and the freedom to provide services; these obstacles arise from divergences in legislation and from the legal uncertainty as to which national rules apply to such services; in the absence of coordination and adjustment of legislation in the relevant areas, obstacles might be justified in the light of the case-law of the Court of Justice of the European Communities; legal uncertainty exists with regard to the extent to which Member States may control services originating from another Member State.

(1) OJ C 30, 5.2.1999, p. 4.
(2) OJ C 169, 16.6.1999, p. 36.

ENVIRONMENT: CTE AGENDA PART 3
CKET on: how environmental taxes and other requirements fit in

The relationship between the provisions of the multilateral trading system and:
(a) charges and taxes for environmental purposes; and
(b) requirements for environmental purposes relating to products, such as standards and technical regulations, and packaging, labelling and recycling requirements
(Item 3 of the work programme)

Discussion of the work programme’s item 3 has focused primarily on the issues of eco-labelling, handling requirements (such as requirements for packaging, recycling, re-use, recovery, and disposal), and environmental taxes.

Eco-labelling

Eco-labelling — labelling products, often voluntarily, according to environmental criteria such as use of recycled material, etc — has been one of the most controversial aspects of the WTO Committee on Trade and Environment’s work.

It has received considerable attention, and its use by governments, industry and non-governmental organizations is increasing.

Product v. process

A key theme running through the discussion of these issues is the distinction between a measure (such as a tax or labelling requirement) that applies to a product, and one that applies to a process (i.e. the way a product is made).

Under WTO rules, dealing with an internationally traded product is more straightforward. Measures applied to the processes used to make an internationally traded product cause more problems. They could even be illegal under WTO rules.

Why are processes more problematic?

The measures would still be applied to products (e.g. an environmental tax on an imported product) but it is not always easy to determine exactly what processes...
The CTE recognized that well designed programmes for eco-labelling can be effective environmental policy instruments, which may be used to foster environmental awareness amongst consumers.

However, it noted that these schemes raise significant concerns about their possible trade effects (if labelling requirements are too narrow they could be unnecessarily difficult for some suppliers to fulfil).

Eco-labelling schemes differ in their design. Some are based on a single criterion, such as what the products contain. Others are based on life-cycle analysis, i.e. they take into consideration the environmental effects of products all the way through their production process until their final disposal.

In practice, life-cycle analysis is not easy to conduct. Labels following the latter approach are frequently based on criteria that relate to only a few aspects of a process of production or of a product. This creates the potential for unwarranted trade restriction, in particular protectionism in disguise.

The criteria used for eco-labelling are determined through consultation among interested parties within countries. As a result, a common complaint by the users of eco-labels has been that the criteria focus on local concerns and do not address the views of foreign suppliers, nor the specific environmental situation of the supplier countries.

The use of life-cycle analysis also results in eco-labels being based on process and production methods (PPMs) that are not related to specific products.

In other words, when eco-labels are successful in influencing consumer choice, and are necessary to maintain market share, suppliers have to alter their production processes in order to qualify for the eco-

In addition, the environmental implications of a particular process can vary from place to place, from country to country — for example, whether a particular resource such as water is scarce; or whether a particular location is already heavily polluted and therefore ill-placed to absorb and degrade additional pollution.

Another way of expressing this: products are "objective", processes are "subjective" (for the various reasons described above). The WTO is based on rules, and therefore promotes "objectivity" in trading schemes in order to ensure that the rules are as clear-cut as possible.
Some countries have therefore expressed concern in the CTE that eco-labelling means that the environmental concerns of importing countries are imposed on the production methods of their trading partners.

The principal WTO rules dealing with labelling are those of the Technical Barriers to Trade (TBT) Agreement.

The extent to which the agreement applies to labels based on processes (instead of the characteristics of the products themselves) is unclear, and has been the subject of some discussion both in the CTE and the Committee on Technical Barriers to Trade, which administers the TBT Agreement.

Currently, a major challenge to the TBT Agreement’s effectiveness is the increasing use of regulations and standards that are process-based, as opposed to product-based, and not only in the area of the environment. This may require added reflection on the TBT Agreement’s rules on mutual recognition and equivalency (i.e. countries recognizing each others’ methods and standards) as a means of addressing the problems posed by countries having differing environmental standards.

The CTE has supported the view that environmental concerns are not the same in all countries, and that the eco-labels developed by different countries need not be based on the same criteria.

In the context of international trade, this raises the issue of how to compare different criteria and different methods of assessing whether a product or process conforms.

Some of the issues raised in this regard have...
included: how the positive environmental qualities of the imported products can be taken into account in the design of labelling schemes; how eco-labelling schemes can be made more transparent; the extent to which trading partners can participate in selecting the criteria; and so on.

The CTE concluded that further discussions are needed on how criteria based on PPMs that are not related to the product itself should be treated under the TBT Agreement. It urged WTO members to respect their obligations under the TBT Agreement, including those on transparency.

Handling requirements

At present, handling requirements (such as requirements for packaging, recycling, re-use, recovery, and disposal) are applied on a smaller scale than eco-labels, but their use as environmental policy instruments is spreading.

A number of countries, particularly in Europe, have instituted policies stipulating, for instance, the kind of packaging that can or cannot be used in their markets. They also prescribe the recovery, re-use, recycling or disposal of packaging materials once they have served their purpose.

These policies can increase costs for exporters and can potentially be barriers to trade. They can result in discriminatory treatment, even if the same requirements are imposed both on domestic products and imports, when countries differ in the materials and other resources available to them, and when they face different constraints.

