BLUE ANGEL

The Environmental Label

Low-Emission Thermal Insulation Material and Suspended Ceilings for Indoor Use

DE-UZ 132

Basic Award Criteria

Edition January 2020

Version 6

The environmental label is underpinned by the following institutions:

Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

The Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Cosnumer Protection (Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz) is the owner of the label. It regularly provides information on the decisions taken by the Environmental Label Jury.

Umwelt Bundesamt

The Federal Environmental Agency (Umweltbundesamt) in the specialist department "Ecodesign, Eco-Labelling and Environmentally friendly Procurement" acts as the office of the Environmental Label Jury and develops the specialist criteria in the form of the Basic Award Criteria for the Blue Angel environmental labels.

Jury Umweltzeichen

The Environmental Label Jury is the independent, decision-making body for the Blue Angel and includes representatives from environmental and consumer associations, trade unions, industry, the trade, crafts, local authorities, academia, the media, churches, young people and the German federal states.

RAL gGmbH

RAL gGmbH is the awarding body for the environmental label. It organises the process for developing the relevant award criteria in independent, expert hearings – which involve all relevant interest groups.

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Version 6 (01/2024): Prolongation without changes, Expirx date: December 31, 2026

Table of Contents

1 Introduction

1.1 Preface

In cooperation with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, the Federal Environmental Agency and considering the results of the expert hearings conducted by RAL gGmbH, the Environmental Label Jury has set up these Basic Criteria for the Award of the Environmental Label. RAL gGmbH has been tasked with awarding the Environmental Label.
Upon application to RAL gGmbH and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH, the permission to use the Environmental Label may be granted to all products, provided that they comply with the requirements as specified hereinafter.
The product must comply with all the legal requirements in the country in which it is to be marketed. The applicant shall declare that the product meets these conditions.

1.2 Background

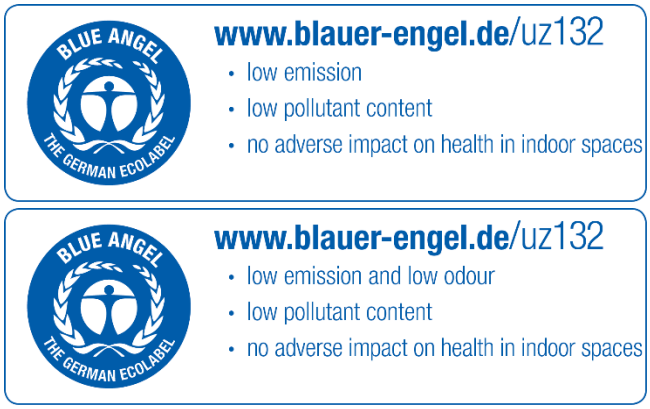
Thermal insulation material and suspended ceilings make a significant contribution to saving energy and improving energy efficiency in buildings and other indoor spaces.
Pollutant emissions from thermal insulation material and suspended ceilings for indoor use must be low in order to place the lowest possible burden on the environment and health. The environmental label is designed for the labelling of low-emission products.
In order to evaluate the emissions from thermal insulation material and suspended ceilings, the design of these Basic Award Criteria has been based on the evaluation procedure (AgBB procedure) developed by the Committee for Health-Related Evaluation of Building Products – a committee of experts from environmental and health authorities at a federal government and state level.
The environmental label places requirements on the materials and substances added during the manufacturing process as well as on the usage phase and disposal of the containers and any residual product left in the container. The proper processing of the products to e.g. avoid thermal bridges is also important.

1.3 Objectives of the environmental label

The environmental label for "Low-Emission Thermal Insulation Material and Suspended Ceilings for Indoor Use" may be awarded to products that – above and beyond the legal regulations:

- are manufactured using substances and materials that place less burden on the environment,
- in particular, do not contain any critical ingredients,
- do not have an adverse impact on health in indoor spaces,
- do not contain any harmful substances that have a detrimental impact during disposal.

