

The Swan labelling of  
**Chemical building products**

Document for hearing

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**Nordic Ecolabelling**

In 1989, the Nordic Council of Ministers decided to introduce a voluntary official ecolabel, the Swan. These organisations/companies operate the Swan ecolabelling system on behalf of their own country's government. For more information, see the websites.

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## **What is a Swan-labelled chemical building product?**

The Swan Label is an official ecolabel with absolute requirements within the areas of environment, health and quality. A Swan-labelled chemical building product will be amongst the least environmentally impacting products in its group, and the Swan Label indicates that the product fulfils strict environmental requirements.

The requirements imposed in the criteria document are based on an assessment of the life cycle of the product and requirements are imposed on raw materials, production, use, performance and waste. The lower impact of chemical building products on health and the environment is achieved by means of a reduced use of chemicals that are harmful to health and the environment, and lower emissions to air and water.

## **Why choose the Swan Label?**

- The license holders may choose to use the Swan Label as a trademark in their marketing. The Swan Label is widely known and respected in the Nordic countries.
- The Swan Label represents a cost-effective and simple way of communicating a producer's environmental work and environmental responsibilities to customers and suppliers.
- A reduction in environmental impact is often accompanied by a reduction in costs, for example as a result of savings in energy consumption and reduced quantities of packaging and waste.
- The introduction of environmentally friendly solutions enables producers of chemical building products to prepare themselves for future environmental legislation.
- Environmental issues are complex. Understanding specific environmental issues can take time and involve extensive resources. Swan labelling can be used as an aid in this process, since the environmental requirements in the criteria document offer guidance on how producers can contribute to the development of a sustainable society.
- The Swan Label focuses not only on health and environmental issues, but also on quality, since quality and environment often go hand in hand. This means that a Swan Label can also be viewed as a mark of quality.

## **What chemical building products are eligible for a Swan Label?**

Chemical building products encompass liquid or unhardened products for use in building work, both indoors and outdoors, and on a variety of substrates. At present

the product group encompasses the following products for both private consumers and professional users:

- Adhesives
- Sealants
- Fillers
- Outdoor paints and varnishes

The product group does not include adhesives for industrial use for purposes other than building work, e.g. for furniture production or the production of building panels.

Relevant liquid or unhardened products in addition to those specified above, classifiable as chemical building products, may subsequently be added to this criteria document. The decision on whether new products are to be included in the product group will be adopted by Nordic Ecolabelling. Inquiries to extend the product group by means of the inclusion of other chemical building products that are not encompassed by separate Swan labelling criteria may be submitted to Nordic Ecolabelling. Criteria already exist for the Swan labelling of "Adhesives" and "Indoor paint and varnish".

Solid building products such as insulation materials and plastic products, pure concrete etc. cannot be Swan-labelled under these criteria. Criteria already exist for Swan-labelling, for example, houses, windows and outside doors, floors, furniture and fixtures and fittings (including internal doors and stairs), building panels, durable wood etc.

## How to apply




Licence applications may be submitted by producers, importers, wholesalers and dealers.

For a product to qualify for a Swan Label, all general requirements and relevant product-specific requirements must be fulfilled. Each requirement is labelled with the letter O and a number.

All information submitted to Nordic Ecolabelling will be treated confidentially. Subcontractors may submit documentation directly to Nordic Ecolabelling. This information will also be treated confidentially.

### Symbols used in the text

Each requirement is accompanied by a description of how the requirement must be documented. Various icons are used in the text to make this work easier. These icons are:

-  States the documentation that applicants must submit.
-  Nordic Ecolabelling will check this requirement by means of an on-site inspection.
-  Means that procedures for environment and quality assurance must be submitted.

**Application**

Applications must be submitted to Nordic Ecolabelling in the country in which the chemical building products are produced or are sold. The addresses are specified on page 2. Applications comprise an application form and documentation evidencing fulfilment of the requirements.

Further information and assistance with applications is available from Nordic Ecolabelling. See the website for the national body responsible for ecolabelling of the product. See the address list on page 2.

**Sales in other Nordic countries**

Registering the licence in other Nordic countries allows the Swan Label to be used on a larger market. To do so, the following must be submitted to Nordic Ecolabelling:

- Application form for registering the product
- Copy of the licence certificate
- Label/consumer information in the language(s) of the country or countries in question.
- Documentation evidencing fulfilment of national rules, regulations and, if applicable, industry-wide agreements on recycling systems.

Registration is free of charge, but annual fees are payable in accordance with the applicable national rules.

**On-site inspections**

In connection with the awarding of a licence, Nordic Ecolabelling will conduct an onsite inspection to ensure that the requirements have been fulfilled. During inspections, the figures on which calculations are based, the originals of submitted certificates, test results, purchasing statistics and the like confirming fulfilment of the requirements, must be available for examination.

