



The New Zealand Ecolabelling Trust

Licence Criteria for

Wool and Wool-rich Pile Carpets

EC-04-11

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Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in December 2011

Date	Version	Change

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1. INTRODUCTION

Environmental Choice New Zealand (ECNZ) is an environmental labelling programme which has been created to help businesses and consumers find products and services that ease the burden on the environment. The programme results from a New Zealand Government initiative and has been established to improve the quality of the environment by minimising the adverse and maximising the beneficial environmental impacts generated by the production, distribution, use and disposal of products, and the delivery of services. The programme is managed by the New Zealand Ecolabelling Trust (The Trust).

ECNZ operates to the ISO 14024:1999 standard "Environmental labels and declarations – Type I environmental labelling – Principles and procedures" and The Trust is a member of the Global Ecolabelling Network (GEN) an international network of national programmes also operating to the ISO 14024 standard.

ISO 14024 requires environmental labelling specifications to include criteria that are objective, attainable and verifiable. It requires that interested parties have an opportunity to participate and have their comments considered. It also requires that environmental criteria be set, based on an evaluation of the environmental impacts during the actual product or service life cycle, to differentiate product and services on the basis of preferable environmental performance.

The life cycle approach is used to identify and understand environmental issues (adverse or beneficial impacts) across the whole life of a product or service (within a defined product or service category). This information is evaluated to identify the most significant issues and from those to identify the issues on which it is possible to differentiate environmentally preferable products or services from others available in the New Zealand market. Criteria are then set on these significant and differentiating issues. These must be set in a form and at a level that does differentiate environmentally preferable products or services, is attainable by potential ECNZ licence applicants and is able to be measured and verified. As a result of this approach, criteria may not be included in an ECNZ specification on all aspects of the life cycle of a product or service. If stages of a product or service life cycle are found not to differentiate environmentally preferable products or services, or to have insufficient data available to allow objective benchmarking in New Zealand, those stages will not generally be included in criteria in the specification. For some issues, however, (such as energy and waste) criteria may be set to require monitoring and reporting. These criteria are designed to generate information for future reviews of specifications.

The Trust is pleased to publish this proposed revised specification Wool and Wool-rich Pile Carpets. This proposed revised specification sets out the requirements that Wool and Wool-rich Pile Carpets will be required to meet in order to be licensed to use the ECNZ Label. The requirements include environmental criteria and product characteristics. The specification also defines the testing and other means to be used to demonstrate and verify conformance with the environmental criteria and product characteristics.

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This specification will be valid for a period of five years from publication. Twelve months before the expiry date (or at an earlier date if required), The Trust will initiate a further review process for the specification.

2. BACKGROUND

The New Zealand wool industry is a significant player in the international wool markets and especially for scoured wool. The Wool Taskforce report, published in February 2010 reports the following statistics.

- New Zealand produces:
 - about 14% of the world's wool;
 - about 45% of the world's carpet wool; and
 - more than 30% of the world's strong wool suitable for floor-coverings, bedding and upholstery.
- In 2008, 93% of the New Zealand wool clip was exported. About 89% was exported in a raw form after some early-stage processing as scoured wool or slipe.
- The proportion exported to European countries (United Kingdom, Belgium and Italy) has remained steady over the last ten years (26% in 1998 and 25% in 2008) but the proportion exported to Asia (China and India) has markedly increased (28% in 1998 to 40% in 2008).
- The New Zealand wool clip comprises:
 - 89% strong wool;
 - 5% merino or fine wool;
 - 4% medium wool; and
 - 2% dags.

Carpet manufacturing can place a significant burden on the environment. Wool scouring can consume large quantities of water and energy and can result in undesirable discharges to air, particularly strong odours. Scouring effluents can have heavy loadings of grease and other wastes which can remove oxygen from the receiving waters, causing impacts on plant and animal life. The use of detergents (surfactants) in scouring can also cause water quality problems. Dyeing processes can also result in effluent discharge to water.

Some processes also involve the use of hazardous substances, such as, insecticides, glues and dyes. Inappropriate handling and disposal of these materials can result in environmental impacts.