For example, wood is used for packaging in many

2. The economic argument.

This is an argument that environmental economists themselves make. When products are identified only by what they are, not how they are made, countries can set their own standards as appropriate for their level of development. Inappropriate standards are not imposed on them from outside.

Countries can then make their own trade-offs between their needs for development and for environmental protection — according to how they themselves value these needs, and not on the basis of how other people make the valuations for them.

3. The environmental argument.

If countries do not impose their standards on each other, the standards can be tailored to the different conditions, priorities and problems in different parts of the world, including varying ability to absorb pollution.
recyclable and therefore pays a penalty in the marketplace.

On waste handling requirements, the CTE has followed a similar approach in its analysis of the potential trade effects to that used for eco-labelling.

Among the concerns it has expressed are:

- the extent to which the criteria for selecting waste handling schemes are delegated to domestic industry groups and therefore tailored to their preferences;
- the degree to which foreign suppliers are allowed to participate in the design and preparation of these schemes;
- the extent to which packaging favoured by overseas suppliers is accepted by the schemes;
- the cost of participating in the schemes.

Environmental charges and taxes

Governments are increasingly using environmental charges and taxes in order to meet national environmental policy objectives, and to "internalize" domestic environmental costs (i.e. to make producers pay for the environmental costs such as pollution, which they would not normally have to face).

These charges have an impact on international trade if they are imposed on imported products or rebated on exports. That is where WTO rules discipline governments' actions.

The issue is of considerable interest and importance to trade and environment policy-makers in the context of proposals to increase taxes on environmentally
and transportation.

Under existing GATT rules and jurisprudence, "product" taxes and charges can be adjusted at the border (i.e. when products are imported or exported), but "process" taxes and charges by and large cannot.

For example, a domestic tax on fuel can be applied perfectly legitimately to imported fuel. But a tax on the energy consumed in producing a ton of steel (a tax on the production process) cannot be applied to imported steel, even if it is charged on domestically produced steel, which could make the imported steel cheaper (and presumably less environmentally friendly).

For this reason, there is some concern that the WTO rules could affect the competitiveness of domestic producers when they face environmental process taxes and charges. Indeed, these concerns about competitiveness were widely reported to have been behind the European Commission's decision to abandon its proposal for a carbon tax in 1992.

The CTE says it is important for further work to be undertaken on the extent to which WTO rules need to be reviewed to accommodate environmental taxes and charges.
Identificação: NI/ABNT 09.31.02 Revisão 0B de outubro de 1999

Título: Critérios para Concessão da Marca ABNT – Qualidade Ambiental para Calçado

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Trata-se de um documento não normativo que, após ser aprovado, será de adoção voluntária, para uso exclusivo do programa ABNT de Rotulagem Ambiental.
SUMÁRIO

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Prefácio

Esta Norma Interna, cujo conteúdo é de responsabilidade da Gerência de Certificação - DTC, foi elaborada por uma Comissão Interna de Normalização - CINOR.

Esta Norma Interna foi aprovada pela Diretoria Técnica em __/__/__.

Esta Norma Interna está conforme à NI/ABNT 01.00.02 - Elaboração de Normas Internas.

Os projetos de Normas Internas elaborados no âmbito desta CINOR circularam para verificação entre as Unidades Operacionais - UO - envolvidas.

Introdução

A obtenção da marca ABNT - Qualidade Ambiental é uma certificação do produto calçado para as organizações que produzam calçados dentro de cuidados ambientais que abranjam desde a seleção e produção de matérias primas até o descarte final.

A atribuição do rótulo ecológico tem por objetivo a melhoria da qualidade dos produtos e processos. É um importante mecanismo de implementação de políticas ambientais, dirigido aos consumidores, auxiliando-os na escolha de produtos menos agressivos ao meio ambiente, como também um instrumento de Marketing para as empresas que investem nessa área e querem os seus produtos diferenciados no mercado.

1 Objetivo

Esta Norma Interna estabelece critérios para a concessão da Marca ABNT - Qualidade Ambiental para Calçado.

2 Referência Normativa

A Norma relacionada a seguir contém disposições que constituem prescrições válidas para esta Norma. A edição indicada estava em vigor no momento desta publicação. Como toda Norma está sujeita à revisão, recomenda-se aqueles que utilizem esta Norma, que verifiquem a conveniência de utilizar a edição mais recente. A ABNT mantém registros das Normas válidas atualmente.

- Norma DIN 4843: 1985 - Calçados de proteção - exigências técnicas de segurança - Teste - item 6.3