**Costs**

An application fee is payable in connection with licence applications. In addition an annual fee is payable based on the sales by the undertaking of Swan-labelled chemical building products.

**Inquiries**

Should you have questions or require additional information, please contact Nordic Ecolabelling, see the address list on page 2.

# 1 General environmental requirements

Unless otherwise specified, the requirements in Chapter 1 apply to all ingoing substances. Ingoing substances are defined as all substances in the product, including additives (e.g. preservatives or stabilisers) in the ingredients, but not pollutants from raw material production. Pollutants are defined as traces from raw material production present in the finished product in concentrations of less than 100 ppm (0.01 weight %, 100 mg/kg), but not substances that have been added to a raw material intentionally and for a purpose, irrespective of quantity.

It should be noted that the product must at all times fulfil all obligatory requirements – an exemption provided for in a specific requirement will accordingly not constitute a general exemption from the other obligatory requirements.

## 01 Information about the product

Describe the product and the way in which it fulfils the definition of a product that qualifies for a Swan label. If the product forms part of a system that jointly ensures the functioning of the system, the entire system may be Swan-labelled and not simply parts of it.

Describe the formula for the product. This must include the full formula/recipe with a specification of all ingoing substances. For each ingoing substance this description must include the trade name, chemical name, function, boiling point (for ingoing organic substances), content in weight/percentage (both with and without solvent (e.g. water)) and CAS number.

- Description of the product in accordance with the definition of what may be Swan-labelled.
- Description of the product formula in accordance with the above. This means that for each ingoing substance the applicant must declare unambiguously its trade name, chemical name, function, boiling point (for ingoing organic substances), content as weight/percentage, (both with and without solvent (e.g water)) and CAS number.
- Safety data sheets/product sheets in accordance with Directive 2001/58/EC for each product.
- Declaration from the manufacturer in accordance with Appendix 1.

**O2 Classification of the product**

The product must not be classified /labelled as specified in the table below.

<b>Classification</b>	<b>Associated hazard symbol and R-phrases</b>
Dangerous for the environment	N with R50, R50/53 or R51/53, R52, R53 or R52/53 without N
Very toxic	Tx
Toxic	T
Harmful	Xn
Corrosive	C
Sensitization	Xn with R42 or Xi with R43. The product must not contain ingoing substances in quantities that result in labelling as "Contains (name of the sensitising substance). May cause allergic reactions"
Carcinogenic	Carc
Mutagenic	Mut
Harmful for reproduction	Rep
Explosive	E
Oxidizing	O
Extremely flammable	Fx (F+ in Norway)

*R50: Very toxic to aquatic organisms, R50/53:Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment, R51/53:Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment, R52: Harmful to aquatic organisms, R53:May cause long-term adverse effects in the aquatic environment, R52/53: Harmful to aquatic organisms, may cause adverse long-term effects in the aquatic environment, R42: May cause sensitization by inhalation, R43: May cause sensitization by skin contact.*

*The classifications above apply in accordance with Directive 67/548/EEC and Directive 1999/45/EC as amended.*

Please note that the producer is responsible for ensuring that the classification is correct.

- Declaration from the producer in accordance with Appendix 1.
- Safety data sheets/product sheets in accordance with Directive 2001/58/EC for each product.

**O3 Classification of ingoing chemical substances**

The product must not contain chemical substances that are - or that may shed substances that are - classified as carcinogenic (Carc), mutagenic (Mut) or toxic for reproduction (Rep). Formaldehyde is exempted from this requirement. Specific requirements for formaldehyde are given in O7.

Ingoing chemical substances that are classified as:

N R50/53 may not be present in quantities in excess of 0.1 weight %

N R51/53 may not be present in quantities in excess of 1.0 weight %

N R50, R52/53, R52 and/or R53 may not be present individually in quantities in excess of 2.0 weight %.

The sum of chemical substances classified as N R50/53, N R50, R52/53, R52 or R53 may not be present in total in quantities in excess of 4.0 weight %.

It should be noted that the product must at all times fulfil all other obligatory requirements.

*The classifications above apply in accordance with Directive 67/548/EEC and Directive 1999/45/EC as amended.*

- Declaration from the supplier of each individual raw material in accordance with Appendix 2.
- Calculation that clearly shows fulfilment of the requirement.

#### **O4 Risk phrases for ingoing chemical substances**

No ingoing chemical substances may be allocated the following risk phrases or combinations thereof: R23, R24, R25, R26, R27, R28, R33, R39, R42, R48, R49, R68.