Therefore, the following benefits for the environment and health are stated in the explanatory box:



2 Scope

These Basic Award Criteria apply to

- thermal insulation material for buildings manufactured in the factory or at the point of use for the fields of application:
  - WI - interior insulation of walls
  - WZ - insulation of double-leaf walls
  - WH – insulation of timber frame and timber panel constructions
  - WTR – insulation of partition walls
  - DI - interior insulation of the ceiling (on the underside) or roof
  - DZ – intermediate rafter insulation
  - DEO – interior insulation of the ceiling or base plate (on the upper side) without sound-proofing requirements
  - DES – interior insulation of the ceiling or base plate (on the upper side) with sound-proofing requirements)

  from DIN 4108-10[1] according to DIN EN 13162 bis 13171, DIN EN 16069, DIN EN 14063[2], DIN EN 14064, DIN EN 14315, DIN EN 14316, DIN EN 14317, DIN EN 14318, DIN EN 15101, DIN EN 16809, EAD 040005-00-1201, EAD 040729-00-1201, EAD 040461-00-1201, EAD-040138-00-1201, EAD 040010-00-1201 or EAD-040138-01-1201

- thermal insulation material manufactured in the factory or at the point of use in accordance with the relevant general construction technique permit using directories "23 Baustoffe und Bauarten für den Wärmeschutz"[3] (Building materials and constructions methods for thermal insulation) and "43 Feuerungsanlagen"[4] (Furnaces), although only those products intended for the specialist areas of thermal insulation or impact sound insulation materials and when

[1] DIN 4108-10: Thermal insulation and energy economy in buildings - Part 10: Application-related requirements for thermal insulation materials - Factory made products. Edition 2015-12 or the currently valid version.
[2] The standards for thermal insulation material manufactured at the point of use generally consist of two standardised components, which are not listed here individually for the sake of clarity.
[3] https://www.dibt.de/fileadmin/verzeichnisse/NAT_n/vSVA_23.htm
[4] https://www.dibt.de/fileadmin/verzeichnisse/NAT_n/vSVA_43.htm

their use for interior insulation is listed as a field of application according to the approval certificate.
- suspended ceilings according to DIN EN 13964.
- thermal insulation products for building equipment according to DIN EN 14303 to 14309, DIN EN 14313, DIN EN 14314, DIN EN 14319, DIN 14320, DIN EN 15501, DIN EN 15599, DIN EN 15600 that are manufactured in the factory or at the point of use.

The insulation material named above must comply with the technical building rules in the Model Administrative Provisions – Technical Building Rules (Muster-Verwaltungsvorschrift Technische Baubestimmungen - MVV TB[5]) or the corresponding rules for their implementation in the German federal states.

These Basic Award Criteria also apply to
- insulation material according to MED/3.13: "Non-combustible materials" and the lamination of the insulation material according to MED/3.18a: "Surface materials and floor coverings with low flame-spread characteristics — decorative veneers" from Directive 2014/90/EU on marine equipment, amended by the relevant Commission Implementing Regulation (most recently 2019/1397[6]), whose conformity is labelled.

The Environmental Label Jury may include other thermal insulation material and suspended ceilings within the scope of validity of the Basic Award Criteria on the recommendation of the Federal Environmental Agency (Umweltbundesamt).

The short description "insulation material" will be used below for all products.

3 Requirements

The insulation material named under Paragraph 2 can be labelled with the environmental label illustrated on the first page of these Basic Award Criteria if they fulfil the following requirements.

3.1 Manufacture

3.1.1 General substance requirements

The components of the insulation material may not contain or split off any substances or mixtures[7] with the following properties as a constituent component[8]:

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[5] Publication of the Model Administrative Provisions – Technical Building Rules (Muster-Verwaltungsvorschrift Technische Baubestimmungen - MVV TB). Edition 2019/1 or the currently valid version. Official Announcement. German Institute for Structural Engineering (Deutsches Institut für Bautechnik).(https://www.dibt.de/fileadmin/dibt-website/Dokumente/Referat/P5/Technische_Bestimmungen/MVVTB_2019.pdf)

[6] COMMISSION IMPLEMENTING REGULATION (EU) 2019/1397 of 6 August 2019 on design, construction and performance requirements and testing standards for marine equipment and repealing Implementing Regulation (EU) 2018/773

[7] Terms in the sense of § 3 German Chemicals Act (ChemG) in the version published on 28 August 2013 (BGBl. I p. 3498, 3991) or the currently valid version.

