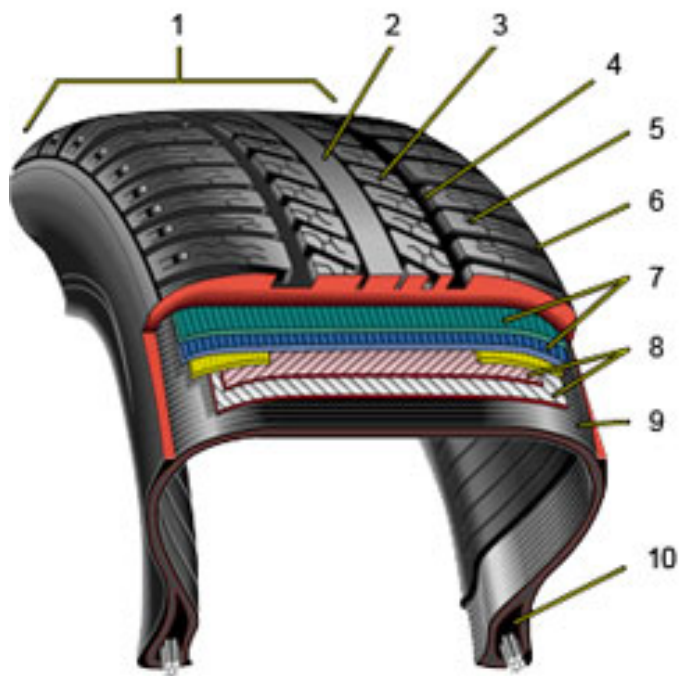


Nordic Ecolabelling of Vehicle Tyres

Vehicle tyres v3.0

For review • 9 Mars 2009



Nordic Ecolabelling

In November 1989, the Nordic Council of Ministers adopted a measure to implement an official voluntary ecolabelling scheme, the Nordic Ecolabel, also known as the Swan. The organizations/companies listed below administer the Nordic Ecolabelling scheme on assignment from their national governments.

For further information, please visit the respective Web sites:

Finland:

SFS-Ecolabelling
Pb 116
FI-00241 HELSINKI
Tel: +358 9 1499 331
Fax: +358 9 1499 3320
www.ymparistomerkki.fi
joutsen@sfs.fi

Denmark:

Ecolabelling Denmark
Dansk Standard
Kollegievej 6
DK-2920 CHARLOTTENLUND
Tel: +45 72 300 450
Fax: +45 72 300 451
www.ecolabel.dk
info@ecolabel.dk

Norway:

Ecolabelling Norway
Tordenskiolds gate 6 B
NO-0160 OSLO
Tel: +47 24 14 46 00
Fax: +47 24 14 16 01
www.ecolabel.no
info@ecolabel.no

Iceland:

Ecolabelling Iceland
Umhverfisstofnun
Suðurlandsbraut 24
IS-108 REYKJAVIK
Tel: +354 591 20 00
Fax: +354 591 20 20
www.svanurinn.is
audurj@ust.is

Sweden:

SIS Ecolabelling
SE-118 80 STOCKHOLM
Tel: +46 8 55 55 24 00
Fax: +46 8 55 55 24 01
www.ecolabel.se
svanen@ecolabel.se

This document may be copied only in its entirety and without any type of change.

Quotations may be made provided that Nordic Ecolabelling is stated as the source.

This document is a translation of a Swedish original. In case of discrepancy, the original document shall be taken as authoritative.

Nordic Ecolabelling of

066/3.0, 9 Mars 2009

What is a Nordic Ecolabelled vehicle tyre?	1
Why choose the Nordic Ecolabel?	1
What can carry the Nordic Ecolabel?	2
How to apply	2
What are the requirements for the Nordic Ecolabel?	3
1 Environmental requirements.....	4
1.1 Environmental requirements for all vehicle tyres.....	4
1.2 Special requirements.....	8
1.3 Safety aspects.....	9
2 Quality and regulatory requirements	9
Marketing	11
Design of the Nordic Ecolabel	11
Follow-up inspections	12
How long is a licence valid?.....	12
New criteria.....	13

Appendices

1	Marketing of Nordic Ecolabelled vehicle tyres
2	Analysis and test laboratories
3	Declaration on organic solvents used during production
4	Classification of vehicle tyres

What is a Nordic Ecolabelled vehicle tyre?