Exemptions from this requirement apply to preservatives used for preserving the product and present in quantities of less than 1000 ppm (0.1 weight %, 1000 mg/kg) and organotin compounds (see O5), allotted phrase risk phrases R23, R24, R25, R26, R27, R28, R39, R48 or combinations thereof.

*R23: Toxic by inhalation, R24: Toxic in contact with skin, R25: Toxic if swallowed, R26: Very toxic by inhalation, R27: Very toxic in contact with skin, R28: Very toxic if swallowed, R33: Danger of cumulative effects, R39: Danger of very serious irreversible effects, R42: May cause sensitization by inhalation, R48 Danger of serious damage to health by prolonged exposure, R49: May cause cancer by inhalation, R68 Possible risk of irreversible effects.*

- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

#### **O5 Organotin compounds**

The product must not contain organotin compounds.

Products in the sealant product group are exempted from this requirement if the product is a single component hardening system. In this case, tributyltin (TBT), dibutyltin (DBT), dioctyltin (DOT) and triphenyltin (TPT) may be used as catalysts and may be present as a total in the following maximum quantities:

0.1 weight % in silicone products and PUR-polymers containing silanes in place of isocyanates.

0.25 weight % in MS-polymers.

- Calculations that show clearly that the requirement has been fulfilled.
- Declaration from the manufacturer in accordance with Appendix 1.

#### **O6 Preservatives**

No preservatives added to the product or raw materials shall be bioaccumulative in accordance with OECD test methods 107, 117 or 305.

The content of isothiazolinone compounds in the product must be below 15 ppm (0.0015 weight %, 15 mg/kg).

Exemptions apply in the case of products in the category outdoor paint and varnish if the content of isothiazolinone compounds in the product does not exceed 1000 ppm. It should be noted, however, that the content of a mixture of 5-chloro-2-methyl-2H-isothiazol-3-one (CAS-No.

26172-55-4) and dimethyl-2H-isothiazol-3-one (CAS-No. 2682-20-4) (3:1) must be below 15 ppm (0.0015 weight %, 15 mg/kg).

- Documentation evidencing that none of the added preservatives are bioaccumuable, cf. OECD test methods 107, 117 or 305.
- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.
- Calculations that clearly show that the requirement applicable to isothiazolinones is fulfilled.

## **07 Formaldehyde**

Formaldehyde is permitted as an impurity in newly produced polymer in a concentration of no more than 200 ppm (0.02 weight %, 200 mg/kg) provided that the content of free formaldehyde in the end product does not exceed 10 ppm (0.001 weight %, 10 mg/kg).

Except in the case of products in the category outdoor paint and varnish, formaldehyde (CAS-number 50-00-0) or formaldehyde-shedding substances must not be actively added to products.

In the case of products in the category outdoor paint and varnish, the content of free formaldehyde (from formaldehyde or formaldehyde-shedding substances) in the end product must not exceed 10 ppm (0.001 weight %, 10 mg/kg)

- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.
- Calculations that show clearly that the formaldehyde requirement is fulfilled or specification of the quantities (in specific cases) in the product measured using the Merckoquant-method or the VdL-RL 03-method ("The concentration of free formaldehyde in the packaging is determined using the acetyl-acetone-method"), where the measured concentration must not exceed 100 ppm. Other equivalent tests may be used.

## **08 Residual monomers**

Polymers may as a maximum contain 100 ppm residual monomers classified as very toxic (Tx), toxic (T), harmful (Xn) or dangerous for the environment (N) in newly produced polymer.

*The classifications above apply in accordance with Directive 67/548/EEC and Directive 1999/45/EC as amended.*

It should be noted that polymers over and above this are encompassed by all obligatory requirements.

- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

## **09 Plasticizers - phthalates**

No ingoing phthalates must be classified as very toxic (Tx), toxic (T), harmful (Xn) or dangerous for the environment (N).

*The classifications above apply in accordance with Directive 67/548/EEC and Directive 1999/45/EC as amended.*

No phthalates must be recorded on the EU list of 118 substances, regarded as causing endocrine disruption or potential endocrine disruption.

No phthalates shall be bioaccumulative in accordance with OECD test methods 107, 117 or 305.

It should be noted that phthalates / the product at all times must fulfil all other obligatory requirements.

- Documentation that none of the preservatives added to the product are bioaccumulable, cf. OECD test method 107, 117 or 305.
- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

#### **O10 Heavy metals**

Heavy metals or compounds of heavy metals, cadmium, lead, chromium VI, mercury, arsenic, barium (with the exception of barium sulphate), selenium and antimony must not be present in the product or in the ingoing chemical substances. Although it is accepted that ingoing substances may contain traces of these substances deriving from impurities, the trace quantity of the individual heavy metal must not exceed 100 ppm (0.1 mg/kg, 0.01 weight %).

- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.
- Calculation which shows clearly that the requirement is fulfilled, if impurities are present.

#### **O11 Titanium dioxide**

If the product contains more than 3.0 weight % of titanium dioxide, emissions from the production of titanium dioxide must not exceed the quantities specified below respectively for the sulphate process and the chloride process.

The sulphate process:

- SO<sub>x</sub> calculated as SO<sub>2</sub>: 7 kg/ton TiO<sub>2</sub>
- Sulphate: 500 kg/ton TiO<sub>2</sub>

The chloride process:

- If natural ore is used, 120 kg/ton TiO<sub>2</sub>
- If synthetic ore is used: 210 kg/ton TiO<sub>2</sub>
- If rutile ore is used: 415 kg/ton TiO<sub>2</sub>

If more than one type of ore is used, the values will apply in proportion to the quantity of the individual ore types used.

- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.
- If the product contains titanium oxide, the applicant must submit descriptions and calculations from the titanium dioxide producer which show clearly that the requirement is fulfilled.

**O12 Ingoing substances in powder form**

Substances in powder form must be added in closed systems, in suspensions or using a method that ensures that the working environment is dust-free.

- Description of the work in which substances in powder form are handled during the production process.

**O13 Nano particles**

Nano metals, nano carbon compounds and/or nano fluoride compounds must not be actively added to chemical building products, unless documentation exists that they will not entail problems in terms of health or the environment.

*For these purposes Nano particles are counted as particles where at least one of the dimensions is smaller than 100 nm. Nano metals, for example, are nano silver, nano gold and nano copper.*

- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.
- Documentation of the nano particles used, showing clearly that the requirements are fulfilled.

**O14 Other requirements applicable to ingoing chemical substances**

The following must not form part of the product or be added to raw materials that form part of the product:

- APEO - Alkylphenolethoxilates and other alkylphenol derivatives (substances that release alkylphenols during degradation).
- Halogenated organic compounds
- Isocyanates
- Naphtha
- Bisphenol-A-compounds
- Fragrance

- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

## 2 Adhesives

**O15 Volatile organic compounds (VOC)**

Volatile aromatic compounds must not be actively added to the product, but may be present as traces or pollutants in quantities not exceeding 100 ppm (0.01 weight %, 100 mg/kg).

Special adhesives that are frost protected for use in winter may contain a maximum of 6.0 weight % volatile organic compounds.

Other adhesives, with the exception of wallpaper paste, may contain a maximum of 1.0 weight % volatile organic compounds.

Wallpaper paste must not contain volatile organic compounds.

Volatile organic compounds are defined for these purposes as volatile organic compounds with an initial boiling point that is lower than or equal to 250°C measured at a normal pressure of 101.3 kPa.

- Specification of the content of volatile organic compounds, including the content of volatile aromatic compounds, and calculations showing clearly that the requirement is fulfilled.
- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

#### **O16 Emissions of total volatile organic compounds (TVOC)**

If the adhesive is sold in a packaging size that is larger than 125 ml the requirement applies that the highest permitted emission of total volatile organic compounds after four weeks is 0.2 mg/m<sup>2</sup>h converted to toluene equivalents.

- Description of packaging size.
- Test report in accordance with CEN EN 13419, part 1-3 and analysis in accordance with ISO DIS 16000-6.2 for products sold in a packaging size larger than 125 ml. The test laboratory must fulfil the general requirements in the standard DS/EN ISO/IEC 17025 or be an officially GLP-approved laboratory.

#### **O17 Quality requirements for adhesives**

Adhesives must be tested in accordance with the standards specified in the following table.

Type	Test Method
Adhesives for wall and floor coverings	EN 1372, EN 1373, EN 1902 or equivalent methods. At least one comparable reference product must be tested.
Adhesive substances for ceramic tiles	EN 1324 or an equivalent method– the adhesive must fulfil the minimum requirements specified in EN 12004
Wallpaper paste	Comparative test
Wood adhesive	EN 205:1997 or an equivalent method. At least one comparable reference product must be tested.
Other adhesives	Methods suitable for these products or comparative testing.

- Test report that shows clearly that the requirement is met. The test laboratory must fulfil the general requirements in the standard DS/EN ISO/IEC 17025 or be an officially GLP-approved laboratory.

### 3 Sealant

#### 018 Volatile organic compounds (VOC)

Volatile aromatic compounds must not be actively added to the product, but may be present as traces or pollutants in quantities not exceeding 100 ppm (0.01 weight %, 100 mg/kg).

Sealants may contain a maximum of 3.0 weight % volatile organic compounds.