This specification addresses the manufacture of wool and wool-rich pile carpets from the receipt of scoured wool through the manufacture of yarn to the fabrication of the carpet itself. The environmental issues addressed include effluent disposal, water use, energy use, dyeing procedures, hazardous substance content, lubricant additions and insect resistance treatment.

Based on a review of currently available information, the following product category requirements will produce environmental benefits by reducing discharges, energy and water

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consumption and the use of potentially hazardous materials. As information and technology change, product category requirements will be reviewed, updated and possibly amended.

3. INTERPRETATION

“Chemical Oxygen Demand” (COD) means 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.

“ISO” means International Organisation for Standardisation.

“Label” means the Environmental Choice New Zealand Label.

“OECD” means Organisation for Economic Co-operation and Development.

“Readily biodegradable” when used in relation to surfactants in this specification means compounds which exhibit 70% removal of Dissolved Organic Carbon (DOC), or 60% of Theoretical Oxygen Demand (ThOD) or Theoretical CO₂ (ThCO₂) production for respirometric methods, when tested in accordance with Directive 67/548/EEC and its subsequent amendments, in particular the methods detailed in Annex V.C4, or their equivalent OECD test methods (No. 301 (A to F) in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144), or their equivalent ISO tests. Test methods published in *“Classification, Packaging and Labelling of Dangerous Substances in the European Union, Part 2: Testing Methods”* European Commission 1997 (ISBN 92-828-0076-8) will also be acceptable.

“WNZ” means Wools of New Zealand.

4. CATEGORY DEFINITION

This category includes the following product sub categories:

- 4.1 Scoured coarse/strong wool intended for use in carpets
- 4.2 All carpet products where the pile is 100 % pure new wool as defined in WNZ Specification Sheet E4 and tested using test method WNZ 155 (or equivalent, for example under the Australian Carpet Classification Scheme);
- 4.3 All carpet products where the pile, when tested using test method WNZ 155 (or equivalent), has not less than 80 % wool fibre content (with a tolerance in accordance with the requirements of clause 4 of the New Zealand Consumer Information Standards (Fibre Content Labelling) Regulations 2000), with the balance being polyamide, polyester or polypropylene fibres.

To be licensed to use the Label:

- a scoured wool must meet the requirements of clauses 5.1 and 5.2 of this specification;
- a wool or wool-rich pile carpet must meet all of the environmental criteria set out in clause 5 and product characteristics set out in clause 6.

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5. ENVIRONMENTAL CRITERIA

5.1 Legal Requirements

Criteria

The product must comply with the provisions of all relevant environmental laws and regulations that are applicable during the product's life cycle.

Verification Required

Conformance with this requirement shall be demonstrated by providing a written statement on regulatory compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by documentation identifying the applicable regulatory requirements and demonstrating how compliance is monitored and maintained.

Explanatory Notes

Relevant laws and regulations could, for example, include those that relate to:

- producing, sourcing, transporting, handling and storing raw materials and components for manufacture
- manufacturing processes
- handling, transporting and disposing of waste products arising from manufacturing
- transporting product within and between countries
- using and disposing of the product.

The documentation required may include, as appropriate:

- procedures for approving and monitoring suppliers and supplies
- information provided to customers and contractors regarding regulatory requirements.

It is not intended to require licence holders to accept increased legal responsibility or liability for actions that are outside their control.

5.2 Requirements for Scoured Wool

5.2.1 Pesticides

Criteria

- (a) Licence applicant/holders must have and implement a fibre procurement programme for greasy wool with the objectives of purchasing wool from farmers:
- using pesticides with lower human toxicity and aquatic ecotoxicity;
 - using pesticides with higher efficacy (likely to be based on persistence and effectiveness over time on the animals and more targeted on

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- problem pest species);
 - implementing best practice in storing, handling, managing and using pesticides so as to avoid pesticide discharges to ground or water.
- (b) The procurement programme shall be supported:
- with records and information from the farmers on pesticides used and practices employed to apply and manage pesticides on their farms; and
 - a programme of pesticide residue testing on greasy wool that provides for:
 - at least two samples and test results initially for each farmer supplying wool; and
 - additional testing if there are changes to the pesticides or application practices employed by the farmer that may impact on pesticide residue levels on wool.