The aim of a Nordic Ecolabel for vehicle tyres with low rolling resistance is to limit environmental impact by promoting products that are least damaging to the environment. These criteria have been developed to minimise environmental impact during manufacture and use.

An ecolabelled tyre must have a low rolling resistance since lower fuel consumption has many environmental benefits (such as lower CO₂ emissions, lower emission of carcinogens and lower levels of PM₁₀). The tyre must also be quiet since noise is an increasing environmental problem that causes health problems (e.g. heart and vascular disorders). The manufacturing of ecolabelled tyres must use environmentally suitable raw materials and production methods (e.g. to reduce the dispersion of toxic substances and minimise environmentally harmful emissions). There are also requirements on safety, durability and the possibility to retread.

Tyres have an advanced composite structure comprising rubber and reinforcements. A tyre carries the vehicle's weight and enables movement. The textile and steel reinforcements give the tyre its shape and stability under load. The rubber mixture comprises various polymers (natural and synthetic rubbers), carbon black, plasticizers, vulcanizing agent, accelerators, protecting agents and other substances.

Why choose the Nordic Ecolabel?

- The companies selling Nordic Ecolabelled tyres may use the Swan trademark in their marketing. The Nordic Ecolabel, the Swan, is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers and suppliers.
- Reducing environmental impact often creates scope for lowering costs, such as by cutting the consumption of energy and reducing the amounts of waste.
- Environmentally suitable operations prepare the tyre manufacturer for future environmental legislation.
- Environmental issues are complex. It can take a long time and extensive resources to gain an understanding of a specific area. The Nordic Ecolabel can be seen as an aid in this work.
- The Nordic Ecolabel not only covers environmental issues but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Ecolabel licence can also be seen as a mark of quality.

What can carry the Nordic Ecolabel?

The product group covers non-studded new or retreaded vehicle tyres (summer and winter tyres for cars, buses and trucks) with a low rolling resistance. The load index¹ for tyres for heavy vehicles must exceed 121. For car tyres, the load index must be 121 or lower according to ECE 54.

How to apply

Each requirement is marked with the letter R (requirement) and a number. All requirements must be fulfilled for the award of a licence.

Icons in the text

The documentation required to demonstrate fulfilment of a requirement varies greatly, from self declarations to laboratory reports from an accredited test institution. How the applicant shall demonstrate fulfilment is therefore specified after each requirement. There are also icons in the text to make this clearer. These icons are:

- ✉ Enclose
- ☺ Requirement checked on site.

Application

The application shall be sent to Nordic Ecolabelling in the country in which the vehicles tyres are sold/the applicant carries on activities. See page 2 for addresses.

The documents required for application are an application form and documentation demonstrating fulfilment of the requirements (specified in each requirement).

Documentation requirements may vary greatly, from self declarations to laboratory reports from an accredited test institution.

Further information and assistance may be available. Visit the Web site of the national ecolabelling body for more information.

Sales in other Nordic countries

Registering a licence in another Nordic country allows the Nordic Ecolabel to be used on a larger market. The following must be submitted to Nordic Ecolabelling:

- Form for sales in the country in question.

¹ The load index is a numerical categorisation based on the maximum load that the tyre can carry under specific conditions at the maximum speed of the given speed rating up to 220 km/h. The load index 121 is equivalent to 1450 kg. See Appendix 4.

Nordic Ecolabelling

Vehicle tyres 066/3.0

9 Mars 2009

- Consumer information in the local language.
- Affiliation to a take-back system for vehicle tyres in the country in question.

Registration is free of charge but an annual fee shall be paid in accordance with the national regulations.

On-site inspection

During the application process, Nordic Ecolabelling performs an on-site inspection to ensure adherence to the requirements. For this inspection, data used for calculations, original copies of submitted certificates, test records, purchase statistics, and similar documents that support the application must be available for examination.