Volatile organic compounds are defined for these purposes as volatile organic compounds with an initial boiling point that is lower than or equal to 250°C measured at a normal pressure of 101.3 kPa.

- Specification of the content of volatile organic compounds, including the content of volatile aromatic compounds, and calculations showing clearly that the requirement is fulfilled.
- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

#### 019 Quality requirement for sealant

Sealant must be tested in accordance with ISO 11600.

- Test report that shows clearly that the requirement is met. The test laboratory must fulfil the general requirements in the standard DS/EN ISO/IEC 17025 or be an officially GLP-approved laboratory.

### 4 Filler

#### 020 Volatile organic compounds (VOC)

Volatile aromatic compounds must not be actively added to the product, but may be present as traces or pollutants in amounts not exceeding 100 ppm (0.01 weight %, 100 mg/kg).

Sealants may contain a maximum of 3.0 weight % volatile organic compounds.

Volatile organic compounds are defined for these purposes as volatile organic compounds with an initial boiling point that is lower than or equal to 250°C measured at a normal pressure of 101.3 kPa.

- Specification of the content of volatile organic compounds, including the content of volatile aromatic compounds, and calculations showing clearly that the requirement is fulfilled.
- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

#### 021 Quality requirements for filler

The manufacturer must describe how the filler is tested in order to ensure that its quality is uniform and good, particularly in terms of viscosity, adhesion, gap-filling properties, shrinkage, minimum loss and durability.

Tests of filler for plasterboard must be conducted in accordance with EN Standard 13963.

- Test report that shows clearly that the requirement is met. The test laboratory must fulfil the general requirements in the standard DS/EN ISO/IEC 17025 or be an officially GLP-approved laboratory.

## 5 Outdoor paint and varnish

The product group “Outdoor paint and varnish” encompasses: outdoor decorative and protective paints and varnishes, wood stains and related products including wood paints, varnishes, wood and decking stains, masonry coatings and metal finishes (excluding anti-corrosion finishes and primers), as well as primers (and undercoats) of such product systems.

The following products are not included in the product group: anti-corrosion primers, anti-fouling coatings, wood preservation products, coatings for particular industrial and professional uses, including heavy duty-coatings, any product primarily developed for indoor use and marketed as such.

### O22 Volatile organic compounds (VOC)

Volatile aromatic compounds must not be actively added to the product, but may be present as traces or pollutants in amounts not exceeding 100 ppm (0.01 weight %, 100 mg/kg)

Outdoor paint and varnish may contain the quantities of volatile organic compounds specified in the form.

Volatile organic compounds are defined for these purposes as volatile organic compounds with an initial boiling point that is lower than or equal to 250°C measured at a normal pressure of 101.3 kPa.

Product classification, cf. 2004/42/EC	Highest permitted quantity specified in g/L (incl. water)
Exterior walls of mineral substrate	25
Interior/exterior trim and cladding paints for wood and metal including undercoats	75
Interior/exterior trim varnishes and wood-stains, including opaque wood stains	75
Interior and exterior minimum build wood stains	75
Primers (for exterior)	15
Binding Primers (for exterior)	15
1 pack performance coatings	100
Two-pack reactive performance coatings for specific end use such as floors	100

- Specification of the content of volatile organic compounds, including the content of volatile aromatic compounds, and calculations that clearly show that the requirement is fulfilled.
- Declaration from the manufacturer in accordance with Appendix 1.
- Declaration from the supplier of each individual raw material in accordance with Appendix 2.

**O23 Quality requirements for outdoor paint and varnish**

If the product forms part of a system that as a totality ensures the function of the system the system as a whole must be Swan-labelled, not simply part of it. If an oil, primer and paint are adapted to each other as a system, they must as far as possible be tested in accordance with the recommendations of the manufacturer.

For all the tests specified below the test laboratory must fulfil the general requirements in the standard DS/EN ISO/IEC 17025 or be an officially GLP-approved laboratory.

**Weathering test:** Products within the product group definition shall be exposed to artificial weathering in apparatus including fluorescent UV lamps and condensation or water spray according to the respective tests mentioned.

- Masonry paints shall be exposed to test conditions for 1000 hours according to ISO 11507:2007:
- Metal finishes (including varnishes) shall be exposed to test conditions for 500 hours. (UVA 4h/60°C+humidity 4h/50°C) according to ISO 11507:2007:
- Products for wood shall be exposed in the QUV accelerated weathering apparatus with cyclic exposure with UV(A) radiation and spraying test conditions for two weeks according to EN927-6

The effects of weathering shall also be evaluated by testing the following parameters:

- flaking (according to ISO 4628-5:2003) Flaking, passing score when flakes' density is 2 or less and size 2 or less.
- cracking (according to ISO 4628-4:2003) and Cracking, passing score when cracks' quantity is 2 or less and size 3 or less.
- blistering (according to ISO 4628-2:2003) Blistering, passing score when Blisters' density is 3 or less and size 3 or less.