The pesticide residue testing programme may be implemented progressively over a period of no more than three years, beginning with the farmers supplying the greatest volumes of wool. At least 10% of wool purchased must have been tested at the time of application for an ECNZ licence.

- (c) The licence applicant/holder shall report to ECNZ on application and thereafter annually on the procurement and testing programmes; and provide information on these, on request, to the wool scourer.

Testing shall be carried out using IWTO Draft Test Method 59 *Method for the Determination of Chemical Residues on Greasy Wool* or an equivalent test method. Test results shall be reported for the following pesticides.

Substance	CAS no
<i>Organochlorine Insecticides (OCs)</i>	
γ-hexachlorocyclohexane (Lindane)	319-84-6
α-hexachlorocyclohexane	319-85-7
β-hexachlorocyclohexane	58-89-9
δ-hexachlorocyclohexane	319-86-8
aldrin	309-00-2
dieldrin	60-57-1
endrin	72-20-8
p,p'-DDT	50-29-3
p,p'-DDD	72-54-8
<i>Organophosphorous Insecticides (OPs)</i>	
Propetamphos	31218-83-4
Diazinon	333-41-5
Dichlofenthion	97-17-6
Fenclorphos	299-84-3
Chlorpyrifos	2921-88-2
Chlorfenvinphos	470-90-6
Ethion	563-12-2
Pirimiphos-Methyl	29232-93-7

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Synthetic Pyrethroids (SPs)

Cyhalothrin	68085-85-8
Cybermethrin	52315-07-8
Deltamethrin	52918-63-5
Fenvalerate	51630-58-1
Flumethrin	69770-45-2

Insect Growth Regulators (IGRs)

Diflubenzuron	35367-38-5
Triflumuron	64628-44-0
Dicyclanil	112636-83-6
Cyromazine	66215-27-8

Verification Required

Conformance with this requirement shall be demonstrated by providing a written statement on compliance signed by the Chief Executive or other authorised representative of the applicant company. This statement shall be supported by documentation as follows:

- details of the procurement and testing programmes for greasy wool;
- reports on the implementation of the procurement and testing programmes, including sufficient detail to demonstrate that the requirements of clauses (a) and (b) have been met.

5.2.2 Wool Scouring

Criteria

Wool must be scoured in a scour that meets the requirements set in the ECNZ specification EC-47-11 Wool Scouring Services.

Verification Required

Conformance with this requirement shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by documentation as follows:

- a copy of the ECNZ certificate covering the wool scour; **OR**
- an assessment report showing compliance with the requirements of EC-47-11 Wool Scouring Services, completed by an independent assessor from the ECNZ register and appointed by ECNZ; **AND**
- production and quality control processes and records to demonstrate that the scoured wool to be licensed or finished carpet product includes wool that was scoured in a scour meeting EC-47-11 requirements.

5.3 Synthetic Fibre

5.3.1 Resource Use and Emissions

Criteria

- (a) The synthetic fibre included in wool-rich pile carpet products shall be sourced only from manufacturing facilities which:

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- are committed to reducing use of water and energy;
 - are committed to reducing emissions to air and water, particularly “greenhouse gases”; and
- (b) The carpet licence applicant/holder shall have and implement a synthetic fibre procurement programme that:
- gives preference to suppliers who have environmental management systems that are ISO 14001 (or equivalent) certified;
 - informs suppliers of the licence applicant/holder’s preference for certified environmental management systems; and
 - requests and pursues reporting information from the suppliers on their programmes to reduce energy use, water use and emissions to air and water.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by the following documentation:

- copies or extracts of supply contracts with suppliers of synthetic fibre that include requirements for programmes to reduce water and energy use and reduce emissions and to report on these;
- an annual report to The Trust on the supplier(s) programmes, prepared by the licence holder or applicant, or provided by the supplier(s); and
- information on facilities at which synthetic fibre destined for an ECNZ-licensed carpet is manufactured, the certification status of their environmental management systems and/or plans or intentions regarding formal management systems and certification.