Costs

An application fee is charged to companies applying for a licence. There is an additional annual fee based on the revenues produced by the vehicle tyres carrying the Nordic Ecolabel.

Enquiries

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 2 for addresses.

What are the requirements for the Nordic Ecolabel?

To be awarded the Nordic Ecolabel:

- All requirements for the particular tyre class and type must be fulfilled.
- Nordic Ecolabelling must have performed an on-site inspection of the manufacturing facilities.

1 Environmental requirements

1.1 Environmental requirements for all vehicle tyres

K1 Description of the product

Describe the vehicle tyres/tyre model(s) to which the application applies.

Specify whether the tyres are non-studded, new or retreads, summer and/or winter tyres, the name and pattern of the tread, and the load index.

The load index for passenger car tyres and class C2 tyres must not exceed 121. The load index for bus and truck tyres must be greater than 121 according to ECE 54.

- Description as specified above in which the following are described/specified for the tyre model(s): carcass, tread, tread pattern, load index, summer/winter use, and new/retread.

K2 Rolling resistance

PROPOSAL/SUGGESTION: 1)

The highest value of the rolling resistance coefficient for each tyre type, measured according to ISO 28580 or equivalent. Must not exceed the limit values in Table 1.

Table 1

Tyre category C1 (passenger car tyres)	Max value (kg/ton)	Max value (% of wheel load)
Load index <80	10	1%
Load index 80-90	9	0.9%
Load index >90	8	0.8%

Table 2

Tyre category	Max value (kg/ton)	Max value (% of wheel load)
C2	7	0.7%
C3	6.5	0.65%

New tyres:

- The average results of test performed according to ISO 8767 on at least two tyres from each tyre category and/or load class must fulfil the requirements specified above. The rolling resistance of the tyre that has the lowest load index within each index class must be specified.
- Description according to Appendix 2 of the test institution that has performed the tests.

Retreaded tyres:

Nordic Ecolabelling

Vehicle tyres 066/3.0

9 Mars 2009

- The trade name of the tread pattern and carcass type of the tested tyre must be specified and clearly linked to the test results.
- Description of how the carcasses are identified.
- The average results of test performed according to ISO 8767 on at least two tyres from each tyre category and/or load class must fulfil the requirements specified above. The rolling resistance of the tyre that has the lowest load index within each index class must be specified.
- Description according to Appendix 2 of the test institution that has performed the tests.

PROPOSAL/SUGGESTION: 2)

The highest value of the rolling resistance as a percentage of the wheel load for each tyre type, measured according to ISO 18164:2005* or equivalent. Must not exceed the limit values in Table 3.

Table 3

Tyre category C1 (passenger car tyres)	Max value (kg/ton)	Max value (% of wheel load)
Load index <80	10	1%
Load index 80-90	9	0.9%
Load index >90	8	0.8%
Tyre category C2		
Drive wheels	7	0.7%
Free-rolling wheels	6	0.6%
Tyre category C3		
Drive wheels	7	0.7%
Free-rolling wheels	6	0.6%

* ISO 18164:2005 comprises ISO 8767:1992, ISO 9948:1992 and ISO 13327:1998.

New tyres:

- Test report and results from tests and calculations performed according to ISO 18164:2005 (or equivalent). The rolling resistance of the tyre that has the lowest load index within each index class must be specified.
- Description according to Appendix 2 of the test institution that has performed the tests.

Retreaded tyres:

- The average results of test performed according to ISO 8767 on at least two tyres from each tyre category and/or load class must fulfil the requirements specified above. The rolling resistance of the tyre that has the lowest load index within each index class must be specified.
- The trade name of the tread pattern and carcass type of the tested tyres.
- Description of how the carcasses are identified.

- ☒ Description according to Appendix 2 of the test institution that has performed the tests.

K3 Tyre noise

The average tyre noise must not exceed the limit values in Table 4 or 5 measured in accordance with ISO 13325 or equivalent, or EU legislation in force. The noise measurements must be performed on a test track complying with ISO 10844 or be convertible to values equivalent to results from such a surface.

