

# **BLUE ANGEL**

**The German Ecolabel**



## **Low-Emission Internal Plasters**

**DE-UZ 198**

**Basic Award Criteria**

**Edition August 2015**

**Version 2**

## The Environmental Label is supported by the following four institutions:



The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety is the owner of the label. It regularly provides information on the decisions taken by the Environmental Label Jury.



The German Environmental Agency with its specialist department for "Ecodesign, Eco-Labeling and Environmentally friendly Procurement" acts as office of the Environmental Label Jury and develops the technical criteria of the Basic Criteria for Award of the Blue Angel.



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.



The 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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**This document is a translation of a German original. In case of dispute, the original document should be taken as authoritative.**

# 1 Introduction

## 1.1 Preface

In cooperation with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, the German 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 this requirement.

## 1.2 Objectives of the Environmental Label

Internal plasters are used as coating material to cover large surfaces of indoor ceilings and walls. Since they are applied onto large surfaces the emissions from internal plasters into the indoor air should be as little as possible from an environmental and health perspective. Here, the Blue Angel eco-label is a good means to identify low-emission products. To allow the evaluation of emissions from plaster for interior use these Award Criteria are set up by analogy with the evaluation scheme (AgBB evaluation scheme) developed by the Committee for Health-related Evaluation of Building Products (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten) - a joint state and federal government committee composed of experts from German environmental and health authorities. The requirements for award of the Blue Angel refer to both the substances and materials used in the manufacturing process as well as to the period of use and the disposal of packages and product remainders. Also of importance is the proper preparation/application<sup>1</sup> of the products.

Since emissions are often accompanied by odours which may also cause health effects the sensory test is an important element in evaluating the various products for interior use. The DIN ISO 16000-28 standard „Indoor air - Part 28: Determination of odour emissions from building products using test chambers“ of December 2012 provides a measurement method. This standard describes the measurement of odours from building products parallel to the measurements of volatile organic compounds (VOC). That is why the verification of low odour has been adopted as an optional requirement in these Basic Criteria. The Scope comprises mineral plasters and dispersion-based plasters for interior use, with the exception of gypsum-based plasters.

The Blue Angel eco-label for „low-emission internal plasters“ may be awarded to products which – beyond the legal provisions -

- are manufactured by using environmentally less harmful substances and materials,
- have less adverse impact on human health in the living environment,

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<sup>1</sup> DIN 18550-1 /-2

- do not contain any substances that might well impede the intended recycling process.

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



## 2 Scope

These Basic Criteria apply to the following internal plasters<sup>2</sup>:

- Solvent-free paste-like plaster according to DIN EN 15824<sup>3</sup>
- Dry mortar for masonry according to DIN EN 998-1<sup>4</sup>
- Earth plaster according to DIN 18947<sup>5</sup> and stabilizing earth plaster
- Structural paint for use as internal plaster on interior surfaces with a layer thickness of > 400 µm and/or a minimum coverage of < 2m<sup>2</sup>/l.

The term "internal plaster" is used hereinafter to refer to the product groups within the scope.

Excluded are:

- External plasters that are designed for use on exterior surfaces only
- Fillers and repair surfacers as well as adhesives
- Surfacers and adhesives for gypsum boards and gypsum wall boards according to DIN EN 13963<sup>6</sup>
- Dry gypsum plasters according to DIN EN 13279-1<sup>7</sup>

## 3 Requirements

### 3.1 Material Requirements

#### 3.1.1 General Material Requirements

Compliance with the provisions of the European and German chemicals legislation is a prerequisite; with regard to internal plasters this includes, above all, the following: REACH Regulation<sup>8</sup> Annexes XIV and XVII, Persistent Organic Pollutant (POP) Regulation<sup>9</sup> Annex I,

<sup>2</sup> The Environmental Label Jury may include additional internal plasters in the scope of the Basic Award Criteria at the suggestion of the German Umweltbundesamt (Federal Environmental Agency).