- Norma DIN 53313: 1996 – Determinação do conteúdo de pentaclorofenol

ABNT - ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS
- Norma DIN 53314: 1996 - Determinação de cromo hexavalente
- Norma DIN 53316: 1997 – Determinação de azocorantes em couro
- Norma DIN 53516: 1987 – Determinação da resistência à abrasão
- Norma DIN 53328: 1979 – Resistência à tração de tiras do cabedal
- Norma DIN 53339: 1978 – Determinação da resistência da coloração e do acabamento à fricção
- SATRA physical test method PM 92 – Flexões contínuas em calçados. Resistência dos solados e sua fixação ao cabedal
- SATRA physical test method PM 108 – Strength of top-piece attachment – setembro 1992; arrancamento do tacão
- SATRA physical test method PM 113 – dezembro 1996 – Measurement of the strength of attachment of heels to footwear and backpart of such footwear – Arrancamento do salto
- SATRA physical test method PM 181 – agosto 1996 – Strength of buckle and strap attachment – Resistência à tração de enfeites e pontos críticos do cabedal
- Standard methods for the examination of water and wastewater (SMEWW): 1985
- NBR 10004: 1987 – Resíduos sólidos – Classificação
- NBR 10561:1988 – Águas - Determinação de residual sedimentável (sólidos sedimentáveis) - Método cone Imhoff
- NBR 11031:1998 – Determinação da cinza total sulfatada
- NBR 11041: 1997 – Determinação da resistência à tração e alongamento
- NBR 11055: 1997 – Determinação da força de rasgamento progressivo
- Projeto NBR 11057: 1998 – Couro - Determinação do pH e da cifra diferencial
- NBR 11114: 1998 – Determinação da medida de resistência a flexões contínuas
- NBR 11126: 1989 – Determinação da adsorção estática – Método de Kulbeka
- NBR 11671: 1995 – Determinação estática da fixação de substâncias extraíveis em água (fixação de corantes)
- NBR 12846:1993 – Determinação da resistência do acabamento a fricção
- NBR 13340:1995 - Banho residual de caleiro - Determinação do teor de sulfeto
- NBR 13341:1995 - Banho residual de curtimento e recurimento - Determinação do teor de óxido de cromo III

ABNT - ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS
3 Definições

Para os efeitos da presente Norma Brasileira aplicam-se as seguintes definições:

3.1 Produto

Qualquer bem ou serviço.

3.2 Categoria de produto

Grupo de produtos que têm função equivalente.

3.3 Adequação ao uso

Capacidade de um produto, processo ou serviço, em atender a um propósito definido, sob condições específicas.

3.4 Impacto ambiental

Qualquer modificação do meio ambiente adversa ou benéfica, que resulte no todo ou parte das atividades, produtos ou serviços de uma organização.

3.5 Critério ambiental de um produto

Requisito ambiental que o produto deve atender para que lhe seja concedida a licença de uso do rótulo ambiental.

3.6 Organização

Companhia, corporação, firma, empresa ou instituição, ou parte, ou combinação destas, pública ou privada, sociedade anônima, limitada ou com outra forma estatutária, que tem funções e estrutura próprias e que solicita a concessão da marca.

3.7 Efluentes

Todas as correntes de saída de um processo.

3.8 Cifra diferencial

Diferença entre o valor do pH de uma solução e o valor do pH desta solução diluída dez vezes.

3.9 Avesso

4 Campo de aplicação
Os critérios para concessão da marca ABNT – Qualidade Ambiental para Calçado – referem-se a calçados:

a) cabedal, sola, forro, palmilha interna e avesso – de couro.

b) de uso diário e médio desempenho, definidos através de requisitos de resistência e durabilidade conforme informações obtidas no Instituto de teste e pesquisa para a produção do calçado de Pirmasens.

5 Critérios

Os critérios ambientais devem ser atendidos pelos produtores de calçados que queiram usar o rótulo ambiental em seus produtos. Para tanto, serão auditadas as diversas etapas da produção do calçado, a saber: modelagem, corte, preparação, costura, montagem, acabamento, embalagem e expedição, bem como, será avaliada a qualidade do produto final. As matérias primas utilizadas na produção são de responsabilidade do próprio fabricante do calçado, o qual deve evidenciar critérios de desempenho por parte de seus fornecedores.

5.1 Documentação

A organização deve estabelecer e manter procedimentos para o controle de todos os documentos relativos aos critérios para concessão da marca ABNT- Qualidade Ambiental para calçados, para assegurar que:

a) possam ser localizados;

b) sejam periodicamente analisados, revisados quando necessário e aprovados quanto à sua adequação, por pessoal autorizado;

c) as versões atualizadas dos documentos pertinentes estejam disponíveis em todos os locais onde são executadas operações essenciais de produção do calçado;

d) documentos obsoletos sejam prontamente removidos de todos os pontos de emissão e uso ou, de outra forma, garantidos contra o uso não intencional

e) quaisquer documentos obsoletos retidos por motivos legais e/ou para preservação de conhecimento sejam adequadamente identificados.

A documentação deve ser legível, datada (com datas de revisão) e facilmente identificável, mantida de forma organizada e retida por um período de tempo especificado. Devem ser estabelecidos e mantidos procedimentos e responsabilidades referentes à criação e alteração dos vários tipos de documentos.

5.1.1 Acompanhamento e medição

A organização deve estabelecer e manter procedimentos documentados para acompanhar e medir periodicamente as características principais de suas operações e atividades que possam ter um impacto significativo sobre os critérios contidos neste documento. Tais procedimentos devem incluir o registro de informações para acompanhar o desempenho, controles operacionais pertinentes e a conformidade com os critérios.

Os registros de calibração de equipamentos de monitoramento devem ser mantidos e ficar retidos, segundo procedimentos definidos pela organização.

5.1.2 Legislação

A organização deve estabelecer e manter um procedimento documentado para avaliação periódica do
atendimento à legislação e regulamentos pertinentes.

5.1.3 Registros

A organização deve estabelecer e manter procedimentos para a identificação, manutenção e descarte de registros referentes aos critérios.

Estes registros devem ser legíveis e identificáveis, permitindo rastrear a atividade, produto ou serviço envolvido. Devem ser arquivados e mantidos de forma a permitir sua pronta recuperação, sendo protegidos contra avarias, deterioração ou perda. O período de retenção deve ser igual ao da validade da concessão da marca.