Where relevant the following parameters is evaluated:

- The colour change of samples exposed to weathering shall not be greater than  $\Delta E^* = 4$  (paints)
- The decrease in gloss shall not be greater than 30% of initial value (varnishes). The gloss shall be measured using ISO 2813
- Chalking shall also be tested on masonry finish coatings and metal finishes after weathering using method EN ISO 4628-6:2007. Coatings shall achieve in this test a score of 1.5 or better (0.5 or 1.0). In the standard there are pictorial reference standards.

If an entire colour system is ecolabelled, all products must fulfil the requirements, which can be documented by testing the quality of at least three representative colours. At least one white, one intermediate colour and one dark colour.



Test reports that show clearly that the requirements are fulfilled.

**Water Vapour Permeability:** Where claims are made that exterior masonry paints are breathable the paint shall be classified as Class II (medium vapour permeability) or better according to the method EN ISO 7783-2 (this method is only for exterior masonry and concrete). Due to large numbers of possible tinting colours, this criterion will be restricted to testing of the base paint. This method is not applicable for transparent primers.

Test report that clearly shows that the requirements are fulfilled.

**Liquid Water Permeability:** Where claims are made that exterior masonry and concrete paints are water repellent or elastomeric, the coating shall be classified as Class III (low liquid permeability) according to the method DIN EN 1062-3:1999. Due to large numbers of possible tinting colours, this criterion will be restricted to testing of the base paint.

Test report that clearly shows that the requirements are fulfilled.

**Resistance to fungal growth:** Where claims are made that the product has anti-fungal properties or the like, test must be made to document this. A product where claims are made that the product has anti-algal properties can not be Swan labelled (the product is then a biocide).

Masonry finish coatings shall have a score of 2 or better (less than 10% fungal coverage), as determined by method BS 3900:G6 or equivalent.

Wood paint shall be tested in accordance with EN-927-3 or ASTM C 1338 or equivalent.

If an equivalent method is used, for example PREN 15457, the applicant must document that the test is equivalent to the tests specified in the criteria document.

Due to large numbers of possible tinting colours, this criterion will be restricted to testing of the base paint.

Test report that clearly shows that the requirements are fulfilled.

## 6 Packaging, labels, consumer information and recycling systems

### 024 Packaging

Packaging must be reseal able, unless documentation can be provided that the entire product will always be used at one session.

The type of plastic material must be documented by the producer. Labels and product packaging must not contain halogenated plastic.

Metal packaging must not be used for volumes of less than 1 litre, unless this is contra-indicated by special health and environmental arguments.

Packaging sample showing that the packaging can be resealed.

Description whether the entire product is always used at one time.

Declaration from the packaging producer that no halogenated plastics have been used or product data sheets that clearly shows that the

requirement is met by all parts of the packaging, including lids, caps and the like.

- Declaration from the label producer that no halogenated plastics have been used.

## **O25 Label/product packaging**

The label/product packaging must be equipped with a Swan-labelled logo, licence number and designation of product group.

- Label/product packaging – alternatively a pdf-file.

## **O26 Consumer information**

The following information must be attached to the packaging or enclosed with each individual product:

- The purpose, substrate and other conditions of application for which the product is intended. This shall include advice on preparation etc., e.g. correct preparation of the substrate, outdoor use (if relevant) or temperature).
- Recommended preventive protective measures for users, for example in connection with working in enclosed spaces or the like. The text must be attached to the packaging of the product or enclosed with the product.
- Guidance on cleaning used tools and how waste products from cleaning can best be disposed of (to limit water pollution). These guidelines should be adapted to the product types and areas of application question, and pictograms should be used where appropriate.
- Guidance on how the product should be stored after it has been opened (in order to reduce quantities of solid waste), including safety instructions, if relevant.
- Guidance on how residual product and packaging should be disposed of.

- Documentation that the requirement is fulfilled, i.e. labels, product datasheets or the equivalent, and a description how the information follows each product.

## **O27 Recycling systems**

The relevant national rules, statutes and/or industry-wide agreements concerning recycling systems for products and packaging must be fulfilled in the Nordic countries in which the Swan-labelled products are marketed.

- Documentation from the applicant of membership of existing agreements on recycling/processing.

## 7 Quality management and the requirements of the authorities

To ensure that the Swan requirements are fulfilled, the following procedures must be in place.