[8] Constituent components are substances added to the product as such or as part of a mixture and remain there unchanged in order to achieve or influence certain product properties and those required as chemical cleavage products for achieving the product properties. This does not apply to residual monomers that have been reduced to a minimum.

[1] Substances which are identified as particularly alarming under the European Chemicals Regulation REACH[9] (1907/2006/EC) and which have been incorporated into the list drawn up in accordance with Article 59, Paragraph 1 of the REACH Regulation (so-called "SVHC list of candidates").[10]

[2] Substances that according to the CLP Regulation (EC) No. 1272/2008[11] have been classified in the following hazard categories or which meet the criteria for such classification[12]:

- carcinogenic in categories Carc. 1A or Carc. 1B[13]
- germ cell mutagenic in categories Muta. 1A or Muta. 1B
- reprotoxic (teratogenic) in categories Repr. 1A or Repr. 1B
- acute toxicity (poisonous) in categories Acute Tox. 1, Acute Tox. 2 or Acute Tox. 3
- specific target organ toxicity in categories STOT SE 1 or STOT RE 1
- hazardous to water in categories Aquatic Acute 1, Aquatic Chronic 1 or Aquatic Chronic 2

The hazard statements (H Phrases) that correspond to the hazard categories can be found in Appendix A.

[3] Substances that are classified in TRGS 905[14] as:

- Carcinogenic (K1A, K1B)
- Germ cell mutagenic (M1A, M1B)
- Reprotoxic (R_F1A, R_F1B)
- Teratogenic (R_D1A, R_D1B)

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 2). At the expiry/extension date for the Basic Award Criteria, the applicant shall submit new declarations from the manufacturers/suppliers.

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[9] Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), in short REACH.

[10] The version of the list of candidates at the time of application is valid. The list of candidates in its relevant version can be found at: REACH list of candidates.

[11] Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures, short: CLP (Classification, Labelling and Packing). Supplementary legislative acts with respect to the CLP Regulation must also be observed (see e.g. https://www.reach-clp-biozid-helpdesk.de/DE/CLP/Rechtstexte/Rechtstexte_node.html))

[12] The harmonized classifications and labellings of dangerous substances can be found in Annex VI, Part 3 of the CLP Regulation. Furthermore, a comprehensive classification and labelling inventory, which also includes all of the self-classifications of hazardous substances made by manufacturers, has been made available to the public on the website of the European Chemicals Agency: ECHA classification and labelling inventory.

[13] Substances classified as carcinogenic 1A or 1B for which the most sensitive endpoint for a threshold at which there is no further indication of a carcinogenic potential can be determined and for which a LCI value can be determined on this basis and are stated in Table 1 of the AgBB evaluation procedure for VOC from building products are exempt from this rule.

[14] TRGS 905, directory of carcinogenic, mutagenic or teratogenic substances from the Committee for Hazardous Substances (AGS): TRGS 905. The current version at the time of application is valid. The TRGS lists such CMR substances that have not received harmonised classifications up to now or where the AGS has come to a different classification.

3.1.2 Halogens

No halogenated organic compounds may be used in the manufacture of the insulation material (e.g. as a binding agent, flame retardant or dirt-repellent finish).

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 2). If the applicant cannot declare compliance with the requirement, the contents of the halogens fluorine, chlorine and bromine must be determined by means of combustion analysis in accordance with DIN EN 14582[15] and the proportion of tolerable impurities may not exceed 1 g/kg.

3.1.3 Flame retardants

The insulation material may not contain any flame retardants classified as persistent, bioaccumulative and toxic (PBT) substances or as very persistent and very bioaccumulative (vPvB) substances according to the criteria of Annex XIII to the REACH Regulation 1907/2006/EC. If flame retardants are used, they must be named by the applicant (name, CAS no).

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 2).

