

# The Australian Ecolabel Program

## Good Environmental Choice Australia Standard

### Textiles



ISSUED BY GOOD ENVIRONMENTAL CHOICE AUSTRALIA LTD  
PO BOX 4140, WESTON CREEK ACT 2611  
PHONE: +61 (02) 6287 3100  
FAX: +61 (02) 6287 3800  
E-MAIL: [OFFICE@GECA.ORG.AU](mailto:OFFICE@GECA.ORG.AU)

## Use of This Standard

This voluntary environmental labelling standard may be used by competent environmental assessors to establish product compliance to the Australian Ecolabel Program. Products that are certified with the mark of conformity, the “Good Environmental Choice Label” have been independently tested and demonstrate compliance to the environmental and social performance criteria detailed in this standard. The overall goal of environmental labels and declarations is the communication of verifiable and accurate information, which is not misleading, on environmental aspects of products and services. This encourages the demand for, and supply of, those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

This standard identifies environmental, quality, regulatory and social performance criteria that products sold on the Australian market can meet in order to be considered as good “environment practice”. Products that have been certified as complying to this standard may gain greater market recognition and a marketing advantage in government and business procurement programs, as well as broad consumer preference.

This standard can be used by Australian producers to guide their designs for environment programs by using the environmental criteria as key performance benchmarks to reduce the environmental loads of their product. The standard is necessarily restricted in its identification of environmental loads from the product life-cycle. Producers should consider other environmental measures along the product cycle, which are not included in this standard, in their environment program designs for and aim for even higher levels of environmental performance where technically possible.

For further information please contact:

Good Environmental Choice Australia Ltd  
Standards Review and Development  
Ph: +61 (2) 6287 3100  
E-mail: [standards@geca.org.au](mailto:standards@geca.org.au)

This document may be copied only in its entirety and without any type of change. Quotations may be made provided that Good Environmental Choice Australia Ltd is stated as the source. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Good Environmental Choice Australia Ltd  
PO Box 4140, Weston Creek ACT, 2611, Australia.  
Printed in Australia

**CONTENTS**

ABSTRACT.....4

DEFINITIONS.....4

1 INTRODUCTION.....5

    1.1 PURPOSE.....5

    1.2 BACKGROUND.....5

2 STANDARD CATEGORY SCOPE.....6

3 ENVIRONMENTAL PERFORMANCE CRITERIA.....7

    3.1 FITNESS FOR PURPOSE.....7

    3.2 MATERIAL REQUIREMENTS.....8

    3.3 HAZARDOUS MATERIALS.....11

4 COMPLIANCE TO ENVIRONMENTAL REGULATIONS.....17

5 COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS.....17

6 COMPLIANCE TESTING.....18

    6.1 AUDIT METHODOLOGY.....18

    6.2 ASSESSOR COMPETENCY.....18

    6.3 SUITABLE SOURCES.....18

    6.4 LABORATORY TESTING.....18

---

**GOOD ENVIRONMENTAL CHOICE AUSTRALIA STANDARD**

---

## Textiles

Current Status: Final Standard Version 2.4

Date Published: 20 June 2007  
Amended August 2008

### Abstract

This Standard specifies environmental performance requirements for a range of textile products for the Australian Ecolabel Program. The Australian Ecolabel Program complies with ISO 14024: "Environmental labels and declarations - Guiding principles" which requires environmental labelling specifications to include criteria that are objective, reasonable and verifiable.

### Definitions

**AOX** means Absorbable Organic Halogen. A standard measurement of organic halogens used for indication of the environmental influence of bleach plant effluents. Halogen refers to all the five elements fluorine, chlorine, bromine, iodine and astatine. In practice it is a measure of organically bound chlorine.

**Bast fibre** includes fibre from the phloem of dicotyledonous plants, in particular jute, hemp, flax, ramie and kenaf.

**COD** is Chemical Oxygen Demand, the mass concentration of oxygen equivalent to the amount of dichromate consumed by dissolved and suspended matter when a water sample is treated with that oxidant under defined conditions

**Keratin Fibre** includes greasy wool from sheep, alpaca, goat, camel and any other mammalian  $\alpha$ -keratin source.