If the manufacturer has a certified environmental management system in accordance with ISO 14 001 or EMAS in which the following procedures are implemented, it will be sufficient for the accredited auditor to certify that the requirements are implemented.

### **O28 Responsibility for the Swan Label**

One person in the company must be responsible for fulfilment of the Swan requirements and one person must be appointed as a contact person to maintain contact with Nordic Ecolabelling.

- Organisational structure showing the persons responsible for the above areas.

### **O29 Documentation**

The license holder must be able to present copies of the application and the statistics and basis for calculation (including test reports, documents from subcontractors and the like) for the documentation submitted in connection with the application.

- Onsite inspection.

### **O30 The quality of the product**

The license holder must guarantee that the quality of the Swan-labelled product will not deteriorate during the term of the licence.

- Procedures for drafting and if necessary processing complaints concerning the quality of the Swan-labelled product.

### **O31 Planned changes**

Planned changes that impact upon the Swan requirements must be reported in writing to Nordic Ecolabelling.

- Procedures showing the way in which planned changes are handled.

### **O32 Unforeseen deviations**

Unforeseen deviations that impact upon the Swan requirements must be reported in writing to Nordic Ecolabelling and recorded in a journal.

- Procedures showing the way in which unforeseen deviations are handled.

### **O33 Traceability**

The license holder must be capable of tracing the Swan-labelled product in the production process.

- Descriptions/procedures for the ways in which these requirements are fulfilled.

**O34 Statutes and regulations**

The license holder must ensure that the applicable provisions on safety, working environment, environmental legislation and plant-specific conditions/licences are followed at all locations at which the Swan-labelled product is produced.

**No documentation is required, but Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled.**

- Documentation in which the license holder documents that the requirement is fulfilled are reports to the regulatory authority.

**O35 Marketing**

The marketing of Swan-labelled chemical building products shall comply with rules on Nordic Ecolabelling of 12 December or subsequent versions.

- Duly completed Appendix 3.

## Marketing

The Swan Label is a trademark that is familiar and respected in the Nordic countries. The Swan-labelled/service may be marketed using the Swan Label for as long as the licence remains in force.

The label must be positioned in such a way that no doubt exists about the meaning of the label and that makes it clear that the fuel is ecolabelled.

Further information on marketing can be found in the “Rules on Nordic Ecolabelling of 12 December 2001 or subsequent versions.

## The design of the Swan Label

The design of the Swan Label is as follows:



Licence number

Product group: Adhesives, sealants, filler, outdoor paint and varnish

Each licence has a unique licence number which must always be displayed together with the Swan Label. The specification of the product group must be recorded below the licence number.

Further information on the design of the Swan Label can be found in Rules on Nordic Ecolabelling of 12 December 2001 or subsequent versions.

## Follow-up inspections

Nordic Ecolabelling may check to ensure that the fuel continues to fulfil the Swan label requirements after a licence has been granted. This may take the form of, for example, on-site inspections or random sampling.

If it transpires that the fuel no longer fulfils the requirements, the licence may be revoked.

Random samples may also be taken at points of sale and analysed by an impartial laboratory. If this process reveals that the requirements are not fulfilled, Nordic Ecolabelling will require the license holder to pay the costs of analysis.

## How long will the licence remain in force?

Nordic Ecolabelling adopted the criteria for chemical building products on xxx. The criteria remain in force until xxx.

The licence is valid for as long as the conditions of the criteria document are fulfilled and until the criteria document expires. The term of validity of the criteria may be extended or adjusted. In the event of extensions, all license holders will be notified.

The Board of Nordic Ecolabelling will give notice of which criteria will apply after the final date of validity of the criteria. This will take place at the latest one year before the criteria expire. License holders will then be given the opportunity to renew their licences.

## Future criteria

In future criteria Nordic Ecolabelling will consider:

- whether there have been any changes in ethyleneglycolethers that will be of significance for whether or not 111-1-0 should be excluded.
- whether requirements should be imposed as to raw materials extraction and, if so, which raw materials such requirements should encompass.
- whether tinorganic compounds should be excluded completely from all chemical building products.
- whether it is possible to impose requirements on raw material extraction, mapping of relevant raw materials and the specification of controllable requirements.