3.1.4 Plasticisers

Products that contain plasticising substances from the group of phthalates or group of organophosphates or other comparable substances with a high boiling point as a plasticiser according to VdL Guideline 01[16] may not be added to the insulation material.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 2). If a verification test is required, the content of phthalates shall be determined by means of extracting a material sample and analysing it using the GC/MS method. The quantitative determination of the target substances shall be carried out using a substance-specific reference mixture. The content of phthalate impurities in the product shall not exceed 0.1% by mass.

[15] DIN EN 14582: Characterization of waste - Halogen and sulfur content - Oxygen combustion in closed systems and determination methods.

[16] Guideline on the declaration of paints, lacquers, varnishes, renders, fillers, primers and related products (VdL Guideline 01): http://www.wirsindfarbe.de/service-publikationen/vdl-richtlinien/

3.1.5 Requirements for the insulation material

3.1.5.1 Mineral wool

Insulation material made of mineral wool may only be added if it complies with the requirements of the RAL Quality Mark for "products made of mineral wool" from the Quality Assurance Association Mineralwolle e.V.[17]

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 and submit corresponding verifications from the manufacturers/suppliers (Annex 3).

Mineral fibres can have temporary, short-term effects on the skin. Therefore, insulation material made of mineral wool must include information about the application of the material on the packaging or the enclosed instruction leaflet, e.g. in the form of pictograms or notices.

Compliance verification

The applicant shall submit the text printed on the packaging or the enclosed instruction leaflet (Annex 4).

3.1.5.2 Foamed insulation material

No halogenated organic compounds may be used as blowing agents (e.g. fluorinated greenhouse gases [HFCs] or chloropropane) in the production of the insulation material. The name of the blowing agent used must also be stated (Name, CAS no.).

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 3).

3.1.5.3 Biocides

No biocides[18] may be added to the insulation material.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 3).

3.1.5.4 Wood-based insulation material

It must be ensured that all of the wood processed originates from legal sources. In addition, at least 70% of the wood must be sourced from forests that can verify that they are managed in accordance with a forest certification system established in Germany or from waste wood in waste wood categories AI and AII according to the German Waste Wood Ordinance.

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[17] The quality mark statutes and the Quality Assurance and Test Specifications of the Quality Assurance Association Mineralwolle e.V.and other information can be found on the website of the Quality Assurance Association Mineralwolle e.V.: https://www.ral-mineralwolle.de/home.html.

[18] Biocides in the sense of these Basic Award Criteria are "substances" and "biocidal products" according to Article 3 of Regulation (EU) No. 528/2012 concerning the making available on the market and use of biocidal products.

Compliance verification

The applicant shall verify the legality of the wood sources in accordance with EU Regulation no. 995/2010 in Annex 1 or submit corresponding declarations from the manufacturers/suppliers (Annex 3). In order to verify the use of wood from certified forestry, the applicant shall submit suitable certificates[19] from its raw materials suppliers (Annex 5). Certificates from the Forest Stewardship Council (FSC), Naturland and the PEFC (Programme for the Endorsement of Forest Certification Schemes) verifying certified forestry and a chain of custody (CoC) will be accepted. The applicant shall submit a record of the woods used according to Annex 6 that specifies the percentage of the certified woods used.

3.1.6 Requirements for the coatings

[1] Dyes and pigments containing lead, cadmium or chromium VI compounds may not be used. Process-related and technically unavoidable (natural or production-related) impurities may be contained in the dye/pigment up to a maximum of 100 mg/kg, or 200 mg/kg for lead.

[2] Coatings containing alkylphenol ethoxylates (APEO) and/or their derivatives may not be added.

[3] Dyes and pigments containing plasticizers in the sense of VdL Guideline 01[20] may only be added in quantities that do not exceed a maximum plasticizer content of 1 g/m² in the finished coating.