**Label** means the Good Environmental Choice Australia Label.

**Natural Cellulosic Seed Fibre** includes cotton and kapok.

**Oeko-Tex Standard 100** means the textile testing standard of the International Association for Research and Testing in the Field of Textile Ecology, Zurich, Switzerland.

**Sufficiently Biodegradable** in this standard means that the substance passes any or all of the following test methods:

*At least 70 % degradation within 28 days:*

OECD 301 A, OECD 301 E, ISO 7827, OECD 302 A, ISO 9887, OECD 302 B or ISO 9888.

*At least 60 % degradation within 28 days:*

OECD 301 B, ISO 9439, OECD 301 C, OECD 302 C, OECD 301 D, ISO 10707, OECD 301 F, ISO 9408, ISO 10708 or ISO 14593.

*At least 80 % degradation within 28 days:*

OECD 303 or ISO 11733

**TOC** means Total Organic Carbon – A measure of the concentration of organic carbon in water, determined by oxidation of the organic matter into carbon dioxide (CO<sub>2</sub>)

**VOC** (Volatile Organic Compound) as defined by EC Directive 1999/13/EC, is any organic compound having a vapour pressure of 0.01kPa or more, at 20°C (293.15K). For organic solvents this definition corresponds to a boiling point or initial boiling point below 250°C.

## **1 INTRODUCTION**

### **1.1 Purpose**

This Standard seeks to define good environmental performance benchmarks for textile products. The voluntary environmental labelling standard implemented by Good Environmental Choice Australia (GECA) as part of the Australian ecolabel program specifies environmental performance criteria for a range of textile products including textiles for use in clothing, bedding, decorative applications and fittings. This standard stipulates the environmental load of such products throughout the major aspects of their life cycle.

### **1.2 Background**

Textile products have the potential to create significant environmental and human health impacts. These range from agricultural practices such as the use of biocidal agents in the production of natural textile fibres, to oxygen depleting substances emitted to waterways during manufacturing processes, to skin irritation during use and environmental damage caused by final disposal problems resulting from non-biodegradability, non-recyclability or toxic chemicals contained within finished products.

This standard identifies the key environmental loads of textile products and specifies limits on the major loads during the product life cycle. Products which comply with this standard will have considerably lower adverse environmental impacts and human health risks compared with products which cannot meet the standard.

## **2 STANDARD CATEGORY SCOPE**

This standard is applicable to the following range of products:

### **2.1 Clothing and Bedding Products**

This category includes clothing and bedding comprising at least 90% textile fibres by weight of the finished product.

### **2.2 Interior Textile Applications**

This category includes items such as textile lamp shades or window blinds comprising at least 90% textile fibres by weight of finished product. This category does not include floor coverings.

### **2.3 Yarns and Fabrics**

This category includes yarn and fabric intended for use in clothing, bedding or similar applications.

### **2.4 Textile Bags**

This category includes items such as shopping, laundry and school bags comprising at least 90% textile fibres by weight of finished product.

### **2.5 Outdoor Textile Applications**

This category includes textiles for use in outdoor furniture products.

### 3 ENVIRONMENTAL PERFORMANCE CRITERIA

#### 3.1 Fitness for Purpose

Certified products should be good performers in their intended application. Certain standards of quality and durability are implicit in the Label and the manufacturer must ensure that the product is fit for its intended purpose and:

##### 3.1.1 Applicable Standards

The product meets or exceeds the requirements of the relevant Australian Standard, or the product meets the applicable and accepted standard in its target market if it is to be exported. If there is no relevant Australian Standard for the product type, the product can demonstrate sufficient quality by providing testing reports from an independent organisation or case studies demonstrating market suitability and quality.