5.3.2 Polyamide

Criteria

The carpet licence applicant/holder shall have and implement a synthetic fibre procurement programme that:

- (a) gives preference to suppliers of polyamide that can provide evidence that their emissions to air of N₂O during monomer production, expressed as an annual average, shall not exceed 10g/kg polyamide 6 fibre produced and 50 g/kg polyamide 6,6 produced;
- (b) informs suppliers of the licence applicant/holder’s preference in (a); and
- (c) requests and pursues information about the preference matters in (a) from their suppliers.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- information on the licence applicant/holder’s procurement programme and its implementation; and
- where available, a declaration on compliance from the supplier of the polyamide or information on the supplier’s plans or intentions to achieve compliance.

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5.3.3 Polyester

Criteria

- (a) The carpet licence applicant/holder shall have and implement a synthetic fibre procurement programme that gives preference to suppliers of polyester that can provide evidence that the polyester they supply meets the following requirements:
- the amount of antimony in the polyester fibres shall not exceed 260 ppm; and
 - the emissions of VOCs during polymerisation and fibre production of polyester, measured at the process steps where they occur, including fugitive emissions as well, expressed as an annual average shall not exceed 1.2g/kg of produced polyester resin.
- (b) As part of the procurement programme, the licence applicant/holder shall:
- (d) inform suppliers of the licence applicant/holder's preference for polyester that meets the requirements in (a); and
- (e) request and pursue this information on the polyester's ability to meet those requirements from their suppliers.

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.

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- information on the licence applicant/holder's procurement programme and its implementation; and
- where available, declarations on compliance from the supplier of the polyester or information on the supplier's plans or intentions to achieve compliance.

5.3.4 Polypropylene

Criteria

Lead-based pigments shall not be used.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by a declaration from the supplier of the polypropylene.

5.4 Hazardous Substances

Criteria

- (a) The carpet product shall not be manufactured with materials or substances that are classified as toxic, carcinogens, mutagens or reproductive/developmental toxins, as identified using any of the classifications (or combinations thereof) listed in the table in Appendix A.

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- (b) Raw materials or substances added to the carpet product that are classified as sensitisers or allergenic (as identified using any of the classifications listed in the table in Appendix A) must not comprise in total more than 0.1% by weight of the finished carpet product.
- (c) Raw materials or substance added to the carpet product that are classified as ecotoxins (as identified using any of the classifications, or combinations thereof, listed in the table in Appendix A) must not comprise in total more than 2% by weight of the finished carpet product.
- (d) The following substances shall not be part of any preparations or formulations used to treat textile fibres:
- alkylphenoethoxylates (APEOs)
 - linear alkylbenzene sulfonates (LAS)
 - bis(hydrogenated tallow alkyl) dimethyl ammonium chloride (DSDMAC)
 - distearyl dimethyl ammonium chloride (DSDMAC)
 - di(hardened tallow) dimethyl ammonium chloride (DHTDMAC)
 - ethylene diamine tetra acetate (EDTA)
 - diethylene triamine penta acetate (DTPA).

Notes:

1. These general requirements do not apply to substances that are specifically identified in substance-specific criteria elsewhere in this specification.
2. Requirement (d) applies only to chemicals used to treat textile fibres. Other chemicals, such as those for cleaning production equipment do not need to fulfil the requirement.

Verification Required

Compliance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company.

This statement shall be supported by documentation that should include:

- lists of materials and substances used in the manufacture of the carpet;
- MSDS for substances, including information on hazardous substance classifications of the substance and its constituent ingredients;
- calculations and other supporting documents demonstrating that the limits set for finished carpet products are met;
- information about the classification of substances where there is a discrepancy between the identified classification schemes.

5.5 Yarn

Yarn shall be sourced only from yarn manufacturing facilities which comply with the following requirements.

5.5.1 COD level

Criteria

- a) The COD level in the dyehouse effluent shall not exceed 35 kg/tonne of fibre dyed.
- b) The carpet licence applicant/holder shall have and implement an improvement

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programme focused on reducing COD levels in the dyehouse effluent and report annually to The Trust on its implementation.