Compliance verification

The applicant shall verify compliance with the requirement by submitting declarations from the manufacturers or distributors of the products used. In addition, the applicant shall name the trade names and suppliers of all individual intermediates (raw materials) of the coatings for the products made of insulation material.
The applicant shall submit

- *a declaration from the dye/pigment manufacturer (Annex 7) to verify compliance with Paragraph 3.1.6 Number 1 and*
- *an applicant declaration (Annex 1) to verify compliance with Paragraph 3.1.6, Numbers 2 and 3, and a declaration from the intermediate manufacturer (Annex 7) for Number 2.*

[4] Preservation (contrary to Paragraph 3.1.1, Number 1 and 2): The coatings may not contain any Biocides. In-can preservatives on the list of approved in-can preservatives are permitted. (See Appendix B)

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 and submit corresponding declarations from the manufacturers/suppliers (Annex 7).

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[19] The list of approved certificates may be expanded on request and with the approval of the Environmental Label Jury.

[20] Guideline on the declaration of paints, lacquers, varnishes, renders, fillers, primers and related products (VdL Guideline 01): http://www.wirsindfarbe.de/service-publikationen/vdl-richtlinien/

3.2 Use

3.2.1 Indoor air quality

Based on the "AgBB evaluation procedure for VOC from building products"[21] developed by the Committee for Health-Related Evaluation of Building Products, products according to Paragraph 2 must not exceed the emission values stated in Table 1 in the test chamber.

[21] "Requirements for indoor air quality in buildings: Health-related Evaluation Procedure for Volatile Organic Compounds Emissions (VVOC, VOC and SVOC) from Building Products" (AgBB procedure), Federal Environmental Agency website, in its currently valid version: https://www.umweltbundesamt.de/themen/gesundheit/kommissionen-arbeitsgruppen/ausschuss-zur-gesundheitlichen-bewertung-von#agbb-gesundheitliche-bewertung-der-emissionen-von-fluchtigen-organischen-verbindungen-aus-bauprodukten

Table 1: Emissions values

Substance	Requirements Final value 28 days[22]
Total organic compounds within the retention range C_6 – C_{16} (TVOC)[23]	≤ 100 µg/m³
Total organic compounds within the retention range > C_{16} – C_{22} without LCI ($TSVOC_{without\ LCI}$)	≤ 20 µg/m³
Total organic compounds within the retention range > C_{16} – C_{22} with LCI ($TSVOC_{LCI}$)	≤ 80 µg/m³
Acetic acid	≤ 140 µg/m³
C-substances[24]	≤ 1 µg/m³ **for each single value**
Total VOC without LCI[25,26]	≤ 50 µg/m³
R-value	≤ 1
Formaldehyde	≤ 60 µg/m³
Acetaldehyde	≤ 120 µg/m³

The taking, storage and transport of the insulation material samples and the production and preparation of the test specimens must be completed in accordance with the guidelines in Chapter 5 of DIN EN 16516. The load for the test chamber measurement should be selected based on the field of application stated by the manufacturer (1.0 m^2/m^3 for walls; 0.4 m^2/m^3 for floors or ceilings; 0.8 m^2/m^3 for floors and ceilings; 1.0 m^2/m^3 for walls and floors or ceilings; 1.0 m^2/m^3 for walls, floors and ceilings; maximum loading of the chamber = 30 %). Marine insulation material should be tested with a load of 1.0 m^2/m^3, while insulation material for technical building equipment and building technology should be tested with a load of 0.4 m^2/m^3. Only the surface facing into the room should be used for the load. All open edges and the rear (alternatively, the test sample can be fixed to the chamber wall) should be sealed using an inert material, e.g. low-emitting tape or aluminium foil. The emissions from the material used to cover the edges should be determined before the start of the test and documented internally at the laboratory. In the case of thermal insulation panels, the largest available insulation thickness should be selected (worst case).

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[22] Every test result must be expressed with at most two significant figures, for values under 10 µg/m³ only with one significant figure. Examples:
— 49.5 and 50.4 are expressed as 50;
— 95.0 and 104.9 are expressed as 100.

[23] Excluding acetic acid and acetaldehyde

[24] C-substances are carcinogenic substances classified as Carc. 1A or Carc. 1B according to the CLP Regulation (EC) No. 1272/2008 or evaluated and classified as category K1A or K1B according to TRGS 905.