##### 3.1.2 Colourfastness Standards

Certified products must meet the following international standards with respect to colourfastness:

###### 3.1.2.1 Washing

The colour fastness to washing shall be at least level 3 to 4 for both colour change and staining measured using ISO 105 C06 (single wash, at temperature as marked on the product, with perborate powder).

This criterion does not apply to:

- Products clearly labelled “dry clean only” or equivalent (if it is normal practice for that product type to be labelled “dry clean only”).

- White products or products that are neither dyed nor printed

- Non-washable furniture fabrics.

###### 3.1.2.2 Perspiration (Acid and Alkaline)

The colour fastness to perspiration (acid and alkaline) shall be at least level 3 to 4 for both colour change and staining measured using ISO 105 E04 (acid and alkaline, comparison with multi-fibre fabric).

A level of 3 is nevertheless allowed when fabrics are both dark coloured (standard depth > 1/1) and made of regenerated wool or more than 20 % silk.

This criterion does not apply to white products, to products that are neither dyed nor printed, to furniture fabrics, curtains or similar textiles intended for interior decoration.

###### 3.1.2.3 Wet Rubbing

The colour fastness to wet rubbing shall be at least level 2 to 3 measured using ISO 105 X12.

A level of 2 may be allowed for indigo dyed denim.

This criterion does not apply to white products or products that are neither dyed nor printed.

###### 3.1.2.4 Dry Rubbing

The colour fastness to dry rubbing shall be at least level 4 measured using ISO 105 X12.

A level of 3 to 4 may be allowed for indigo dyed denim.

This criterion does not apply to white products or products that are neither dyed nor printed, or to curtains or similar textiles intended for interior decoration.

**3.1.2.5 Light**

For fabrics intended for furniture, curtains or drapes, the colour fastness to light shall be at least level 5 measured using ISO 105 B02. For all other products the colour fastness to light shall be at least level 4.

A level of 4 may be allowed when fabrics intended for furniture, curtains or drapes are both light coloured (standard depth < 1/12) and made of more than 20 % keratin fibres, silk fibres or bast fibres.

This requirement does not apply to mattress ticking, mattress protection or underwear.

**3.1.3 Dimensional Stability Standards**

Information on dimensional changes (%) shall be stated on the care label, packaging and other product information if the dimensional changes exceed:

- 2 % (warp and weft) for curtains and furniture fabric that is washable and removable,
- 6 % (warp and weft) for other woven products,
- 8 % (length and width) for other knitted products or terry towelling.

**3.2 Material Requirements**

Each fibre source in the certified product must conform to the following requirements.

**3.2.1 Natural Cellulosic Seed Fibres**

Seed fibers must not contain more than 0.05 ppm (sensitivity of the test method permitting) of each of the following substances:

Aldrin, captafol, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, hexachlorocyclohexane (total isomers), 2, 4, 5-T, chlordime-form, chlorobenzilate, dinoseb and its salts, monocrotophos, pentachlorophenol, toxaphene, methamidophos, methylparathion, parathion, phosphamidon.

Australian Certified Organic (ACO), National Association for Sustainable Agriculture Australia (NASAA) Certified Organic or Demeter Certified Organic seed fibres are deemed to have fulfilled this requirement.

**3.2.2 Bast Fibres**

Bast fibres shall not be obtained by water retting, unless the waste water from the water retting is treated so as to reduce the COD or TOC by at least 75% for hemp fibres and by at least 95% for flax and other bast fibres.

Bast fibres must also not contain more than 0.05 ppm (sensitivity of the test method permitting) of each of the following substances:

Aldrin, captafol, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, hexachlorocyclohexane (total isomers), 2, 4, 5-T, chlordime-form, chlorobenzilate, dinoseb and its salts, monocrotophos, pentachlorophenol, toxaphene, methamidophos, methylparathion, parathion, phosphamidon.

Australian Certified Organic (ACO), National Association for Sustainable Agriculture Australia (NASAA) Certified Organic or Demeter Certified Organic bast fibres are deemed to have fulfilled this requirement.