5.2 Cumprimento da lei

A organização deve demonstrar que está cumprindo a legislação ambiental federal, estadual e municipal em vigor e outros requisitos por ela subscritos assim como, atender aos acordos e tratados internacionais relativos aos impactos ambientais de sua atividade em que o Brasil é signatário.

5.3 Resíduos sólidos

Todo o resíduo sólido gerado na preparação da matéria prima e na produção do calçado deve ser controlado e minimizado através de metas quantificáveis. Deve ser classificado conforme norma vigente e ter destinação final adequada.

5.4 Emissões atmosféricas

A organização deve controlar e minimizar suas emissões atmosféricas.

5.5 Controle sobre matérias primas

5.5.1 Sistema de acompanhamento

A organização deve manter mensalmente um gerenciamento dos resíduos sólidos e o monitoramento dos efluentes líquidos, através de laboratório cadastrado pelo órgão ambiental competente ou na falta deste aceito pela ABNT.

5.5.2 Couro

As peles devem ser de animais cujo abate e comercialização não tenham quaisquer restrições legais. O processo de produção de couro será considerado desde a pele verde ou conservada até o couro acabado.

5.5.2.1 Requisitos de propriedade químicas

O couro não deve conter:

a) aditivos azocorantes, que gerem aminas aromáticas, em concentração superior a 30 mg.kg⁻¹ (limite de quantificação possível), conforme a norma DIN 53316.

b) derivados aromáticos policlorados (pentaclorofenol e congêneres) em concentração superior a 5 mg.kg⁻¹ (limite de quantificação possível), conforme a norma DIN 53313.
c) Cromo hexavalente em concentração superior a 3 mg kg\(^{-1}\), conforme a norma DIN 53314.

O pH mínimo do couro deve ser de 3,5 e a cifra diferencial máxima de 0,7, cuja determinação deve ser conforme a norma NBR 11057.

5.5.2.2 Requisitos de propriedades físicas

a) Para couro cabedal – Requisitos a serem cumpridos

<table>
<thead>
<tr>
<th>Ensaio</th>
<th>Norma</th>
<th>Valor limite</th>
</tr>
</thead>
</table>
| Determinação da resistência à tração e alongamento (na ruptura) em couro vacum | NBR 11041 | Tração na ruptura – mínimo 150 N  
Alongamento – mínimo 40% |
| Determinação da força de rasgamento progressivo em couro vacum | NBR 11055 | Calçado com forro – mínimo 35 N  
Calçado sem forro – 50 N |
| Determinação da resistência da coloração e do acabamento à fricção | DIN 53339 | Flor (acabamento) – não abaixo de 3 na escala cinza-branco;  
Carnaíba (sem forro) – não abaixo de 3 na escala cinza-branco |
| Determinação da medida de resistência a flexões contínuas | NBR 11114 | Modalidade a seco – 50 000 flexões sem alteração |

b) Para couro sola – Requisitos a serem cumpridos

<table>
<thead>
<tr>
<th>Ensaio</th>
<th>Norma</th>
<th>Valor limite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determinação da resistência à abrasão</td>
<td>DIN 53516</td>
<td>Máximo 400 mm(^3)</td>
</tr>
<tr>
<td>Determinação da adsorção estática</td>
<td>NBR 11126 substituir!!</td>
<td>Mais de 10 000 flexões sem penetração de água</td>
</tr>
</tbody>
</table>
| Determinação da cinza total sulfatada       | NBR 11031 | Máximo de 3%  
Com sais de magnésio: máximo 4% |
c) Para couro forro/palmilha/avesso – Requisitos a serem cumpridos

<table>
<thead>
<tr>
<th>Ensaio</th>
<th>Norma</th>
<th>Valor limite</th>
</tr>
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<tbody>
<tr>
<td>Determinação da força de rasgamento progressivo em couro vacum</td>
<td>NBR 11055</td>
<td>Couro forro: mínimo: 30N</td>
</tr>
<tr>
<td>Determinação da resistência da coloração e do acabamento a fricção</td>
<td>DIN 53.339</td>
<td>Couro Forro e Palmilha:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tinto: seco - 100 fricções: não abaixo do grau 4 (na escala cinza-branco);</td>
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<tr>
<td></td>
<td></td>
<td>úmido - 50 fricções: não abaixo do grau 3 (na escala cinza-branco);</td>
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<tr>
<td></td>
<td></td>
<td>suor sintético - 20 fricções: não abaixo do grau 3 (na escala cinza-branco)</td>
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<tr>
<td></td>
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<td>Não tinto: seco - 100 fricções: não abaixo do grau 4 (na escala cinza-branco);</td>
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<td>úmido - 50 fricções: não abaixo do grau 4 (na escala cinza-branco);</td>
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<td>suor sintético: 20 fricções: não abaixo do grau 3 (na escala cinza-branco)</td>
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<td></td>
<td>Avesso:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>seco - 2000 fricções</td>
</tr>
<tr>
<td></td>
<td></td>
<td>úmido - 1000 fricções</td>
</tr>
<tr>
<td></td>
<td></td>
<td>aceitável até um leve enovelamento superficial preso ao material.</td>
</tr>
<tr>
<td>Determinação estática da fixação de substâncias extraíveis em água (fixação de corantes)</td>
<td>NBR 11671</td>
<td>Teste da tira: mânchamento não abaixo do grau 3 (na escala cinza-branco)</td>
</tr>
</tbody>
</table>