Table 4 and 5 specify the limit values, corrected for temperature (except for C3 tyres) and instrument inaccuracy and rounded to the closest integer.

Table 4. Tyres of Class C1 listed by nominal width of the test tyre.

Tyre class	Nominal width (mm)	Limit value in dB(A)
C1a (new)	≤ 185	69
C1b (new)	$185 \leq 215$	70
C1c (new)	$215 \leq 245$	70
C1d (new)	$245 \leq 275$	71
C1e (new)	> 275	73

Table 5. Tyres of class C2 and C3 listed by use category.

Tyre class		Limit value in dB(A)
C2	Normal	71
	Drive wheels	72
C3	Normal	72
	Drive wheels	74

- ☒ Test results according to ISO 13325 or equivalent for a representative tyre for each carcass type to be ecolabelled. The widest nominal width within each range must be tested for each tread pattern.
- ☒ Description according to Appendix 2 of the test institution that has performed the tests.
- ☒ For retreaded tyres, the trade name of the tread pattern and carcass type of the tested tyres must also be specified.

K4 Content of lead and cadmium impurities in zinc oxide

Lead (Pb) and cadmium (Cd) impurities in zinc oxide (ZnO) must be documented by either a declaration or test results demonstrating that the zinc oxide fulfils the requirements regarding Pb and Cd impurities, or through calculations showing that the quantities of Pb and Cd impurities from the zinc oxide in the finished tyre fulfil the requirement.

Nordic Ecolabelling

Vehicle tyres 066/3.0

9 Mars 2009

If ZnO is purchased from several suppliers, the total as an annual average of Pb and Cd impurities per unit mass ZnO must fulfil the requirement.

The quantity of lead and cadmium impurities in the zinc oxide must not exceed:

- 0.10% for lead
- 0.01% for cadmium

Alternatively, the applicant may document that the quantity of lead per kilo of tyre does not exceed 0.00155% by weight and that the quantity of cadmium per kilo of tyre does not exceed 0.000155% by weight.

- Declaration from the chemical producer or a material safety data sheet specifying the concentration of Pb and Cd in the zinc oxide. The material safety data sheet must be less than three years old.
- If ZnO is purchased from several suppliers, the quantity purchased from each supplier and quantity of Pb and Cd impurities per batch must be documented.
- Alternatively, the quantity of ZnO in the tyre and quantity of impurities (Pb and Cd) per unit mass of finished tyre must be submitted.

K5 Organic solvents

The consumption of volatile organic solvents² during tyre production (e.g. hexane and heptane) must not exceed 0.04 per cent of the tyre's weight.

- Declaration from the manufacturer on the consumption of solvents. Appendix 3 may be used.

K6 Production waste

Waste that is suitable for material or energy recovery (rubber, paper, metal and plastics) shall be sorted at source so that as much waste as possible is recycled.

- A description of how sorting is operated and details of the quantities of waste.
- A statement of who processes the waste and how the waste is processed.

K7 Consumer information

The following information must be made available in the local Nordic language for each ecolabelled tyre:

- The tyre's environmental characteristics with factors that are significant to safety and durability.
- Directions for the use and care of the tyre.

² Volatile organic compounds (VOC) 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. Volatile organic substances that include one or more benzene ring are referred to as volatile aromatic compounds.

- An example of the text/information provided to consumers.

K8 Labelling

The tyre must be type approved to ECE regulation 30, Council Directive 92/23/EEC or ECE regulation 108 on retreaded tyres.

- Declaration that the tyre model(s) is (are) approved to the appropriate regulation.

1.2 Special requirements

Bus and truck tyres (load index ≥ 121) must also fulfil requirement R9 and all types of retreaded tyres must also fulfil requirements R10 and R11.

1.2.1 Bus and truck tyres

K9 Environmentally hazardous and harmful substances

The total quantity of protective agents that are added to the tread rubber (anitozonants and antioxidants) and that are classified with risk phrase(s) R45, R46, R49, R50+R53, R51+R53, R52+R53, R60 or R61, must not exceed 0.85 per cent by weight of the tread rubber.