**3.2.3 Keratin Fibres**

The sum total content of each of the following groups of substances shall not exceed the following values:

<b>Substance</b>	<b>Max. Total Concentration</b>
γ -hexachlorocyclohexane (lindane) α -hexachlorocyclohexane β -hexachlorocyclohexane δ -hexachlorocyclohexane aldrin dieldrin endrin p,p'-DDT p,p'-DDD	0.5 ppm
cypermethrin deltamethrin fenvalerate cyhalothrin flumethrin	0.5 ppm
diazinon propetamphos chlofenvinphos dichlofenthion chlorpyriphos fenchlorphos	2 ppm
diflubenzuron triflumuron	2 ppm

Representative samples must be taken using the sampling system outlined in IWTO DTM 59 or similar.

For scouring effluent discharged to sewer, the COD discharged to sewer shall not exceed 60 g/kg greasy wool, and the effluent shall be treated off-site so as to achieve at least a further 75 % reduction of COD content, expressed as an annual average.

For scouring effluent treated on site and discharged to surface waters, the COD discharged to surface waters shall not exceed 5 g/kg greasy wool. The pH of the effluent discharged to surface waters shall be between 6 and 9 (unless the pH of the receiving waters is outside this range), and the temperature shall be below 40 °C (unless the temperature of the receiving water is above this value).

Solvent-based washing shall not be used.

**3.2.4 Regenerated Cellulose**

The level of AOX in the effluent water from fibre processing shall not exceed 250 ppm.

For viscose fibres, the sulphur content of the emissions of sulphur compounds to air from the processing during fibre production, expressed as an annual average, shall not exceed 120 g/kg filament fibre produced and 30 g/kg

staple fibre produced. Where both types of fibre are produced on a given site, the overall emissions must not exceed the corresponding weighted average.

For viscose fibres, the emission to water of zinc from the production site, expressed as an annual average, shall not exceed 0.3 g/kg.

For cupro fibres, the copper content of the effluent water leaving the site, expressed as an annual average, shall not exceed 0.1 ppm.

### **3.2.5 Polyester**

The antimony content of the raw fibres must not exceed 260 ppm, tested before any wet processing.

The average annual emissions of VOC into the air as a result of polymerisation must not exceed 1.2 g/kg polyester produced.

Solvent-based spinning for the production of fibres must not be used.

### **3.2.6 Polyamide**

The emissions to air of N<sub>2</sub>O during monomer production, expressed as an annual average, shall not exceed 10 g/kg polyamide 6 fibre produced and 50 g/kg polyamide 6.6 produced.

### **3.2.7 Acrylic**

The residual acrylonitrile content in raw fibres leaving the fibre production plant shall be less than 1.5 mg/kg.

The emissions to air of acrylonitrile (during polymerisation and up to the solution ready for spinning), expressed as an annual average, shall be less than 1 g/kg of fibre produced.

### **3.2.8 Polypropylene**

Lead based additives (e.g., pigments, stabilisers) shall not be used.

### **3.2.9 Polyvinylchloride**

Certified products containing PVC textiles may only be used for applications under Sections 2.2 or 2.5 of the Scope.

Lead or tin based additives (e.g., pigments, stabilizers) shall not be used.

The vinyl chloride monomer must not be detectable in the textile.

The dioxin concentration (expressed as TEQ TCDD) in the textile must not exceed 10 pg / kg PVC fibre.

The phthalates DEHP, DiHepP, BBP, DBP or DAP must not be used.

The phthalates DMP, DEP, DMEP and DIBP must not be used in outdoor textile applications.

Waste waters containing phthalates must be aerobically treated on-site prior to discharge to reduce phthalate emissions by greater than 90 %.

Solvent-based spinning for the production of fibres is not permitted.

PVC may not be used as a coating for other textiles.

The manufacturer or distributor must have in place a product stewardship program whereby the manufacturer shall accept their product without additional cost (excluding transportation costs) for recycling, or have

arrangements with a local recycler to accept the product free of charge. Products collected under the scheme shall not be disposed of in landfill or by incineration.