5.5.2.3 Controle dos efluentes líquidos

Os efluentes líquidos finais, quando lançados, não devem ultrapassar os seguintes limites:

<table>
<thead>
<tr>
<th>Ensaio</th>
<th>Norma / Método</th>
<th>Valor limite*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH</td>
<td>NBR 13346</td>
<td>6,0 a 8,5</td>
</tr>
<tr>
<td>Temperatura</td>
<td>SMEWW ** 212</td>
<td>menor do que 40 °C</td>
</tr>
<tr>
<td>DBOs / 20 °C</td>
<td>SMEWW 507</td>
<td>40 a 200 mg.L⁻¹ O₂ (conforme a vazão dos efluentes)</td>
</tr>
<tr>
<td>DNO</td>
<td>SMEWW 508</td>
<td>160 a 450mg.L⁻¹ O₂ (conforme a vazão dos efluentes)</td>
</tr>
<tr>
<td>Cromo total</td>
<td>NBR 13341</td>
<td>máximo 0,5 mg.L⁻¹ **</td>
</tr>
<tr>
<td>Sulfetos</td>
<td>NBR 13340</td>
<td>máximo 0,2 mg.L⁻¹ **</td>
</tr>
<tr>
<td>Sólidos suspensos totais</td>
<td>NBR 13574</td>
<td>50 a 200 mg.L⁻¹ (conforme a vazão dos efluentes)</td>
</tr>
<tr>
<td>Sólidos sedimentáveis</td>
<td>NBR 10561</td>
<td>até 1 ml.L⁻¹.h⁻¹</td>
</tr>
</tbody>
</table>

*Resolução do CONAMA nº 20 de 18/06/86. **Portaria da SSMA do RS nº 01/89
5.5.3 Componentes

Os componentes metálicos ou não metálicos não devem conter níquel em sua composição ou em seu revestimento. A determinação deve ser através de espectrofotometria de absorção atômica.

5.6 Produção do calçado

5.6.1 Aproveitamento do couro

Todo o couro utilizado deve ter um aproveitamento mínimo de 75%.

5.6.2 Ambiente de trabalho

O calçado a ser certificado deve ser produzido por organização que possua um plano de proteção à saúde e de segurança ocupacional para seus funcionários, conforme a legislação.
5.7 Adequação do calçado ao uso

O calçado deve atender aos seguintes requisitos mínimos de durabilidade e desempenho:

<table>
<thead>
<tr>
<th>Ensaio</th>
<th>Norma/Método</th>
<th>Valor limite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexões contínuas em calçados -</td>
<td>SATRA PM 92</td>
<td>Resistência ao flexionamento: mínimo-500 mil ciclos sem alterações no aspecto visual</td>
</tr>
<tr>
<td>Resistência dos solados e sua fixação no cabedal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistência de colagem (sola x cabedal) a 90°.</td>
<td>DIN 4843</td>
<td>Calçado feminino: bico – mínimo 250N planta – mínimo 200N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calçado masculino: bico–mínimo 250 N planta–mínimo 200 N;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calçado infantil: bico – mínimo 300N planta – mínimo 250N</td>
</tr>
<tr>
<td>Resistência à tração de enfeites e pontos críticos do cabedal</td>
<td>SATRA PM 181</td>
<td>Feminino: mínimo 200N Masculino: 250N Infantil: 250N</td>
</tr>
<tr>
<td>Porosidade do fevestimento</td>
<td>NBR 14223/98</td>
<td>Mínimo nível 3</td>
</tr>
<tr>
<td>Resistência à tração de tiras do cabedal</td>
<td>DIN 53328</td>
<td>Feminino: mínimo 200N Masculino: 250N Infantil: 250N</td>
</tr>
<tr>
<td>Arrancamento do salto</td>
<td>SATRA PM 113</td>
<td>Mínimo 500N</td>
</tr>
<tr>
<td>Arrancamento do tacão</td>
<td>SATRA PM 108</td>
<td>Mínimo 140N</td>
</tr>
</tbody>
</table>

5.8 Descarte final do calçado

O fabricante de calçado deve fazer recomendação sobre o produto, com vista a estender a vida do mesmo, quanto à sua conservação e conserto, possibilidade de doação e destinação final adequada.

5.9 Embalagem

Todo material utilizado para embalagem deve ser de matéria prima de origem renovável e de características biodegradáveis.

6 Informação aos consumidores

O calçado deve ter identificado a composição da sola, do cabedal, do forro e da palmilha.

7 Prazo de validade

Estes critérios têm validade de dois anos.

ABNT - ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS
**Annex 18a**

*Summary of Annex 18*

**Brazilian Association for Technical Standards**

**Criteria for Awarding of Label ABNT-Environmental Quality of Shoes**

**Provisional version October 1999**

**Product:** Shoes (leather uppers, sole, lining, insole)

**General criteria:** The whole manufacturing schedule, from the raw hide to the final product, is taken into consideration.

Production, as well as waste treatment and disposal, must take place in accordance with the existing legislation.