Classification according to EU Dangerous Substance Directive 67/548/EEC with amendments for REACH according to Council Directive 2006/121/EC, and EU Dangerous Preparation Directive 1999/45/EC with amendments. The classifications may require translation for the transition to the Globally Harmonised System (GHS).

- Specification of the type and quantity of protective agents in the tread rubber.
- Material safety data sheets for the protective agents used in the tread rubber and their substance classifications. The material safety data sheets must be less than three years old.

1.2.2 Retreaded tyres

K10 Weight variations for passenger car tyres (Class C1)

The weight of retreaded tyres of a certain type may vary a maximum of $\pm 5.0\%$ from the nominal weight.

- Specification by the applicant of the nominal weight of each tyre type. The specification shall also describe how the weight variation of the tyres is checked/monitored.

K11 Labelling of the carcass of bus and truck tyres (Class C2 and C3)

Retreaded tyres must be labelled so that it is possible to identify the carcass type for future retreading.

- Specification/description of the labelling system for retreaded tyres demonstrating fulfilment of the requirement.

1.3 Safety aspects

K12 Passenger car tyres: roadholding in wet/winter conditions

The tyre's friction characteristics (i.e. roadholding in the wet for summer tyres and grip on snow/ice for winter tyres) must be equal to or better than equivalent tyres on the Nordic markets. Testing shall be performed on a solitary wheel in accordance with ECE item 13, Council Directive 71/320/EEC or equivalent test method.

- The applicant must justify their choice of reference tyre.
- A test report that demonstrates that the friction characteristics of the tread pattern (roadholding in the wet for summer tyres and grip on snow/ice for winter tyres) must be equal to or better than equivalent tyres with good performance.
- Description according to Appendix 2 of the test institution that has performed the tests.

K13 Durability

Nordic Ecolabelled tyres must offer good durability/service life. New tyres of class C1 shall be tested according to ECE 30, and class C2 and C3 tyres according to ECE 54.

Retreaded tyres of class C1 shall be tested according to ECE 108, and class C2 and C3 tyres according to ECE.

The requirements of ECE regulations concerning durability must be fulfilled

- Durability test results for at least two tyres that demonstrate that the appropriate ECE regulations are fulfilled.
- Description according to Appendix 2 of the test institution that has performed the tests.

2 Quality and regulatory requirements

To ensure that Nordic Ecolabelling requirements are fulfilled, the following procedures must be implemented.

If the licensee's environmental management system is certified to ISO 14 001 or EMAS, where the following procedures are applied, it is sufficient if the accredited auditor certifies that the requirements are implemented. The tyre manufacture must have a certified environmental management system.

K14 Laws and regulations

The licensee must guarantee adherence to safety regulations, working environment legislation, environmental legislation and conditions/concessions specific to the operations at all sites where the Swan-labelled product is manufactured.

- Declaration from the licensee that the requirement is fulfilled.

Nordic Ecolabelling

Vehicle tyres 066/3.0

9 Mars 2009

K15 Licence administrators

The company (and always the tyre manufacturer) shall appoint an individual responsible for ensuring the fulfilment of Swan requirements, and a contact person for communications with Nordic Ecolabelling.

- A chart of the company's organizational structure detailing who is responsible for the above.

K16 Documentation

The licensee must be able to present a copy of the application, and factual and calculation data supporting the documents submitted on application (including test reports, documents from suppliers and suchlike).

- ☺ Checked on site.

K17 Quality of the vehicle tyres

The licensee (and where applicable, the tyre manufacturer) must guarantee that the quality of production of the Nordic Ecolabelled vehicle tyres does not decline during the licence period.

- Procedures for collating and, where necessary, dealing with claims and complaints regarding the quality of the Nordic Ecolabelled vehicle tyres.

K18 Planned changes

Written notice must be given to Nordic Ecolabelling of planned changes that have a bearing on the Nordic Ecolabelling requirements.