**3.2.10 Elastane**

Organotin compounds shall not be used.

The emissions to air of aromatic diisocyanates during polymerisation and spinning, expressed as an annual average, shall be less than 5 mg/kg of fibre produced.

**3.3 Hazardous Materials**

The following criteria apply for all materials unless otherwise stated.

**3.3.1 Prohibited Processes**

- Chrome mordant dyeing
- Weighting yarns or fabrics using cerium or its compounds
- Halogenated carriers (e.g., for polyester)
- Pickling using metals or metal salts

**3.3.2 Prohibited Substances**

The following substances shall not be used at any stage of textile or filling production:

- Alkylphenolethoxylates (APEOs)
- Linear alkylbenzene sulfonates (LAS)
- Bis(hydrogenated tallow alkyl) dimethyl ammonium chloride (DTDMAC)
- Distearyl dimethyl ammonium chloride (DSDMAC)
- Di(hardened tallow) dimethyl ammonium chloride (DHTDMAC)
- Ethylene diamine tetra acetate (EDTA) or ethylene diamine tetra acetic acid
- Diethylene triamine penta acetate (DTPA)

**3.3.3 Pigments, Dyes and Printing**

**3.3.3.1 Impurities in Pigments**

The levels of ionic impurities for pigments used shall not exceed the following:

<b>Metal</b>	<b>Max value (ppm)</b>
Antimony	250
Arsenic	50
Barium	100
Cadmium	50
Chromium	100
Lead	100
Mercury	25
Selenium	100
Zinc	1000

### 3.3.3.2 Impurities in Dyes

The levels of ionic impurities for dyes shall not exceed the following:

Metal	Max value (ppm)
Antimony	50
Arsenic	50
Barium	100
Cadmium	20
Cobalt	500
Copper	250
Chromium	100
Iron	2500
Lead	100
Manganese	1000
Mercury	4
Nickel	200
Selenium	20
Silver	100
Tin	250
Zinc	1500

### 3.3.3.3 Metal Complex Dyes

The following applies to metal complex dyes based on copper, chromium or nickel:

In the case of cellulose dyeing, where metal complex dyes are part of the dye recipe, less than 20 % of each of those metal complex dyes applied (input to the process) shall be discharged to waste water treatment (whether on-site or off-site).

For all other dyeing processes, where metal complex dyes are part of the dye recipe, less than 7 % of each of those metal complex dyes applied (input to the process) shall be discharged to waste water treatment (whether on-site or off-site).

The emissions to water after treatment shall not exceed: Cu 75 mg/kg; Cr 50 mg/kg; Ni 75 mg/kg (fibre, yarn or fabric).

### 3.3.3.4 Azo Dyes

Azo dyes shall not be used that may cleave to any one of the following aromatic amines:

4-aminodiphenyl	(92-67-1)
Benzidine	(92-87-5)
4-chloro-o-toluidine	(95-69-2)
2-naphthylamine	(91-59-8)
o-amino-azotoluene	(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)

### 3.3.3.5 Carcinogenic, Mutagenic or Toxic to Reproduction Dyes

The following dyes shall not be used:

- C.I. Basic Red 9
- C.I. Disperse Blue 1
- C.I. Acid Red 26
- C.I. Basic Violet 14
- C.I. Disperse Orange 11
- C.I. Direct Black 38
- C.I. Direct Blue 6
- C.I. Direct Red 28
- C.I. Disperse Yellow 3

No use is allowed of dye substances or of dye preparations containing more than 0.1 % by weight of substances that are assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof):

- R40 (limited evidence of a carcinogenic effect),
- R45 (may cause cancer),
- R46 (may cause heritable genetic damage),
- R49 (may cause cancer by inhalation),
- R60 (may impair fertility),
- R61 (may cause harm to the unborn child),
- R62 (possible risk of impaired fertility),
- R63 (possible risk of harm to the unborn child),
- R68 (possible risk of irreversible effects),

as laid down in the European Union Council Directive 67/548/EEC on the regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances, and its subsequent amendments.