**Functional requirements to the leather:**

<table>
<thead>
<tr>
<th>Upper leather:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength (bovine leather)</td>
<td>Load at break</td>
</tr>
<tr>
<td>Tearing load (bovine leather)</td>
<td>Shoe with lining</td>
</tr>
<tr>
<td></td>
<td>Shoe without lining</td>
</tr>
<tr>
<td>Colour fastness to rubbing</td>
<td>Grainside</td>
</tr>
<tr>
<td></td>
<td>Flesh side, if no lining</td>
</tr>
<tr>
<td>Flexing endurance (dry)</td>
<td></td>
</tr>
</tbody>
</table>

*) Number of rubbings not stated

**Sole leather:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion resistance</td>
<td>Max. 400 mm³</td>
</tr>
<tr>
<td>Water penetration</td>
<td>No penetration after 10,000 flexes</td>
</tr>
<tr>
<td>Sulphated ash</td>
<td>Max. 3%</td>
</tr>
<tr>
<td>Sulphated ash incl. magnesium salts</td>
<td>Max. 4%</td>
</tr>
</tbody>
</table>

**Lining leathers:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tearing load:</td>
<td>Min. 30 N</td>
</tr>
</tbody>
</table>

**Lining and insole leather:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour fastness to rubbing</td>
<td>Dyed: Dry 100 cycles, min. 4 on the grey scale.</td>
</tr>
<tr>
<td></td>
<td>Wet 50 cycles, min. 3 on the grey scale.</td>
</tr>
<tr>
<td></td>
<td>Synthetic perspiration:</td>
</tr>
<tr>
<td></td>
<td>20 cycles, min. 4 on the grey scale</td>
</tr>
</tbody>
</table>
Not dyed: Dry 100 cycles, min. 4 on the grey scale
Wet 50 cycles, min. 4 on the grey scale
Synthetic perspiration: 20 cycles, min 4 on the grey scale.

Colour fastness to water: Min. 3 on the grey scale.

Environmental criteria for the leather:

1. Waste water from the leather production; measured in the final outlet:

<table>
<thead>
<tr>
<th></th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PH</strong></td>
<td>6.0-8.5</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>less than 40°C</td>
</tr>
<tr>
<td><strong>BOD₅</strong></td>
<td>40-200 mg/l (*)</td>
</tr>
<tr>
<td><strong>COD</strong></td>
<td>160-450 mg/l (*)</td>
</tr>
<tr>
<td><strong>Total Cr</strong></td>
<td>max. 0.5 mg/l</td>
</tr>
<tr>
<td><strong>Sulphide</strong></td>
<td>max. 0.2 mg/l</td>
</tr>
<tr>
<td><strong>Suspending solids</strong></td>
<td>50-200 mg/l (*)</td>
</tr>
<tr>
<td><strong>Settleable solids</strong></td>
<td>max 1 ml/l, h.</td>
</tr>
</tbody>
</table>

*) dependent on recipient conditions

2. Content of dangerous substances:

Azo dyestuffs generating carcinogenic amines:
Amines (according to German norms): Max. 30 ppm

Polychlorinated aromates (pentachlorophenol and similar substances): Max 5 ppm.
Hexavalent chromium: Max. 3 ppm
pH: Min. 3.5. Difference figure: Max. 0.7

3. Solid wastes must be controlled and minimised, aiming at a specified goal.

4. Atmospheric emissions must be controlled and minimised.

5. In the shoe factory, at least 75% of the leather input must be utilised.

The label is awarded on the basis of declarations and certification by an accredited third party.
List of banned aromatic amines
Pursuant to Amendment 19 of EU Directive 76/769/EEC (28)

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>CAS* No.</th>
<th>EU No.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4-aminobiphenyl</td>
<td>92-67-1</td>
<td>202-177-1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Benzene</td>
<td>92-87-5</td>
<td>202-199-1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4-chloro-o-toluidine</td>
<td>95-69-2</td>
<td>202-441-6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2-naphthylamine</td>
<td>91-59-8</td>
<td>202-080-4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>o-aminoazotoluene; 4-amino-2,3-dimethylazobenzene</td>
<td>97-56-3</td>
<td>202-591-2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>5-nitro-o-toluidine</td>
<td>99-55-8</td>
<td>202-765-8</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4-chloroaniline</td>
<td>106-47-8</td>
<td>203-401-0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>4-methoxy-m-phenylenediamine</td>
<td>615-05-4</td>
<td>210-406-1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4,4'-diaminodiphenylmethane</td>
<td>101-77-9</td>
<td>202-974-4</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3,3'-dichlorobenzene</td>
<td>91-94-1</td>
<td>202-109-0</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>3,3'-dimethoxybenzidine, o-dianisidine</td>
<td>119-90-4</td>
<td>204-355-4</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3,3'-dimethylbenzidine</td>
<td>119-93-7</td>
<td>204-358-0</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>4,4'-methylenedi-o-toluidine</td>
<td>838-88-0</td>
<td>212-658-8</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>6-methoxy-m-toluidine; p-cresidine</td>
<td>120-71-8</td>
<td>204-419-1</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>4,4'-methylene-bis-(2-chloroaniline)</td>
<td>101-14-4</td>
<td>202-918-9</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>4,4'-oxydianiline</td>
<td>101-80-4</td>
<td>202-977-0</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>4,4'-thiodianiline</td>
<td>139-65-1</td>
<td>205-370-9</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>o-toluidine; 2-aminotoluene</td>
<td>95-53-4</td>
<td>202-429-0</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>4-methyl-m-phenylenediamine</td>
<td>95-80-7</td>
<td>202-453-1</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>2,4,5-trimethylaniline</td>
<td>137-17-7</td>
<td>205-282-0</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>o-anisidine; 2-methoxyaniline</td>
<td>90-04-0</td>
<td>201-963-1</td>
<td></td>
</tr>
</tbody>
</table>