Sampling and Testing Methods

Sampling shall consist of five daily samples (taken on five successive working days) each consisting of at least three samples per day taken at a minimum of one hour intervals. All samples (minimum fifteen) shall be combined and duplicate analyses shall be performed on the resulting composite sample.

Sampling for COD analysis shall take place after the operation of any on-site wastewater treatment and at intervals not exceeding six months.

COD shall be determined on unfiltered samples in accordance with APHA 5220, or an equivalent test. If an equivalent test is used, The Trust may require details of the test method and its validation.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- test reports from a laboratory competent to carry out the relevant test methods;
- calculations to demonstrate the limit is met;
- information on relevant sample collection procedures and quality control documentation and implementation of the improvement programme for COD levels in effluent.

5.5.2 Insect resistance treatment

Criteria

- a) Insect-resist agents shall not be applied during opening, carding or spinning operations.
- b) If permethrin or bifenthrin insect resist agents are used, the levels of these agents in total factory effluent shall not exceed:
 - 5 g permethrin/tonne of wool treated
 - 0.25 g bifenthrin/tonne of wool treatedTotal factory effluent includes effluent from the scour and effluent from the dye baths and other wet processes.
- c) Any insect resist agent used, other than permethrin or bifenthrin must meet the requirements of clause 5.4(a) Hazardous Substances in this specification.
- d) Any insect resist agent used, other than permethrin or bifenthrin, must be a Wools of New Zealand (WNZ) approved agent that has lower *Daphnia magna* toxicity equivalent than permethrin, based on the rate of the insecticide(s) discharged per tonne of wool treated, calculated in accordance with the following method.

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For permethrin:

- AW (grams active in factory effluent / tonne of wool treated) must be less than 5 g/tonne of wool treated
- LC₅₀ for *Daphnia magna* (96 hour) = 0.6 µg/L

$$\text{Therefore AW/LC}_{50} \text{ (permethrin)} = 8.3 \frac{\text{grams active} / \text{tonne of wool treated}}{\text{µg active} / \text{litres effluent}}$$

For an alternative insect resist agent:

- Calculate AW (grams active in factory effluent / tonne of wool treated) using the following formula:

$$\text{AW (insect resist agent)} = \frac{\text{AE} \times \text{E/W}}{1000}$$

Where:

- AE (µg/L) = Concentration of active in effluent from the factory
 - E/W (L/tonne) = Effluent discharged from the factory (L) / tonne of wool treated
- Calculate AW/LC₅₀ for the insect resist agent.
 - The AW/LC₅₀ for the insect resist agent must be less than or equal to 8.3.

Notes:

Where insect resist agents are used in both the scour and dye bath or other wet processes, the term “factory effluent” refers to the total, combined effluent from all the processes involving the use of insect-resist agents.

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company.

This statement shall be supported by the following information:

- for (a), information on production processes and controls;
- for (b), test reports from a laboratory competent to carry out the relevant test methods, production records and calculations and information on relevant sample collection procedures. Samples shall be taken at intervals not exceeding six months;
- for (c), copies of MSDS and/or other technical information on the insect resist agent being used, sufficient to demonstrate it does not have any of the identified classifications; and
- for (d), information confirming WNZ approval, the calculations required and source information for the value of LC50 *Daphnia magna* (96 hour).

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5.5.3 Lubricant additions (Wool Pile Carpets)

Criteria

- (a) Spinning lubricants must meet the requirements in clause 5.4(a) Hazardous Substances of this specification.
- (b) Spinning lubricant additions for yarn destined for a wool pile carpet shall not exceed 3% of the weight of wool.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by appropriate documentation of production methods and formulations, including:

- lists and MSDS for spinning lubricants used; and
- procedures for and records of lubricant additions.