### 3.3.3.6 Potentially Sensitizing Dyes

The following dyes shall only be used if the fastness to perspiration (acid and alkaline) of the dyed fibres, yarn or fabric is at least 4 using the ISO 105-E04 (acid and alkaline, comparison with multi-fibre fabric) test method for colour fastness:

C.I. Disperse Blue 3	C.I.61 505
C.I. Disperse Blue 7	C.I.62 500
C.I. Disperse Blue 26	C.I.63 305
C.I. Disperse Blue 35	
C.I. Disperse Blue 102	
C.I. Disperse Blue 106	
C.I. Disperse Blue 124	
C.I. Disperse Orange 1	C.I.11 080
C.I. Disperse Orange 3	C.I.11 005
C.I. Disperse Orange 37	

C.I. Disperse Orange 76	(previously designated Orange 37)
C.I. Disperse Red 1	C.I.11 110
C.I. Disperse Red 11	C.I.62 015
C.I. Disperse Red 17	C.I.11 210
C.I. Disperse Yellow 1	C.I.10 345
C.I. Disperse Yellow 9	C.I.10 375
C.I. Disperse Yellow 39	
C.I. Disperse Yellow 49	

Products certified by the most recent edition of Oeko-Tex Standard 100 are considered as having passed this criterion.

### 3.3.3.7 Printing

Printing pastes must not contain more than 5 % VOC by weight.

Printing inks must not contain the phthalates DEHP, DBP or BBP.

Plastisol-based printing must not be used.

### 3.3.4 Treatments

#### 3.3.4.1 Stripping or De-pigmentation

Heavy metal salts (except of iron) or formaldehyde shall not be used for stripping or de-pigmentation.

#### 3.3.4.2 Detergents, Fabric Softeners and Complexing Agents

At each wet-processing site, at least 95% by weight of the detergents, at least 95% by weight of fabric softeners and at least 95% by weight complexing agents used must be sufficiently biodegradable as defined in the Definitions Section above.

#### 3.3.4.3 Bleaching agents

In general, AOX emissions in the bleaching effluent shall be less than 40 mg Cl / kg. In the following cases, the level shall be less than 100 mg Cl/kg:

- Linen and other bast fibres;
- Cotton which is intended for white end products.

This requirement does not apply to the production of man-made cellulose fibres.

#### 3.3.4.4 Flame Retardants

No use is allowed of flame retardant substances or of flame retardant preparations containing more than 0.1% by weight of substances that are assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof):

- R40 (limited evidence of a carcinogenic effect),
- R45 (may cause cancer),
- R46 (may cause heritable genetic damage),
- R49 (may cause cancer by inhalation),
- R50 (very toxic to aquatic organisms),
- R51 (toxic to aquatic organisms),
- R52 (harmful to aquatic organisms),
- R53 (may cause long-term adverse effects in the aquatic environment),
- R60 (may impair fertility),
- R61 (may cause harm to the unborn child),
- R62 (possible risk of impaired fertility),
- R63 (possible risk of harm to the unborn child),
- R68 (possible risk of irreversible effects),

as laid down in the European Union Directive 67/548/EEC and its subsequent amendments.

This requirement does not apply to flame retardants that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above, and where less than 0.1% of the flame retardant on the treated yarn or fabric remains in the form as before application.

#### **3.3.4.5 Finishes, Coatings, Laminates and Membranes**

Finishes, coatings, laminates and membranes shall not be produced using plasticisers or solvents, which are assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof):

- R40 (limited evidence of a carcinogenic effect),
- R45 (may cause cancer),
- R46 (may cause heritable genetic damage),
- R49 (may cause cancer by inhalation),
- R50 (very toxic to aquatic organisms),
- R51 (toxic to aquatic organisms),
- R52 (harmful to aquatic organisms),
- R53 (may cause long-term adverse effects in the aquatic environment),
- R60 (may impair fertility),
- R61 (may cause harm to the unborn child),
- R62 (possible risk of impaired fertility),
- R63 (possible risk of harm to the unborn child),
- R68 (possible risk of irreversible effects),

as laid down in the European Union Directive 67/548/EEC and its subsequent amendments.