<sup>3</sup> DIN EN 15824:2009-10 Specifications for external renders and internal plasters based on organic binders

<sup>4</sup> DIN EN 998 - Specification for mortar for masonry - Part 1: Rendering and plastering mortar

<sup>5</sup> DIN 18947 - Earth plasters - Terms and definitions, requirements, test methods

<sup>6</sup> DIN EN 13963 - Jointing materials for gypsum boards - Definitions, requirements and test methods

<sup>7</sup> DIN EN 13279 - Gypsum binders and gypsum plasters - Part 1: Definitions and requirements

<sup>8</sup> Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

GefStoffV (Ordinance on Hazardous Substances), Industrial Emissions Directive (IED)<sup>10</sup>, the 25<sup>th</sup> BImSchV (25<sup>th</sup> Federal Immission Protection Ordinance)<sup>11</sup>, Biocidal Products Regulation<sup>12</sup>, Decopaints Directive<sup>13</sup> and the CLP Regulation<sup>14, 15</sup>.

In addition, the product must not contain any substances with the following properties as constituent components<sup>16</sup>:

- a) Substances that have been identified as substances of very high concern in accordance with the REACH Regulation<sup>8</sup> and have been included in the list (so-called Candidate List) set up in accordance with REACH, Article 59, paragraph 1.<sup>17</sup>
- b) Substances that have been classified according to the CLP Regulation<sup>14</sup> in the following hazard categories or meet the criteria for such classification<sup>18, 19</sup>:
  - ◆ carcinogenic of category Carc. 1A or Carc. 1B
  - ◆ mutagenic of category Muta. 1A or Muta. 1B
  - ◆ reprotoxic of category Repr. 1A or Repr. 1B
  - ◆ acutely toxic of category Acute Tox. 1, Acute Tox. 2 or Acute Tox. 3
  - ◆ toxic to specific target organs of category STOT SE. 1, STOT SE. 2, STOT RE. 1 or STOT RE. 2
  - ◆ hazardous to the aquatic environment of category Aquatic Acute 1, Aquatic Chronic 1 or Aquatic Chronic 2

The H-Statements corresponding to the hazard classes and categories can be seen from Appendix B.

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<sup>9</sup> Regulation (EC) No 850/2004 on persistent organic pollutants

<sup>10</sup> Directive 2010/75/EU on industrial emissions

<sup>11</sup> 25. Verordnung zur Durchführung des Bundes-Immissionsschutzgesetzes (25th Ordinance for the Implementation of the Federal Immission Control Act) (Ordinance for the limitation of emissions from the titanium dioxide industry)

<sup>12</sup> Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products

<sup>13</sup> Directive 2004/42/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes

<sup>14</sup> Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (short: CLP), replacing the old Directives 67/548/EEC and 1999/45/EC.

<sup>15</sup> Provided that the specific product is subject to additional regulations such rules shall also be complied with.

<sup>16</sup> Constituent components are substances which are added to the product as such or as an ingredient of mixtures in order to achieve or influence certain product properties as well as those which are required as chemical decomposition products to achieve the product properties. They do not include, for example, minimized residual monomers.

<sup>17</sup> The Candidate List as amended at the time of application shall be applicable. It can be found at: [REACH-Kandidatenliste](#).

<sup>18</sup> The list of harmonised classification and labelling of hazardous substances is included in Part 3 of Annex VI to the CLP Regulation. Moreover, a comprehensive classification and labelling inventory is publicly accessible via the website of the European Chemicals Agency ECHA which also includes all manufacturer-provided self-classifications of hazardous substances: [ECHA Einstufungs- und Kennzeichnungsverzeichnis](#).

<sup>19</sup> Substances with additional hazardous properties (among others: CMR substances of category 2) are not excluded here but are reduced by the emission evaluation according to the AgBB scheme (see paragraph 3.1.2 Indoor Air Quality).

- c) Substances classified in TRGS 905<sup>20</sup> as:
- ♦ carcinogenic (K1, K2),
  - ♦ mutagenic (M1, M2),
  - ♦ reprotoxic (R<sub>F</sub>1, R<sub>F</sub>2, R<sub>E</sub>1, R<sub>E</sub>2).
- d) Substances with other hazardous substances being present in concentrations that require a classification and labelling of the finished product with a GHS hazard pictogram for health and environmental hazards. Exempted are internal plasters which because of their high pH value during processing must be labelled with the GHS hazard pictogram GHS05 (corrosion) or GHS07 (exclamation mark).