5.5.4 Dyes and Dye Processes

Criteria

With respect to fibre destined for carpet for which an ECNZ licence is sought:

- a) dyeing using after-chroming techniques shall not be used;
- b) the dye recipe shall not contain more than 250 mg of chromium per kg of wool dyed;
- c) Azo dyes shall not be used that may cleave to any one of the following aromatic amines:

Name(s)	CAS No.
4-Aminobiphenyl	92-67-1
Benzidine	92-87-5
4-Chloro-o-toluidine	95-69-2
2-Naphthylamine	91-59-8
o-Aminoazotoluene	97-56-3
5-Nitro-o-toluidine/2 amino-4 nitrotoluene	99-55-8
p-Chloroaniline	106-47-8
4-Methoxy-m-phenylenediamine/2,4 diaminoanisole	615-05-4
4,4.-Methylenedianiline/4,4 diaminodiphenylmethane	101-77-9
3,3.-Dichlorobenzidine	91-94-1
3,3.-Dimethoxybenzidine	119-90-4
3,3.-Dimethylbenzidine	119-93-7
4,4.-Methylenedi-o-toluidine/3,3-dimethyl-4,4-diaminodiphenylmethane	838-88-0
6-Methoxy-m-toluidine/p-cresidine	120-71-8
4,4.-Methylenebis (2-chloroaniline)	101-14-4
4,4.-Oxydianiline	101-80-4
4,4.-Thiodianiline	139-65-1
o-Toluidine	95-53-4
4-Methyl-m-phenylenediamine/2,4 diaminotoluene	95-80-7
2,4,5-Trimethylaniline	137-17-7

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O-anisidine	90-04-0
4-Aminoazobenzene	60-09-3
2,4-Xylidine	
2,6-Xylidine	

d) The following dyes that are carcinogenic, mutagenic or toxic to reproduction 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

e) No use is allowed of dye substances or dye preparations containing more than 0.1% by weight of substances that are classified as carcinogens, mutagens or toxic to reproduction as identified using any of the classifications (or combinations thereof) listed in the table in Appendix A.

f) The following potentially sensitising dyes shall not be used:

- 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 Brown 1
- 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

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- information on dye recipes demonstrating the chromium limit is met;
- supplier declarations and/or MSD information on dyes being used.

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5.5.6 Other Chemicals and Processes

Criteria

On fibre destined for an ECNZ licensed carpet:

- a) Fluorochemical finishes shall not be used;
- b) Sulphonated phenolic stainblockers shall not be used;
- c) Yarn scouring surfactants:
 - shall be readily biodegradable; and
 - must not be alkyl phenol-based.

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company.

This statement shall be supported by:

- information on production methods to confirm the banned finishing processes are not used; and
- MSDS, test reports and/or other technical information to demonstrate surfactants are readily biodegradable and are not alkyl phenol-based.

5.6 Carpet Manufacturing

5.6.1 Backings

Criteria

Cotton:

- a) Cotton used in the construction of carpets shall be unbleached.

Synthetic Backings:

- b) The carpet licence applicant/holder shall have and implement a synthetic backing procurement programme that gives preference to suppliers that
 - have or are working towards certification of their environmental management systems to ISO 14001; and
 - have active programmes to investigate and increase recycled content in the backings they supply.
- c) As part of the procurement programme, the licence applicant/holder shall:
 - inform suppliers of the licence applicant/holder's preference for suppliers that meets the requirements in (b); and
 - request and pursue information on the suppliers' ability to meet those requirements.
- d) Information shall be provided to ECNZ at application and thereafter reported annually on PVC and/or phthalates used in the backing. This should include information from production records and/or suppliers on:
 - a. the percentages by weight of recycled and virgin PVC
 - b. the particular production processes used to produce chlorine and VCM for the PVC being used in an ECNZ-licensed carpet (including the

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- locations of the production and, where available, information on water & energy use, waste and emissions);
- c. the types and amounts of any phthalate plasticisers present in recycled content of the backing (if that information is available) and/or added when manufacturing the backing; and
 - d. research and initiatives implemented on substitutes for phthalates identified as of concern by regulators.

Note: Regulators have identified the following phthalates to be of concern – dibutyl phthalate (DBP), diisobutyl phthalate (DIBP), butyl benzyl phthalate (BBP), di-*n*-pentyl phthalate (DnPP), di(2-ethylhexyl) phthalate (DEHP), di-*n*-octyl phthalate (DnOP), diisononyl phthalate (DINP) and diisodecyl phthalate (DIDP).