Halogenated shrink-resist substances or preparations shall only be applied to wool slivers or scoured loose wool.

Polyurethane used shall comply with the requirements for elastane fibres (Section 3.2.10). Other materials (e.g., polyester) used as finishes, coatings, laminates or membranes shall comply with the requirements of the relevant fibre section.

#### **3.3.4.6 Auxiliaries and Finishing Agents for Fibres and Yarns**

At least 95 % (by dry weight) of the component substances of any sizing preparation applied to yarns shall be sufficiently biodegradable or eliminable in wastewater treatment plants, as defined in the Definitions Section above, or else shall be recycled.

At least 90 % (by dry weight) of the component substances of spinning solution additives, spinning additives and preparation agents for primary spinning (including carding oils, spin finishes and lubricants) shall be sufficiently biodegradable or eliminable in waste water treatment plants, as defined in the Definitions Section above.

This requirement does not apply to preparation agents for secondary spinning (spinning lubricants, conditioning agents), coning oils, warping and twisting oils, waxes, knitting oils, silicone oils and inorganic substances.

**3.3.4.7 Biocidal or Biostatic Agents**

Chlorophenols or polychlorinated biphenyls or their derivative salts or esters, and organotin compounds shall not be used during transportation or storage of products and semi-manufactured products.

Biocidal or biostatic agents shall not be applied to products unless they are no longer present or active during the use phase.

Permethrin may be applied to wool upholstery fabric and yarn under Sections 2.2 and 2.5 of the Scope according to the following criteria:

- Application is in conformance with the Woolmark E10 specification
- The application temperature is greater than 90°C
- Effluent water must not contain more than 9% of the applied permethrin

**3.3.5 Emissions and Toxins****3.3.5.1 Waste Water Discharges from Wet-processing**

Waste water from wet-processing sites (except greasy wool scouring sites and flax retting sites) shall, when discharged to surface waters after treatment (whether on-site or off-site), have a COD content of less than 25 g/kg, expressed as an annual average.

**3.3.5.2 Formaldehyde**

The amount of free and partly hydrolysable formaldehyde in the final fabric shall not exceed 30 ppm for products intended for direct contact with skin, and 300 ppm for all other products. Testing should be in compliance with AATCC 112-2003, ISO 14184.1 or equivalent.

Products which are certified according to the most recent Oeko-Tex Standard 100 are considered to have passed the requirements of this criterion.

**3.3.5.3 Polycyclic Aromatic Hydrocarbons**

The content of poly aromatic hydrocarbons (PAH) in the mineral oil proportion of a product shall be less than 1.0 % by weight.

**3.3.6 Fillings**

Filling materials consisting of textile fibres shall comply with the textile fibre criteria in Section 3.2 and its subsections where appropriate.

Filling materials shall comply with Section 3.3.4.7 - Biocidal or Biostatic Agents and Section 3.3.5.2 - Formaldehyde.

Detergents and other chemicals used for washing fillings (down, feathers, natural or synthetic fibres) shall comply with Section 3.3.3.2 - Detergents, Fabric Softeners and Complexing Agents.

**3.3.7 Packaging Requirements**

Chlorinated or halogenated plastics must not be used in product packaging.

Used packaging shall be able to be recycled by local recycling systems.

#### **4 COMPLIANCE TO ENVIRONMENTAL REGULATIONS**

The applicant is required to comply with relevant environmental legislation and government orders at the Local, State, and Commonwealth levels, if these have been issued. An applicant's compliance with these criteria may be established by undertaking a series of random checks; and/or by gathering samples of applicant operational procedures and documents from approved assessors as evidence to support compliance during the verification. Where an applicant is from an overseas jurisdiction, that jurisdiction's environmental regulations apply. Where the applicant is subject to a guilty verdict by a legally constituted court in the last 24 months on the basis of a breach of any environmental legislation or permits, there must be evidence of corrective action.