**Compliance Verification:**

*The applicant shall declare compliance with the requirements in Annex 1 to the Contract. In addition, the applicant shall give the trade names and the names of the suppliers of all individual intermediates of the internal plaster as well as their percentage and function in the internal plaster product (Annex 2). For compliance with the criteria the applicant shall additionally submit declarations from the manufacturers/suppliers of the intermediates used (Annex 3) as well as the appropriate Material Safety Data Sheets of the internal plaster and the intermediates used (Annex 4).*

**3.1.2 Volatile Organic Substances, Indoor Air Quality**

The internal plasters must not exceed the following emission values in the test chamber in conformity with the „health risk assessment process for emissions of volatile organic compounds (VOC) from building products“ developed by the Ausschuss zur gesundheitlichen Bewertung von Bauprodukten<sup>21</sup> (Committee for Health-related Evaluation of Building Products):

Substance	3rd Day	Final Value (28th Day)
Total organic compounds within the retention range C <sub>6</sub> – C <sub>16</sub> (TVOC)	< 3 mg/m <sup>3</sup>	< 0.3 mg/m <sup>3</sup>
Total organic compounds within the retention range > C <sub>16</sub> – C <sub>22</sub> (TSVOC)	-	< 0.1 mg/m <sup>3</sup>
C substances <sup>22</sup>	< 0.01 mg/m <sup>3</sup> <b>total</b>	< 0.001 mg/m <sup>3</sup> <b>per single value</b>
Total VOC without LCI <sup>23, 24</sup>		< 0.1 g/m <sup>3</sup>

<sup>20</sup> TRGS 905, (Technical Rules for Hazardous Substances 905) – List of carcinogenic, mutagenic or reprotoxic substances of the Committee on Hazardous Substances (AGS): [TRGS 905](#). The TRGS 905 list, as amended at the time of application, shall be applicable (last amended in May 2008 – as of January 2014). The TRGS lists those CMR substances where no harmonised classification exists so far or where the Committee on Hazardous Substances arrives at a different classification. The total CMR list of the statutory accident insurance may also be used as a tool: [CMR-Gesamtliste](#) (Combined list of CMR substances according to CLP Regulation and TRGS 905).

<sup>21</sup> "Health risk assessment process for emissions of volatile organic compounds (VOC) from building products" (AgBB scheme), Homepage of the German Umweltbundesamt (Federal Environmental Agency), <http://www.umweltbundesamt.de/bauprodukte/agbb.htm>

<sup>22</sup> C substances = carcinogenic substances; pursuant to Cat. Carc. 1A / K1 and Cat. Carc. 1B / K2 in accordance with EU classification or TRGS 905

<sup>23</sup> including non-identifiable substances



Substance	3rd Day	Final Value (28th Day)
R value		< 1
Formaldehyde <sup>25</sup>		< 60 µg/m <sup>3</sup>

The loading of the test chamber shall be 1.4 m<sup>2</sup>/m<sup>3</sup> for products for use on ceilings and walls. The field of application must be clearly indicated on the package/container (ceilings and walls; walls only or ceilings only). In cases where the plasters are either designed for walls only or for ceilings only the test chamber shall be loaded depending on the field of application: 0.4 m<sup>2</sup>/m<sup>3</sup> for products designed for use on ceilings only, 1 m<sup>2</sup>/m<sup>3</sup> for products designed for use on walls only. In case of doubt the test shall be made with the maximum load. If so, there is no need to specify the field of application. The test may be stopped prematurely (but not before the 7<sup>th</sup> day after loading) if on each of four consecutive measurement days the admissible emission values are not exceeded and if during this period none of the substances to be detected shows a rise in concentration.

The test specimen shall be prepared using the method of application the manufacturer specifies for processing in the Technical Data Sheet. This particularly applies to homogenization, application and surface finishing.