## Appendix 1

### Declaration for completion and signature by producers of chemical building products

<p>Producer's name, stamp and signature.</p> <p>In appending the company seal and signature to this document the producer warrants that the declaration has been completed by the producer.</p>	
Trade name of the product	
The function of the product/product group	
Classification and labelling of the product	
Does the product contain ingoing substances that are or that might shed substances that are classified as carcinogenic (Carc), mutagenic (Mut) or toxic for reproduction (Rep)?	Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)
Does the product contain substances that are classified as: N R50/53, N R51/53, R52/53, N R50, R52 and/or R53?	Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)
Does the product contain ingoing substances that have been allotted the following risk phrases or combinations thereof: R23, R24, R25, R26, R27, R28, R33, R39, R42, R48, R49, R68.	Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)
<p>Does the product contain the following ingoing substances:</p> <ul style="list-style-type: none"> <li>- Organotin compounds?</li> <li>- Isothiazolinone compounds? Formaldehyde? Or other preservatives?</li> <li>- Phthlates?</li> <li>- Heavy metals?</li> <li>- Titanium dioxide?</li> </ul> <p>Nanoparticles, such as nanocarbon, nanofluoride or nanometals?</p>	Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)

<p>Does the product contain the following ingoing substances:</p> <ul style="list-style-type: none"><li>- APEO – Alkylphenoethoxilates and other alkylphenol derivatives (substances that release alkylphenol during degradation).</li><li>- Halogenated organic compounds</li><li>- Isocyanates</li><li>- Naphtha</li><li>- Bisphenol-A compounds</li><li>- Fragrance</li></ul>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>
<p>Does the product contain the following ingoing substances:</p> <ul style="list-style-type: none"><li>- volatile organic compounds (VOC)?</li><li>- volatile aromatic compounds (VAC)?</li></ul>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>

## Appendix 2

### Declaration for completion and signature by raw material producers

<p>Raw material producer's name, stamp and signature.</p> <p>In appending the company seal and signature to this document the raw material producer warrants that the declaration has been completed by the producer.</p>	
<p>Trade name of the raw material</p>	
<p>The function of the raw material</p>	
<p>The raw material contains the following ingoing substances stated with chemical name, w/w % and CAS no.</p>	
<p>Is the raw material or does the raw material contain ingoing substances that are or that might shed substances that are classified as carcinogenic (Carc), mutagenic (Mut) or toxic for reproduction (Rep)?</p>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>
<p>Is the raw material or does the raw material contain substances that are classified as: N R50/53, N R51/53, R52/53, N R50, R52 and/or R53?</p>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>
<p>Is the raw material or does the raw material contain ingoing substances that have been allotted the following risk phrases or combinations thereof: R23, R24, R25, R26, R27, R28, R33, R39, R42, R48, R49, R68.</p>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>
<p>Is the raw material or does the raw material contain the following ingoing substances:</p> <ul style="list-style-type: none"> <li>- Organotin compounds?</li> <li>- Isothiazolinone compounds? Formaldehyde? Or other preservatives?</li> <li>- Residual monomers?</li> <li>- Phthlates?</li> <li>- Heavy metals?</li> <li>- Titanium dioxide?</li> </ul>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>

<ul style="list-style-type: none"><li>- Nanoparticles, such as nanocarbon, nanofluoride or nanometals?</li></ul>	
<p>Is the raw material or does the raw material contain the following ingoing substances:</p> <ul style="list-style-type: none"><li>- APEO – Alkylphenoethoxilates and other alkylphenol derivatives (substances that releace alkylphenol during degradation).</li><li>- Halogenated organic compounds</li><li>- Isocyanates</li><li>- Naphtha</li><li>- Bisphenol-A compounds</li><li>- Fragrance</li></ul>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>
<p>Does the raw material contain:</p> <ul style="list-style-type: none"><li>- volatile organic compounds (VOC)?</li><li>- volatile aromatic compounds (VAC)?</li></ul>	<p>Answer yes/no for each example / if yes, specify chemical name and ppm, w/w% or mg/kg (CAS no. should be specified above)</p>

## Appendix 3

### The marketing of Swan-labelled chemical building products

We hereby certify that we are familiar with the rules governing the use of the Nordic Ecolabel, the Swan Label, as provided for in Rules on Nordic Ecolabelling of 12 December 2001 or subsequent versions, and we warrant that the marketing of the Swan-labelled chemical building products will be conducted in accordance with these rules.

We also confirm that we are familiar with the contents of this criteria document for the Swan-labelling of chemical building products.

We hereby declare that the personnel in our company involved in the marketing of the Swan-labelled chemical building products will be informed of the criteria for the Swan-labelling of chemical building products and Rules on Nordic Ecolabelling of 12 December 2001 or subsequent versions.

\_\_\_\_\_  
Place and date

\_\_\_\_\_  
Company

\_\_\_\_\_  
Signature of contact person

\_\_\_\_\_  
Telephone number

\_\_\_\_\_  
Name of contact person

\_\_\_\_\_  
Signature of marketing manager

\_\_\_\_\_  
Telephone number

\_\_\_\_\_  
Name of marketing manager

In the event of changes in personnel a new declaration must be submitted to Nordic Ecolabelling.