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- information about the facilities at which synthetic backings are manufactured and about production methods and materials used in the backings;
- implementation of the procurement programme for synthetic backings; and
- initial and ongoing annual reports to ECNZ on PVC and plasticisers used.

5.6.2 Dyeing Processes

Criteria

If the carpet is dyed in piece or continuous form, the requirements of clause 5.5 above shall be met, with the exception of sub-clause 5.5.3.

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by appropriate documentation of production methods, calculations and quality controls, as outlined in clause 5.5.

5.6.3 Flame Retardants

Criteria

- a) No use is allowed of flame retardants that are classified as carcinogens, mutagens, toxic to reproduction or ecotoxic as identified using any of the classifications (or combinations thereof) listed in the table in Appendix A.
- b) Halogenated flame retardants shall not be actively added to the wool or wool-rich carpet.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- information identifying any flame retardants used and describing production process controls on the use of the flame retardants;

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- MSDS or other technical information demonstrating that flame retardants that are used meet the requirements.

5.7 Emissions to Air from Finished Product

Criteria

The finished carpet shall have emissions to air that meet the requirements of either:

- the Carpet and Rug Institute's (CRI) Green Label Plus programme; or
- the GuT requirements.

Notes:

- Information on the CRI Green Label Plus programme is available at www.carpet-rug.com/commercial-customers/green-building-and-the-environment/green-label-plus and for the current limits at http://www.carpet-rug.org/pdf_word_docs/071028_Carpet_GLP_Criteria.pdf
- Information on the GuT testing methods and limits is available at http://www.gut-ev.de/en/emission_test.htm

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by the following documentation:

- for compliance with CRI Green Label Plus - either a current certificate of compliance covering the carpet, issued by the CRI, or a test report (for testing using the methods specified by CRI) demonstrating the limits set by the CRI Green Label Plus (at the time of application) are met for the carpet; or
- for compliance with the GuT requirements – a test report (for testing using the methods specified by GuT) and calculations demonstrating the GuT limits (applicable at the time of application) are met for the carpet.

5.8 Waste Management

Criteria

- a) The licence applicant/holder and product manufacturer must have effective waste management policies and procedures and/or a waste management programme.
- b) Licence holders must report annually to The Trust on waste management, including:
 - quantities and types of waste recovered for reuse internally and externally;
 - quantities and types of waste recycled internally and externally;
 - quantities and types of waste disposed of to landfill;
 - quantities and types of waste burned internally for energy recovery;
 - waste generation related to production;
 - initiatives taken to reduce waste generation and improve recovery/recycling of waste; and
 - initiatives or requirements for suppliers or contract manufacturers.

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Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that:

- describes the waste management policies, procedures and programmes; and
- includes annual reports to The Trust on waste generation and management.

5.9 Energy Management**Criteria**

- a) The licence applicant/holder and product manufacturer must have effective energy management policies and procedures and/or an energy management programme.
- b) Licence holders must report annually to The Trust on energy management, including:
 - total energy use;
 - breakdown of total energy use to types of energy used;
 - energy use related to production;
 - initiatives taken to reduce energy use and improve energy efficiency;
 - initiatives taken to calculate and reduce CO₂ emissions associated with energy use; and
 - initiatives or requirements for suppliers or contract manufacturers.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that:

- describes the energy management policies, procedures and programmes; and
- includes annual reports to The Trust on energy use and management.

6. PRODUCT CHARACTERISTICS**Criteria**

The carpet product shall be fit for purpose as demonstrated by having a recognised product grading or certification, such as:

- a Wools of New Zealand grading;
- a Woolmark;
- a Fernmark; or
- an Australian Carpet Classification Scheme rating.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported:

- copies of the product certification or grading certificates and/or reports

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- information demonstrating how compliance and product quality is monitored and maintained (including quality control and assurance procedures); and
- records of customer feedback and complaints.

7. REQUIREMENTS AND NOTES FOR ECNZ LICENCE HOLDERS

Monitoring Compliance

Prior to granting a licence, The Trust will prepare a plan for monitoring ongoing compliance with these requirements. This plan will reflect the number and type of products covered by the licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. This plan will be discussed with the licence applicant and when agreed will be a condition of the licence.