The optional odour test according to paragraph 3.1.6 shall be made in combination with the test of the indoor air quality.

### **Compliance Verification**

*The applicant shall submit, as Annex 5, a test report prepared by a testing laboratory<sup>26</sup> accredited for such testing by BAM - Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing) which confirms compliance with this requirement. Sample preparation and emission measurements shall be performed in accordance with DIN EN 16402<sup>27</sup> in combination with the DIBT principles for health assessment of construction products used in interiors<sup>28</sup>. Contrary to DIN EN 16402, the TVOC emissions shall be determined in accordance with Annex H to CEN/TS 16516 DIN SPEC 18023<sup>29</sup>. In case of doubt the more precise specifications of the DIBt principles shall prevail. In addition and contrary to DIN EN 16402, a trough is recommended as carrier material for thick-layer systems (layer thickness of 10 - 15 mm). The load used shall be indicated in the test report. In*

<sup>24</sup> LCI = lowest concentration of interest

<sup>25</sup> The 2015 AgBB scheme (published in February 2015) derives (for the first time) LCI values for formaldehyde and acetaldehyde. As a result, formaldehyde is not classed with the C substances (p.9 of the AgBB scheme) but is taken into account in the calculation of the R value. Also included in the calculation of the R value are acetaldehyde and other VOC values with LCI value (p. 10 AgBB scheme).

<sup>26</sup> The current list of accredited testing laboratories can be found at [www.blauer-engel.de/downloads/vergabegrundlagen\\_de/Pruefinstitute.pdf](http://www.blauer-engel.de/downloads/vergabegrundlagen_de/Pruefinstitute.pdf).

<sup>27</sup> DIN EN 16402: Paints and varnishes - Assessment of emissions of substances from coatings into indoor air - Sampling, conditioning and testing

<sup>28</sup> DIBt - Deutsches Institut für Bautechnik – (German Institute for Building Technology) Grundsätze zur gesundheitlichen Bewertung von Bauprodukten in Innenräumen (Principles for health assessment of construction products used in interiors) Teil II: Bewertungskonzepte für Spezielle Bauprodukte (Part II: Evaluation Concept for Special Building Products), as of October 2008, [www.dibt.de/de/data/Aktuelles\\_Ref\\_II\\_4\\_6.pdf](http://www.dibt.de/de/data/Aktuelles_Ref_II_4_6.pdf), as amended.

<sup>29</sup> Construction products - Assessment of release of dangerous substances - Determination of emissions into indoor air; German version CEN/TS 16516:2013

*the case of pigmented plasters the testing laboratory shall, in consultation with the applicant, select the colour which is expected to produce the highest emission rates (worst case). The format of the test report is based on CEN/TS 16516 DIN SPEC 18023<sup>30</sup> [paragraph 10], the AgBB evaluation shall be conducted by the use of the ADAM evaluation mask.*

### **3.1.3 Special Material Requirements**

#### **3.1.3.1 Pigments**

No lead-containing pigments shall be added to the internal plaster. The amount of lead contained in the raw material as process-related, technically unavoidable (natural or production-related) impurities must not exceed 200 ppm.

#### **3.1.3.2 Alkylphenol Ethoxylates**

No products containing alkylphenol ethoxylates and/or their derivatives shall be added to the internal plaster and the binder.

#### **3.1.3.3 Plasticizers**

No products containing plasticising substances from the group of phthalates or the group of organophosphates or other comparable high-boiling substances may be added to the low-emission internal plaster. Other mixtures containing plasticizers within the meaning of VdL-Richtlinie 01 (VDL Guideline)<sup>31</sup> may be added to the internal plasters and the binders in quantities not to exceed a plasticizer content of 1g/l in ready-to-use products.

#### **3.1.3.4 Perfluorinated and Polyfluorinated Chemicals**

Neither perfluorinated nor polyfluorinated chemicals (PFCs), as for example, fluorocarbon resins and fluorocarbon emulsions, perfluorinated sulfonic and carboxylic acids as well as substances that may possibly be broken down into these chemicals may be used. This also applies to intermediates processed using PFCs.