#### **5 COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS**

An applicant shall demonstrate that all employees are covered by a Federal or State award or a certified industrial agreement or a registered workplace agreement as determined by the Industrial Relations Commission, the Employment Advocate or a State or Territory Workplace Relations Agency or a workplace agreement in compliance with Workplace Relations Act 1996 Part 7 – The Australian Fair Pay and Conditions Standard.

An applicant shall demonstrate general compliance to the terms of State or Territory Legislation concerning Occupational, Health and Safety and/or the *Commonwealth Safety, Rehabilitation and Compensation Act 1988*, where applicable. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court within the last 24 months, on the basis of a breach of State, Territory or Commonwealth Occupational, Health and Safety Legislation, there must be evidence of corrective action.

The applicant shall demonstrate general compliance to the requirements of the Racial Discrimination Act 1975, Sex Discrimination Act 1984, Disability Discrimination Act 1992, Equal Opportunity for Women in the Workplace Act 1999, and complementary State Legislation. Applicants cannot be in the list of 'named' or non-compliant employers under the Equal Opportunity for Women in the Workplace Act 1999. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court in the last 24 months on the basis of a breach of these Acts, there must be evidence of corrective action.

Where an applicant is from an overseas jurisdiction, the applicant shall demonstrate general compliance to that jurisdiction's anti-discrimination, occupational health and safety, and workers' compensations regulations. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by a legal court in their respective country within the last 24 months on the basis of a the breach of anti-discrimination, occupational health and safety, and workers' compensation regulations, there must be evidence of corrective action.

An applicant's compliance with these criteria may be established by undertaking a series of random checks; gathering samples of applicant operational procedures and documents from approved assessors; and/or by providing a self-declaration document signed by an executive officer of the applicant organisation as evidence to support compliance during verification.

## **6 COMPLIANCE TESTING**

### **6.1 Audit Methodology**

Conformance with this standard shall be demonstrated by undertaking an assessment under the above criteria by an approved assessor, following the certification and verification procedures detailed in the Good Environmental Choice Australia Ltd Documented Quality Management System, which generally follows the environmental auditing requirements of ISO 19 011.

### **6.2 Assessor Competency**

The Australian Ecolabel Program classifies approved assessors as:

- a. Assessors registered by Good Environmental Choice Australia Ltd as environmental professionals that hold expertise relevant for an assessment, and who have undertaken training in the procedures of the Australian Ecolabel Program; or
- b. Environmental auditors accredited with the RABQSA.

### **6.3 Suitable Sources**

Audit evidence should be of such a quality and quantity that competent environmental auditors, working independently of each other, will reach similar audit findings from evaluation of the same audit evidence against the same audit criteria.

Suitable sources of information to establish compliance may be, but are not limited to:

- a. Technical specification of the product.
- b. Obvious characteristics of the product under examination.
- c. Scientific test results and reports.
- d. Environmental management system and audit reports and results.
- e. Life-cycle assessment of each stage of the product life-cycle via a physical audit and examination.
- f. Life-cycle assessment via scientific testing.
- g. A statement of confirmation by an executive officer.
- h. An assessment of company or government records.
- i. Other material that can be considered objective evidence.

### **6.4 Laboratory Testing**

New testing shall be undertaken by a laboratory accredited by the National Association of Testing Authorities (NATA), or similar overseas accreditation agents who can conduct the relevant tests and/or provide documentation detailing environmental performance against the criteria of this standard. The test results should be presented on NATA-endorsed reports or from a laboratory acceptable to Good Environmental Choice Australia Ltd.

If test results or environmental auditing results are not available, and/or there is insufficient data to establish full compliance with the criteria required by this standard, then certification cannot be awarded.