As part of the plan, The Trust will require access to relevant quality control and production records and the right of access to production facilities. Relevant records may include formal quality management or environmental management system documentation (for example, ISO 9001 or ISO 14001 or similar).

The monitoring plan will require the licence holder to advise The Trust immediately of any non-compliance with any requirements of this specification which may occur during the term of the licence. If non-compliance occurs, the licence may be suspended or terminated as stipulated in the Licence Conditions. The licensee may appeal any such suspension.

The Trust will maintain the confidentiality of identified confidential information provided and accessed during verification and monitoring of licences.

Using the ECNZ Label

The Label may appear on the wholesale and retail packaging for the product, provided that the product meets the requirements in this specification and in the Licence Conditions.

Wherever it appears, the Label must be accompanied by the words “scoured wool”, “wool pile carpet” or “wool-rich pile carpet” and by the Licence Number eg “licence No1234”.

The Label must be reproduced in accordance with the ECNZ programme’s keyline art for reproduction of the Label and the Licence Conditions.

Any advertising must conform to the relevant requirements in this specification, in the Licence Conditions and in the keyline art.

Failure to meet these requirements for using the EC Label and advertising could result in the Licence being withdrawn.

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Appendix A: Hazardous Substance Classifications

European Risk Phrases	New Zealand HSNO Classes	Globally Harmonised System
Toxins		
R23 toxic by inhalation	6.1B or 6.1C	Acute Tox. 2 and 3 H330, H331
R24 toxic in contact with skin	6.1B	Acute Tox. 3 H311
R25 toxic if swallowed	6.1B	Acute Tox. 3 H301
R26 very toxic by inhalation	6.1A	Acute Tox. 2 and 3 H330
R27 very toxic in contact with skin	6.1A	Acute Tox. 1 H310
R28 very toxic if swallowed	6.1A	Acute Tox. 2 H300
Carcinogens, Mutagens or Reproductive/Developmental Toxins		
R40 limited evidence of a carcinogenic effect	6.7B	Carc. 2 H351
R45 may cause cancer	6.7A	Carc. 1A and 1B H350
R46 may cause heritable genetic damage	6.6A	Muta. 1B H340
R49 may cause cancer by inhalation	6.7A	Carc. 1A and 1B H350
R60 may impair fertility	6.8A	Repr. 1A and 1B H360
R61 may cause harm to the unborn child	6.8A	Repr. 1A and 1B H360
R62 possible risk of impaired fertility	6.8B	Repr 2 H361
R63 possible risk of harm to the unborn child	6.8B	Repr 2 H361d
R68 possible risk of irreversible effects	6.6B	Muta. 2 H341
Sensitisers or Allergenic		
R42 May cause sensitisation by inhalation	6.5A	Resp. Sens. 1 H334
R43 may cause sensitisation by skin contact	6.5B	Skin Sens. 1 H317
Ecotoxins		
R50 very toxic to aquatic organisms	9.1A	Aquatic Acute 1 H400
R51 toxic to aquatic organisms	9.1D or 9.1B	
R52 harmful to aquatic organisms	9.1D or 9.1C	

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European Risk Phrases	New Zealand HSNO Classes	Globally Harmonised System
R53 may cause long-term adverse effects in the aquatic environment	9.1D	Aquatic Chronic 4 H413
R50/53 very toxic to aquatic life with long lasting effects	9.1A	H410
R51/53 toxic to aquatic life with long lasting effects	9.1B	H411

Notes:

Where there is a discrepancy between the classifications applied to specific substances in the different schemes, The Trust's appointed assessors will review supporting information regarding the classifications on a case-by-case basis to determine whether the particular substance should be considered to have the identified hazardous characteristic. In reaching this decision, the assessors will be cognisant of the original source of the bans and limitations (which were based on the European risk phrases) and any specific information that is in particular relevant to the risks associated with the substance in a carpet product and in the New Zealand environmental context. The evaluation will consider issues such as exposure routes, biodegradability and persistence of the particular hazardous substance. The Trust will make information about any such decisions made by The Trust's appointed assessors available on request.

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