[25] Including non-identifiable substances

[26] LCI = Lowest Concentration of Interest; see Health-related Evaluation Procedure for Volatile Organic Compounds Emissions (VVOC, VOC and SVOC) from Building Products" (AgBB procedure), Federal Environmental Agency website: https://www.umweltbundesamt.de/themen/gesundheit/kommissionen-arbeitsgruppen/ausschuss-zur-gesundheitlichen-bewertung-von#agbb-gesundheitliche-bewertung-der-emissionen-von-fluchtigen-organischen-verbindungen-aus-bauprodukten

In the case of insulation in the form of bulk material, a test bath that is open at the top should be filled with the material to a height of at least 200 mm and horizontally to the bulk density specified by the manufacturer.
The emissions are measured in accordance with DIN EN 16516. The test can be terminated at an early stage (at the earliest on the 7th day after preparing the test sample) if the permissible emission values for the 28th day have been reached early and no increase in concentration has been observed in comparison to the measurement on the 3rd day.

The optional odour emission test according to Paragraph 3.2.2 should be carried out in combination with the test for indoor air quality.

Compliance verification

The applicant shall submit a test report according to the requirements in Table 1 based on the DIN EN 16516 standard (must not be more than 24 months old) for each product group[27] that includes information on the field of application for the product and verifies compliance with this requirement (Annex 8). If the LCI list has been updated after carrying out the test, the applicant shall submit an evaluation based on the current LCI list. If the product is manufactured at different production locations, the applicant shall guarantee and declare that the requirements stated above have also been complied with at all of the production locations. The test and evaluation must be carried out by a testing institution recognised for this test by BAM (Bundesanstalt für Materialforschung und Prüfung (Federal Institution for Material Research and Testing)).
The format of the test report must be based on DIN EN 16516 [Section 10.6], while the evaluation of the results should be carried out using the ADAM template from the DIBt.
A new test report shall be submitted to RAL gGmbH after an extension to the period of validity of the Basic Award Criteria or a change to the product composition.

3.2.2 Odour (optional)

The test for the odour emissions should be carried out in combination with the emissions test in Paragraph 3.2.1. (Indoor air quality) according to DIN ISO 16000-28, whereby the same criteria for terminating the test at an early stage apply. The tested insulation material must not display an odour intensity of more than 7 pi after 28 days. In the case of a test result of 8 pi, a further measurement can be carried out on the next day. If a value of more than 7 pi is once again measured, the product cannot be advertised as being "low odour". If a maximum value of 7 PI is measured, the product has passed the odour test.

Compliance verification

The applicant shall submit a test report in accordance with DIN ISO 16000-28 in combination with VDI 4302 for the initial test (Annex 8). If requested to do so by RAL gGmbH, the applicant shall submit a test report according to DIN ISO 16000-28 with the follow-up tests for every product group.

[27] A product group is a series of products within the limits of variability of the product parameters (set by the manufacturer or a technical specification) and, if applicable, of the use-related parameters with respect to which the specified safety-related properties remain unchanged (i.e. they do not deteriorate in terms of quality). With respect to the Blue Angel the safety-related properties include the emission behaviour. A product group according to DIN 13172 includes products of identical material composition.

3.2.3 Fitness for use

The insulation material must fulfil the usual quality requirements with respect to fitness for use. It must also fulfil the requirements in the MVV TB or Marine Equipment Regulation and the relevant DIN and DIN EN standards, SOLAS 74 rules or IMO Resolutions that are valid at the time of application, as well as the national technical approvals in each specific case and the ETAs for the insulation material.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 to the contract according to DE-UZ 132.

3.3 Declaration and consumer information

The manufacturer must clearly declare the following information on the product packaging or on a sticker. Alternatively, the manufacturer may make this information available to the dealer, who will make it available to the customer on request.

- Identification of the manufacturer or supplier company,
- Product name and material,
- Field of application,
- Traceability information, e.g. batch number,
- Declaration of performance (CE marking), national technical approval, general construction technique permit or the EC type examination certificate (wheel mark),
- EPD, if available.

The following information and recommendations should be enclosed in an abridged version with the product. Alternatively, the information can also be provided to the customer on request. In this case, it must be stated how the customer, building owner or the site manager can receive a detailed version (e.g. by requesting it from the manufacturer, reference to the manufacturer's website).