#### ***Compliance Verification relating to Paragraphs 3.1.3.1 - 3.1.3.4***

*To verify compliance with the requirement the applicant shall present the declarations from the manufacturers/distributors of the intermediates used (Annex 3) and submit the appropriate Material Safety Data Sheets of the internal plaster and of the intermediates used (Annex 4).*

### **3.1.4 Preservation of the Internal Plasters**

Preservation of the internal plaster shall only be permitted for production, storage and transportation.

Internal plasters under para. 2 must not contain any biocides, except for the microbiocides

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<sup>30</sup> CEN/TS DIN SPEC 18023:2013-12 Construction products - Assessment of release of dangerous substances - Determination of emissions into indoor air; German version CEN/TS 16516:2013 of December 2013

<sup>31</sup> Richtlinie zur Deklaration von Inhaltsstoffen in Bautenlacken, Bautenfarben und verwandten Produkten, (Guideline on the declaration of ingredients in architectural paints and coatings and related products); [VdL-Richtlinie\\_01](#), revised edition of November 2013, published by: Verband der Lackindustrie e.V., (Association of the German Paint Industry), Frankfurt/M., 2000.

listed in Appendix A to the DE-UZ 102 Basic Criteria which may be used as in-can preservatives in the amounts specified therein (by way of exception, also contrary to para. 3.1.1). However, only those substances (active substances or biocidal products) may be used as preservative for which – within the scope of the Biocidal Products Regulation (EU) No 528/2012 - an active substance dossier on the assessment as in-can preservative (product type 6) has been submitted. 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.

The preservation of the intermediates shall be dimensioned so as to ensure that the preservation of the internal plaster complies with Appendix A to the DE-UZ 102 Basic Criteria.

### **Compliance Verification**

*The applicant shall declare compliance with the requirement in Annex 1 to the Contract. In addition, the applicant shall give the names of the active ingredients added to the preservatives as well as their percentage in the internal plaster product (Annex 2). To verify compliance with the criteria the applicant shall additionally present declarations from the manufacturers or distributors of the intermediates used (Annex 3) as well as the appropriate Material Safety Data Sheets of the internal plaster and the intermediates used (Annex 4).*

### **3.1.5 Production of Titanium Dioxide Pigments**

The emissions and wastes from the production of titanium dioxide pigments shall not exceed the following limits<sup>32</sup>:

- For the sulphate process:
  - ♦ SO<sub>x</sub> calculated as SO<sub>2</sub>: 7.0 kg per ton of TiO<sub>2</sub> pigment
  - ♦ Sulphate waste liquor: 500 kg per ton of TiO<sub>2</sub> pigment
- For the chlorine process:
  - ♦ If natural rutile ore is used, 103 kg chlorine waste per ton of TiO<sub>2</sub> pigment
  - ♦ If synthetic rutile ore is used: 179 kg chlorine waste per ton of TiO<sub>2</sub> pigment
  - ♦ If slag ore is used: 329 kg chlorine waste per ton of TiO<sub>2</sub> pigment

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

Details on the chlorine process:

SO<sub>x</sub> emissions shall apply to the sulphate process only.

The definition of waste can be seen from Article 3 of the Waste Framework Directive 2008/98/EC of the European Parliament and of the Council<sup>33</sup>. If the manufacturer of titanium dioxide can satisfy Article 5 (by-product production) of the Waste Framework Directive for solid wastes these wastes shall be exempt.

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<sup>32</sup> Derived from the Reference Document on Best Available Techniques for the Production of Basic Inorganic Chemicals (BREF) (August 2007).

<sup>33</sup> Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312 of 22 November 2008, p. 3).

### **Compliance Verification:**

To verify compliance with the requirement the applicant shall submit declarations from the manufacturers of the titanium dioxide pigments used (Annex 6) or see to it that these declarations are made available to RAL gGmbH.