- Procedures demonstrating how planned changes are dealt with by the licensee (and always by the tyre manufacturer).

K19 Unplanned nonconformities

Unplanned nonconformities that have a bearing on the ecolabelling requirements must be reported to Nordic Ecolabelling in writing and journalled.

- Procedures demonstrating how unplanned nonconformities are dealt with by the licensee (and always by the tyre manufacturer).

K20 Traceability

The licensee (and tyre manufacturer) must have a traceability system for the production of the Nordic Ecolabelled tyres.

- Description of/procedures for the fulfilment of the requirement.

K21 Take-back system

Relevant national regulations, legislation and/or agreements within the sector regarding the recycling systems for products and packaging shall be met in the Nordic countries in which the Nordic Ecolabelled vehicle tyre is marketed.

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

Sweden: Svensk Däckåtervinning AB, SDAB.

<http://www.svdab.se/>

Finland: Suomen Rengaskierrätys Oy/ Finsk Däckåtervinning AB.

<http://www.rengaskierratys.fi/fi/>

Denmark: Dæk Specialisternes Landsforening.

<http://www.dsl-tyres.dk/>

Norway: Norsk Dekkretur AS

<http://www.dekkretur.no/>

Iceland: Úrvinnslusjóður/ Icelandic Recycling Fund

<http://www.urvinnslusjodur.is/>

Declaration from the applicant regarding adherence to existing recycling/take-back agreements for vehicle tyres.

K22 Marketing

Marketing of the Nordic Ecolabelled vehicle tyres with low rolling resistance shall comply with "Regulations for Nordic Ecolabelling" of 12 December 2001 or later version.

Appendix 1 shall be signed by the contact person for Nordic Ecolabelling and the marketing manager.

Appendix 1 duly completed.

Marketing

The Nordic Ecolabel, the Swan, is a very well-known and well-reputed trademark in the Nordic region. Nordic Ecolabelled vehicle tyres with low rolling resistance may be marketed using the Swan label as long as the associated licence is valid.

The label must be positioned so that there is no doubt as to what the label refers and so that it is clear that the vehicle tyre is ecolabelled.

More information on marketing can be found in "Regulations for Nordic Ecolabelling" of 12 December 2001 or later version.

Design of the Nordic Ecolabel

Design of the Nordic Ecolabel:

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009



Licence number

Each licence has a unique six-digit licence number that must be displayed along with the label.

More information on the design of the label can be found in "Regulations for Nordic Ecolabelling" of 12 December 2001 or later version.

Follow-up inspections

Nordic Ecolabelling may decide to check whether the vehicle tyres and their production fulfil Nordic Ecolabelling requirements during the licence period. This may involve a site visit, random sampling or similar test.

The licence may be revoked if it is evident that the vehicle tyres or production do not meet the requirements.

Random samples may also be taken in-store and analysed by an independent laboratory. If the requirements are not met, Nordic Ecolabelling may charge the analysis costs to the licensee.

How long is a licence valid?

Nordic Ecolabelling adopted the criteria for vehicle tyres with low rolling resistance on DAY MONTH YEAR. The criteria are valid until DAY MONTH YEAR.

An ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence is automatically extended and the licensee informed.

Revised criteria shall be published at least one year prior to the expiry of the present criteria. The licensee is then offered the opportunity to renew their licence.

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

New criteria

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

Appendix 1

Marketing of Nordic Ecolabelled vehicle tyres with low rolling resistance

We hereby certify that we are well acquainted with the regulations governing the use of the Swan ecolabel, as detailed in "Regulations for Nordic Ecolabelling" of 12 December 2001 or later version. We agree to follow these regulations when marketing the Nordic Ecolabelled vehicle tyres.

Further, we confirm that we are familiar with the criteria document regarding the Nordic Ecolabelling of vehicle tyres with low rolling resistance.

We undertake to advise those individuals within the company involved in marketing the Nordic Ecolabelled vehicle tyres of the criteria for the Nordic Ecolabelling of vehicle tyres with low rolling resistance and "Regulations for Nordic Ecolabelling" of 12 December 2001 or later version.