- Installation instructions and information,
- In the case of insulation made of bulk materials, the installation must be carried out by a specialist company,
- Information on the disposal of packagings and product residues (e.g. return and recycling possibilities),
- Information on noise protection.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 to the contract according to DE-UZ 132 and submit the corresponding product documentation (e.g. technical data sheets) (Annex 9). The applicant shall submit a product list to RAL gGmbH (Annex 10).

3.4 Advertising claims

Advertising claims must not include any information such as "biologically harmless building materials" or claims in the sense of the CLP Regulation (EC) No. 1272/2008 that could play down the risks such as e.g. "non-toxic", "non-harmful to health" or any advertising of biocidal effects. Products that have passed the optional odour test may be advertised as "low odour".

Compliance verification:

The applicant shall declare compliance with the requirement in Annex 1 to the contract according to DE-UZ 132 and submit the corresponding product documentation (e.g. technical data sheets) (Annex 9).

4 Applicants and parties involved

Manufacturers of products according to Paragraph 2 shall be eligible for application.

Parties involved in the award process are:

- RAL gGmbH to award the Blue Angel environmental label,
- the federal state being home to the applicant's production site,
- Umweltbundesamt, (Federal Environmental Agency) which after the signing of the contract receives all data and documents submitted in application for the Blue Angel in order to be able to further develop the Basic Award Criteria.

5 Use of the Environmental Label

The use of the environmental label by the applicant is governed by a contract on the use of the environmental label concluded with RAL gGmbH.

Within the scope of such contract, the applicant undertakes to comply with the requirements under Paragraph 3 while using the environmental label.

Contracts on the Use of the Environmental Label are concluded to fix the terms for the certification of products under Paragraph 2. Such contracts shall run until 31/12/2026.
They shall be extended by periods of one year each, unless terminated in writing by 31/03/2026 or 31 March of the respective year of extension.
After the expiry of the contract, the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.

The applicant shall be entitled to apply to RAL gGmbH for an extension of the right to use the ecolabel on the product entitled to the label if it is to be marketed under another brand/trade name and/or other marketing organizations.

The Contract on the Use of the Environmental Label shall specify:

- Applicant (manufacturer)
- Brand/trade name, product description
- Distributor (Label User), i.e. the marketing organization.

Appendix A Assignment of hazard categories and hazard statements

The following table assigns the hazard categories stated in Paragraph 3.1.1 to the corresponding hazard statements (H Phrases) according to the CLP Regulation (EC) No. 1272/2008.

Hazard categories	H Phrases	Hazard statements
Carcinogenic substances		
Carc. 1A	H350	May cause cancer.
Carc. 1B	H350	May cause cancer.
Carc. 1A, 1B	H350i	May cause cancer if inhaled.
Germ cell mutagenic substances		
Muta. 1A	H340	May cause genetic defects.
Muta. 1B	H340	May cause genetic defects.
Reprotoxic (teratogenic) substances		
Repr. 1A, 1B	H360D	May damage the unborn child.
Repr. 1A, 1B	H360F	May damage fertility.
Repr. 1A, 1B	H360FD	May damage fertility. May damage the unborn child.
Repr. 1A, 1B	H360Df	May damage the unborn child. Suspected of damaging fertility.
Repr. 1A, 1B	H360Fd	May damage fertility. Suspected of damaging the unborn child.
Acute toxicity substances		
Acute Tox. 1 Acute Tox. 2	H300	Fatal if swallowed
Acute Tox. 3	H301	Toxic if swallowed
Acute Tox. 1 Acute Tox. 2	H310	Fatal in contact with skin
Acute Tox. 3	H311	Toxic in contact with skin
Acute Tox. 1 Acute Tox. 2	H330	Fatal if inhaled
Substances with specific target organ toxicity		
STOT SE 1	H370	Causes damage to organs.
STOT RE 1*	H372	Causes damage to organs through prolonged or repeated exposure.
Environmental hazards		
Aquatic acute 1	H400	Very toxic to aquatic life.
Aquatic chronic 1	H410	Very toxic to aquatic life with long-lasting effects.
Aquatic chronic 2	H411	Toxic to aquatic organisms with long-lasting effects.