#### **3.1.6 Odour Test**

The product may come with a label on the package/container claiming the product to be "low-odour"<sup>34</sup>. Such claim does, however, require an odour test to be conducted in combination with the emissions test under para. 3.1.2 "Indoor Air Quality". The odour intensity of the internal plasters shall not exceed 7 pi after 28 days if the product is claimed to be "low-odour".

### **Compliance Verification**

The applicant shall present a test report according to DIN ISO 16000-28<sup>35</sup> in combination with VDI 4302 (Annex 2).

## **3.2 Special Requirements**

### **3.2.1 Application/Purpose of Plastering**

The internal plaster shall be suitable for processing in accordance with DIN EN 13914-2<sup>36</sup> and the national supplementary provisions in DIN 18550-1/-2<sup>37</sup>.

### **Compliance Verification**

The applicant shall declare compliance with the requirement in Annex 1.

### **3.2.2 Fitness for Use**

The internal plaster under paragraph 2 shall meet the usual quality requirements for fitness for use of the respective product group (e.g. mortar class, solidity, adhesive strength, compressive strength, minimum layer thickness, spreading rate, fire behaviour, water absorption, diffusion resistance, particle size) according to existing DIN standards.

### **Compliance Verification**

The applicant shall declare compliance with the requirement in Annex 1.

### **3.2.3 Advertising Messages**

- The type of internal plaster pursuant to para. 2 shall be given on the container/package together with the product designation. The technical data sheets shall additionally specify the binder base.

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<sup>34</sup> In order to gather experience with odour testing on plasters the requirement shall, during the first term of these Basic Criteria, not be binding on all products.

<sup>35</sup> DIN EN ISO 16000-28 - Indoor air - Part 28: Determination of odour emissions from building products using test chambers

<sup>36</sup> DIN EN 13914-2 - Design, preparation and application of external rendering and internal plastering - Part 2: Design considerations and essential principles for internal plastering

<sup>37</sup> DIN 18550-1 /-2 Design, preparation and application of external rendering and internal plastering - Part 1: Supplementary provisions for DIN EN 13914-1 for external rendering

- If paragraph 3.1.6 "Odour Test" is complied with the internal plaster may be claimed to be "low-odour".
- Advertising statements including name components or designations, such as „organic“, „eco“, „natural“, „facade“, „fung“, „insect“ or „nano“ and the like shall not be permitted.
- Advertising statements must not include any indications that would downplay possible risks within the meaning of Article 25 (4) of the CLP Regulation (Regulation (EC) 1272/2008)<sup>14</sup>, such as, for example, "non-toxic", "non-harmful" and the like, except for „free from preservatives“<sup>38</sup>.

### **Compliance Verification**

*The applicant shall declare compliance with the requirement in Annex 1 and present the appropriate technical data sheet as Annex 7 and the container/package text as Annex 8.*

### **3.2.4 Information/Instructions**

#### **3.2.4.1 General Information/Instructions**

The container/package text and the technical data sheet shall include the following instructions/cautions in an easy-to-read form (other similar wording may be used):

- „Keep out of the reach of children“
- „Ensure good ventilation during application and drying“
- If the product can be applied by spraying: "Use combined filter A2/P2 to protect from spray mist"
- „Do not eat, drink or smoke when handling the plaster“
- „In case of contact with skin or eyes, rinse immediately with plenty of water“
- „Do not allow to enter drains, water bodies, ground or soil“
- „Clean tools with water and soap immediately after use“
- „Give only empty containers to recycling. Dried product residues may be disposed of as domestic waste“.

The ingredients of the internal plasters under para. 2 shall be specified in the technical data sheets in accordance with „Richtlinie zur Deklaration von Inhaltsstoffen in Bautenlacken, Bautenfarben und verwandten Produkten (Guideline on the declaration of ingredients in architectural paints and coatings and related products) (short: „VdL-Richtlinie Bautenanstrichstoffe“ - VdL-RL 01)<sup>31</sup>. The specifications shall at least meet the requirements of the 4th revised edition of November 2013.

The field of application (ceiling; wall; wall and ceiling) shall be indicated on the package/container.