*Chemical Abstracts Services
## Concentration limits set in ecolabelling schemes

<table>
<thead>
<tr>
<th>No.</th>
<th>Scheme/Location</th>
<th>Pentachlorophenol ppm</th>
<th>Certain Arylamines from azo dyestuffs ppm</th>
<th>Hexavalent chromium ppm</th>
<th>Formaldehyde ppm</th>
<th>Cadmium Cd Ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICT Eco-Tox Label</td>
<td>5</td>
<td>50</td>
<td>5</td>
<td>150/50</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>SG (Schadstoffgeprüft)</td>
<td>0.5</td>
<td>-5</td>
<td>-5</td>
<td>200</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Lederinstitut</td>
<td>5</td>
<td>-5</td>
<td>10</td>
<td>150</td>
<td>0.1</td>
</tr>
<tr>
<td>5</td>
<td>Gerberschule Reutlingen</td>
<td>5</td>
<td>-5</td>
<td>10</td>
<td>150</td>
<td>0.1</td>
</tr>
<tr>
<td>6</td>
<td>EU Ecolabel to Footwear</td>
<td>5</td>
<td>30</td>
<td>10</td>
<td>150</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Öko-Tex Standard 100</td>
<td>0.5/0.05</td>
<td>20</td>
<td>0.5</td>
<td>300/75</td>
<td>0.1</td>
</tr>
<tr>
<td>10</td>
<td>Brazil, ABNT</td>
<td>5</td>
<td>30</td>
<td>10</td>
<td>150</td>
<td>0.1</td>
</tr>
<tr>
<td>11</td>
<td>Catalonia</td>
<td>5</td>
<td>30</td>
<td>10</td>
<td>150</td>
<td>0.1</td>
</tr>
<tr>
<td>12</td>
<td>India, Ecomark</td>
<td>5</td>
<td>30</td>
<td>10</td>
<td>150</td>
<td>0.1</td>
</tr>
</tbody>
</table>

1) Numbers according to Annex II  
2) For infants or children  
3) Below detection limit  
4) For direct skin contact
ONE-DAY WORKSHOP
ON INTERNATIONAL ECO-LABEL FOR LEATHER

DATE: 13 MAY 1998
VENUE: YOGYAKARTA, INDONESIA

CONTOURS OF AN INTERNATIONAL ECO-LABEL SCHEME FOR LEATHER

PRESENTATION

BY

JURGEN HANNAK
CO-ORDINATOR
ENVIRONMENTAL MANAGEMENT

REGIONAL PROGRAMME OFFICE
REGIONAL PROGRAMME FOR POLLUTION CONTROL IN THE TANNING INDUSTRY IN SOUTH EAST ASIA

TNPCB Building, 1st Floor
100, Anna Salai, Guindy
Chennai 600 032, India

Phone: +91 44 235 3158/235 4518
Fax: +91 44 235 3156
Email: unido@glasmd01.vsnl.net.in
PART I - INTRODUCTION

Leather worldwide still is appreciated as a natural product. A label bearing “genuine leather” in consumer products still does carry much market value, because of prevailing opinion among the end-users of leather product that leather as material is superior to synthetic supplements in ecological acceptability.

For longest period of time this attitude on the consumers' end could be taken for granted, however, questions have been raised - not necessarily starting with leather products - regarding biodegradability and avoidance of any harmful chemical substances in manufacturing.

Over the period of time, the leather manufacturing process as such has not changed significantly, except for changes in design or type of machinery used, variety of chemical substances applied. However, with particular reference to these chemicals worries about their potential harmful impact on environment as well as end-users health have been voiced. As can be easily noticed such worries play an increasingly important role in international trade.

ASPECTS DETERMINING FEATURES OF ECO-LABELLING SCHEMES

In environmental consequences of both manufacturing processes and leather products are receiving much attention by environmentalist and consumer groups and need accordingly be addressed.

=> Eco-label needs to address leather manufacturing process and product.

As conditions of production vary from country to country (e.g. in terms of climatic conditions, locations, etc.) national regulations pertaining to the environmental performance or discharge of effluent of the leather industry have to be taken into account.

=> Eco-label needs to rely on national environmental legislation

The credibility and the impact of the Eco-label scheme - equal whether national or international - vis-à-vis end-user/importing countries is based on the wide acceptance and participation in the scheme by a large percentage of the industry itself. Acceptance and participation can only be achieved in case tanners and associations are willing to take pro-active ownership of such as scheme.

=> Eco-label needs to be administered by the concerned industry

In times of global trade and communication, increasing the flood of information by each day, such a scheme may pass unnoticed, if not specific efforts are undertaken by the stake holders of the scheme in terms of marketing and public relation, even in the sense of a corporate image of the countries tanning/leather industry. Understandably concerted efforts by tannery/leather association will be required.

=> Eco-label scheme needs to be internationally recognised

With the proliferation of schemes as well as in view of the proposed self-administration of the scheme by the concerned association itself, the selection of
criteria for obtaining the scheme as well as their easy monitoring and verification for are crucial.

Eco-label criteria need to be kept simple and transparent

**PROPOSED CONTOURS**

From the above aspects, it may be concluded that such international Eco-labelling scheme for leather needs to constitute a) realisable parameters, b) cost effective compliance possibilities, c) monitoring systems and d) openness for evolving standards.