* If the classification and toxicological evaluation of the substance is based on the classification of the respirable fraction of the substance (dusts) and does not relate to the substance in general, classification as STOT RE 1 does not represent a criterion for exclusion in accordance with Paragraph 3.1.1 "Exclusion of Substances" (asbestos-containing dust is excluded).

Appendix B List of approved in-can preservatives

The following active substances or active substance combinations can be used alternatively:

Active substance/-combination	Content
a) Titanium dioxide/Silver chloride	≤ 100 ppm referred to Silver chloride
b) 2-Methyl-2H-isothiazol-3-one (MIT) / 1,2-Benzisothiazol-3(2H)-one (BIT); 1:1 mixture	≤ 200 ppm
c) 5-Chlor-2-methyl-4-isothiazolin-3-one (CIT) / 2-Methyl-2H-isothiazolin-3-one (MIT); 3:1 mixture	≤ 15 ppm
d) 3-iodo-2-propynyl butylcarbamate (IPBC)	≤ 80 ppm
e) 1,2-Benzisothiazol-3(2H)-one (BIT)	≤ 200 ppm
f) 2-Bromo-2-nitropropane-1,3-diol (BNPD)	≤ 200 ppm
g) BNPD[1)] + CIT/MIT (3:1)[3)]	≤ 130 ppm + ≤ 15 ppm
h) BNPD[1)] + CIT/MIT (3:1)[3)]	≤ 150 ppm + ≤ 10 ppm
i) BNPD[1)] + CIT/MIT (3:1)[3)]	≤ 170 ppm + ≤ 5 ppm
j) MIT/BIT[2)] (1:1) + CIT/MIT (3:1)[3)]	≤ 150 ppm + ≤ 12,5 ppm
k) MIT/BIT[2)] (1:1) + CIT/MIT (3:1)[3)]	≤ 125 ppm + ≤ 15 ppm
l) 1,2-Dibromo-2,4-dicyanobutane (DBDCB)	≤ 500 ppm
m) BIT[4)] + CIT/MIT (3:1)[3)]	≤ 150 ppm + ≤ 12,5 ppm
n) BNPD[1)] + MIT/BIT[2)] (1:1)	≤ 120 ppm + ≤ 75 ppm
o) Zinc pyrithione (ZNP) + BIT[4) 5)]	≤ 100 ppm + ≤ 100 ppm
p) Zinc pyrithione (ZNP) + MIT/BIT[2)] (1:2 bis 2:1)	≤ 50 ppm + ≤ 150 ppm
q) BNPD[1)] + BIT[2)]	≤ 100 ppm + ≤ 100 ppm
r) Sodium pyrithione (NaP) + BIT[4)]	≤ 50 ppm + ≤ 150 ppm
s) N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (CAS 2372-82-9) + MIT/BIT[2)] (1:1)	≤ 81 ppm + ≤ 150 ppm
t) MIT/BIT[2)] (1:1) + Silver chloride	≤ 185 ppm + ≤ 15 ppm

1) BNPD = see f); 2) MIT/BIT = see b); 3) CIT/MIT (3:1) = see c); 4) BIT = see e); 5) zinc oxide is allowed as adjuvant up to maximum 500 ppm

Only those substances (active substances or biocidal products) may be used as preservatives for which an active substance dossier on the assessment as in-can preservatives product type 6) has been submitted within the scope of the Biocidal Product Regulation ((EU) No. 528/2012). If following the assessment an inclusion of the active substance in the Union List of approved

active substances for product type 6 is denied the use of these substances shall no longer be permitted. This also applies to formaldehyde-releasing agents.

Admission process for other substances

Other preservatives may be used if a MAK value is available and/or sufficient data regarding inhalation toxicity and analytics on the pure active substance and, if applicable, relevant degradation products, isomers and impurities, as well as other by-products of the substance and/or sufficient examinations relating inhalative exposure are submitted to the Federal Environmental Agency for the evaluation and setting of a maximum content.