Likewise, the package/container text shall include a clear reference to the technical data sheet and an indication as to where it can be found as well as a phone number of the manufacturer where consumers can get further information. The technical data sheet shall be available on the Internet. The various fields of application shall be indicated on the technical data sheet.

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<sup>38</sup> According to manufacturer's declaration pursuant to Annex 3.

In addition and as an optional feature a QR code may be shown on the package/container.

### **3.2.4.2 Additional Instructions for Marked Internal Plasters**

The container/package text and the technical data sheet of internal plasters that require marking under chemical law with the hazard pictograms GHS05 (corrosion) or GHS07 (exclamation mark) shall, in addition to para. 3.2.4.1, include the following cautions/instructions in an easy-to-read form (other similar wording may be used):

- „Always wear safety glasses!“
- „In case of contact with your eyes rinse immediately with plenty of water and see an ophthalmologist.“
- „Always wear heavy-duty waterproof gloves to protect your hands!“
- „Always wear long trousers!“
- „Avoid prolonged skin contact with the plaster. Rinse affected areas immediately with plenty of water.“
- „The longer fresh plaster remains on your skin the greater the risk of severe skin damage.“
- „Keep children away from fresh plaster!“
- „Follow the manufacturer’s instructions for safety and health during application.“

### **3.2.4.3 Additional Information on Paste-like Internal Plasters**

- „The plaster contains:..... (please enter the name(s) of the active substance(s) of the preservative in accordance with Appendix A, para. 1);
- For information for people suffering from an allergy, please call at.....“

### **Compliance Verification - Paragraphs 3.2.4.1 - 3.2.4.3**

*The applicant shall declare compliance with the requirement in Annex 1 and present the appropriate technical data sheet as Annex 7 and the container/package text as Annex 8*

## **4 Applicants and Parties Involved**

Manufacturers of final 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 (German Environmental Agency) which after the signing of the contract receives all data and documents submitted in applications 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 December 31, 2020. They shall be extended by periods of one year each, unless terminated in writing by March 31, 2020 or March 31 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 (manufacturer) 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 organisations.

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

- Applicant (manufacturer)
- Brand/trade name, product description
- Distributor (label user), i.e. the above-mentioned marketing organisations.

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## **Appendix A Preservatives**

Corresponds to Appendix A to the DE-UZ 102 Basic Criteria for Low-emission Interior Wall Paints and can be directly accessed via the homepage of the Blue Angel [www.blauer-engel.de](http://www.blauer-engel.de), (see: Basic Award Criteria and scroll down to DE-UZ 198 "Low-Emission Internal Plasters" or DE-UZ 102 "Low-Emission Interior Wall Paints").



## Appendix B Assignment of Hazard Categories and Hazard Statements

The following table assigns the respective hazard statements (H statements) to the hazard categories of the substances which are generally excluded under para. 3.1.1.

<b>CLP Regulation (EC) No 1272/2008</b>		
<b>Hazard Category</b>	<b>Hazard Statements</b>	
	<b>H Statement Codes</b>	<b>Wording</b>
<b>Carcinogenic Substances</b>		
Carc. 1A	H350	May cause cancer.
Carc. 1B	H350	May cause cancer.
Carc. 1A, 1B	H350i	May cause cancer by inhalation.
<b>Mutagenic Substances</b>		
Muta. 1A	H340	May cause genetic defects.
Muta. 1B	H340	May cause genetic defects.
<b>Reprotoxic Substances</b>		
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.
<b>Acutely Toxic Substances</b>		
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
Acute Tox. 3	H331	Toxic if inhaled
<b>Substances classified for Specific Target Organ Toxicity</b>		
STOT SE 1	H370	Causes damage to organs.
STOT SE 2	H371	May cause damage to organs.
STOT RE 1*	H372	Causes damage to organs through prolonged or repeated exposure.
STOT RE 2*	H373	May cause damage to organs through prolonged or repeated exposure.
<b>Substances classified for Environmental Hazards</b>		
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 life 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 the classification as STOT RE 1 and STOT RE 2 does not represent a criterion for exclusion pursuant to para. 3.2.1 „Exclusion of Substances“ of the Basic Criteria.