Location and date

Company

Signature, contact person

Clarification of signature

Phone

Signature, marketing manager

Clarification of signature

Phone

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

In case of a change in personnel, a new declaration must be submitted to Nordic Ecolabelling.

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

Appendix 2

Analysis and test laboratories

Requirements on the analysis laboratory

The analysis laboratory used shall fulfil the general requirements of standard EN ISO 17025 or have official GLP status.

The applicant's own analysis laboratory/test procedure may be approved for analysis and testing if:

- a.** the analyses and tests are monitored by the authorities, or if
- b.** the manufacturer has a quality management system encompassing sampling and analysis and has been certified to ISO 9001 or ISO 9002, or
- c.** the manufacturer can demonstrate that it is consistent with the initial analysis/testing performed as a parallel analysis/test by an accredited laboratory and the manufacturer's own laboratory and that the manufacturer takes samples in accordance with a predetermined sampling programme.

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

Appendix 3

Declaration on organic solvents used during production

Whenever possible, the actual consumption of organic solvents in the production of ecolabelled tyres shall be specified.

Solvent name:

Quantity of organic solvent used during production:

_____ % by weight of the ecolabelled tyre.

The consumption of organic solvents in production can also be specified using the table below.

Manufacturers of new tyres shall complete the row for new tyres and retreaders the row for retreaded tyres. Producers may also document the consumption of organic solvents in another way.

Example calculation: *A production plant produces 10,000 tons of tyres/year, of which 100 tons are ecolabelled. 10 000 kg of organic solvents are consumed at the plant each year.*

The proportion of ecolabelled tyres is: 100 ton / 10,000 ton = 0.01 (= 1%)

*The consumption of solvent: 0.01 * 10,000 kg = 100 kg of solvent.*

The solvent consumption per tyre is therefore 100 kg / 100 ton = 0.001 (= 0.10%).

	Annual consumption of organic solvents (weight)	Number or weight of ecolabelled tyres produced	Consumption of organic solvent for ecolabelled tyres (g/tyre and % by weight)
Production of new tyres			
Production of retreaded tyres			

Signature of the producer or retreader:

(Date)

(Company name)

(Contact person)

(Phone/Fax)

Appendix 4

Classification of vehicle tyres

1. Tyre types shall be classified according to the following classes:

- a) Class C1 tyres – tyres designed for vehicle categories M1, O1 and O2.
- b) Class C2 tyres – tyres designed for vehicles heavier than 3.5 tons in categories M2, M3, N, O3 and O4 with a load index (single mounted axle) ≤ 121 and speed rating \geq “N”.
- b) Class C3 tyres – tyres designed for vehicles heavier than 3.5 tons in categories M1, M2, M3, N2, N3, O3 and O4 with the following indices:
- i) load index for single mounted axle ≤ 121 and speed rating \leq “M”.
 - ii) load index for single mounted axle ≥ 122 .

A tyre type may be classified in more than one class provided that the tyre type fulfils all pertinent requirements for the classes in question.

2. The list of load indices and equivalent weights found in FN/ECE regulation 54 shall be used.

Load index – index for the maximum load with which the tyre can be loaded.

Load Index	Maximum wheel load in kg
62	265
63	272
64	280
65	290
66	300
67	307
68	315
69	325
70	335
71	345

Load Index	Maximum wheel load in kg
95	690
96	710
97	730
98	750
99	775
100	800
101	825
102	850
103	875
104	900

Nordic Ecolabelling
Vehicle tyres 066/3.0
9 Mars 2009

72	355
73	365
74	375
75	387
76	400
77	412
78	425
79	743
80	450
81	462
82	475
83	487
84	500
85	515
86	530
87	545
88	560
89	580
90	600
91	615
92	630
93	650
94	670

105	925
106	950
107	975
108	1000
109	1030
110	1060
111	1090
112	1120
113	1150
114	1180
115	1215
116	1250
117	1285
118	1320
119	1360
120	1400
121	1450
122	1500
123	1550
124	1600
125	1650
126	1700