**Realisable parameters**: In the case of leather products, parameters are necessary for the product, components and materials inclusive leather and manufacturing process of leather as well as products. With regard to the manufacturing process, the minimum national pollution control norms of waste water, solid wastes and gaseous emissions may considered appropriate.

As for the norms for the product, the proposed international eco-label for leather considers the semi-finished/finished leather itself as the "product" and confines itself to leather only. Thus, the question of the leather manufacture to account for parameters of components and material other than leather use din the final leather product does not arise. As a consequence, the product related parameters pertaining to chemical substances used in the manufacturing of the leather itself.

**Monitoring system**: A neutral agency, internationally recognised, will be most suitable to catalyse the developments of norms and methodologies. While compliance with manufacturing process related parameters can be easily concluded from the fact that the concerned national environmental enforcement agency allows or disallows operation for compliance/non-compliance with the national pollution norms, the verification and monitoring of product related parameters needs to be done by a certified and recognised testing facility.

In the latter case, standardisation of testing methods of these laboratories in line with established international standards is crucial to arrive at reliable test results.

The Eco-label scheme as presented does not yet deal with the approach with regard to qualification for the scheme by individual companies. For example, as an outcome of the one-day workshop on international Eco-label for leather in October 1997 at Madras, India, the participants suggested a phased approach, with each step extending over a period of two years, both in case of the process and product parameters.

The detailed contours of such Eco-label are elaborated in part II of the paper.
PART II - CONTOURS OF AN INTERNATIONAL ECO LABEL SCHEME FOR LEATHER

NAME OF THE SCHEME

- The scheme will be called International Eco-label Scheme for Leather (IESL).

SCOPE OF THE SCHEME

- The scope of the scheme is limited to leather only. The inclusion of products made of leather may be considered at a later stage.
- The scheme is process-cum-product based.

MEMBERSHIP

- All tanneries are eligible to become members of the scheme subject to their compliance with the conditions as stipulated below. The membership is on voluntary basis.

CRITERIA FOR OBTAINING

The criteria for obtaining "eco-label" under this scheme are:

- The applicant tannery will discharge effluent according to the pollutant discharge standards as stipulated by the country’s environmental legislation (example Indonesia - annex I). This should be certified by the accredited laboratory in the country (Indonesia). The details regarding sampling/certification process and other modalities are to be elaborated on approval of the basic contours.
- The applicant must not process hides and skins of endangered species.
- The applicant must not use any chemicals, internationally banned, in the production process of leather. A list of such chemicals is enclosed in annex II.
- The applicant produces the leather strictly maintaining the limit values of chemicals as indicated in annex III.
- The applicant of the Eco-label confirms that no child labour - as defined by the national legislation - is engaged in production of leather.

ADMINISTRATION OF THE SCHEME

- The administration of the International Eco-label scheme for leather in Indonesia will be entrusted to any agency as per consensus to be evolved at the meeting). The agency to be selected in Indonesia will be confirmed after appropriate verification.
- On application for membership of the scheme, the Indonesian agency responsible for the administration of the scheme will send a team of independent experts to assess the applicant tannery’s capability to conform to the basic...
criteria of the scheme. Based on the report of the independent team of experts, the Indonesian agency will issue an Eco-label certificate to the applicant tannery which will be valid for a period of one/two years. The team of independent experts will consist of three members, one of whom may be an international expert. Acquisition of the eco-label certificate by the applicant will authorise the applicant to put the "Eco-label" stamp on its products and/or an appropriate notification in all its communications.

- At least one month before the expiry of the validity of the certificate, the applicant will apply for renewal of the certificate to the authorised agency in Indonesia. The agency will review the capability of the applicant with the help of a team of independent experts. Based on the report of the team, renewal application will be disposed of.

- During the period the certificate issued by the Indonesian agency is valid, the Indonesian agency may suo moto or on the basis of a complaint that may be made, be free to depute one or more experts to the member tannery to verify the situation and take appropriate action as deemed necessary. Such action will include providing advice and guidance to the member tannery and adequate time for rectification of mistakes or inadequacies, if any. The Indonesian agency will have the right to revoke the certificate issued if it comes to the conclusion based on the report by an independent expert or team of experts that the member tannery did not adhere to the basic criteria of the scheme & to advice and guidance.

FINANCING THE SCHEME

- The scheme will be self-sustaining. Membership fee/inspection fee etc. will be collected by the Indonesian agency to administer the scheme.

ACCREDITATION OF LABORATORIES

- Laboratories in Indonesia whose certificates will be considered valid for the purpose of the scheme will be accredited. The criteria for accreditation of laboratories and the process thereof will be notified by the scheme.

PUBLICITY

- The scheme will be appropriately publicised in the international fora.

- A Memorandum of Understanding (MOU) will be entered with the Indonesian agency responsible for administration of the scheme. As the credibility of the scheme is dependent on the efficiency, commitment and impartiality of this agency, this MOU will be subject to renewal annually for the first three years and thereafter, after every three years.

INTERNATIONAL RECOGNITION

- The scheme will be recommended to the concerned authorities in the European Union, International Organisation of Standards and other world organisations for their consideration and adoption.
• The Indonesian agency will be assisted in informing the importer organisations in the various export destinations about the scheme to motivate them to consider the availability of the eco-label in the choice of their supplier in Indonesia.

• Changes in the scheme, if any, will be introduced after providing adequate notice to the members of the scheme.