natureplus e.V.

Guideline 0806

Insulating Plaster/Render

Version: Oct. 23, 2026
for the awardance of the eco-label

natureplus e.V., Hauptstr. 24, 69151 Neckargemünd, Germany, info@natureplus.org

Introduction

The International Association for Sustainable Building and Living - natureplus association - pursues the goal of promoting sustainable building products and increasing their popularity and use. To this end, sustainability criteria for building products are defined and verified as part of regular conformity assessments at the applicant's premises.

Three comprehensive sustainability definitions are created to achieve a holistic understanding of quality.

CLIMATE PROTECTION

The climate crisis is worsening, and the consequences are becoming increasingly visible. The construction sector is one of the largest emitters, accounting for around 40% [1] of global greenhouse gas emissions. Energy-intensive manufacturing processes, long transport routes and short renovation cycles are often still characteristic of the status quo.

The natureplus certification requires manufacturers to meet limit values on CO2 emissions and primary energy consumption.

[1] UNEP, 2020, 2020 Global Status Report for Buildings and Construction, p. 4.

HEALTHY LIVING

In Western societies, we spend about 90% [2] of our lives in buildings. Pollutants emitted by building materials can accumulate in the indoor air we breathe daily, posing unnecessary health risks to occupants. The accumulation of chemical pollutants from building materials in household dust is also a cause for concern.

The natureplus certification ensures that hazardous input materials are avoided or used in quantities that are harmless to health. Emissions from building products are strictly regulated and regularly monitored.

[2] Umweltbundesamt, o. D., Ausschuss für Innenraumrichtwerte (AIR)

CONSERVATION OF RESOURCES

All construction activities have an impact on nature and the environment, with the consumption of finite resources remaining unacceptably high. The production of building materials in Germany consumes about 60% of our resources, and as much as 90% if only mineral raw materials are considered. At the same time, the construction sector is responsible for 50% of the waste generated. [3]

The natureplus certification sets out requirements for increased transparency in the supply chain, respect for human rights and the environment, and the responsible use of resources throughout the life cycle of a building product.
Sustainable materials should also be durable, reusable, or recyclable.

[3] VDI ZRE, 2019, Ressourceneffizienz im Bauwesen – Von der Planung bis zum Bauwerk, p. 5.

Notes on this product guideline:

The eco-label, the certification programme including all associated documents is the property of the non-profit natureplus® environmental organisation. The Association and its specially appointed Criteria Commission are therefore responsible for the further development of the requirements.

The label is awarded by the European cooperative natureplus Institute SCE mbH.

In the event of textual discrepancies between different language versions of a guideline, the Criteria Commission's Task Force will determine the valid wording. The affected language versions will be amended to reflect the valid wording.

In the event of conflict between the basic guidelines (50XX) and this product guideline, the product award guideline shall prevail.

For questions, criticism and suggestions, please contact:

International Association for Sustainable Building and Living - natureplus association
Hauptstr. 24, 69151 Neckargemünd, Germany
criteria@natureplus.org
+49 (0)6223 866 017 0

1 Application Areas

The following criteria contain the requirements for the awardance of the natureplus eco-label for factory produced insulation plaster/render for interior and exterior applications.

2 Award Criteria

The prerequisite for a product to be awarded the natureplus® quality label in accordance with these guidelines is compliance with the following award guidelines:

- GL5001 Chemicals Directive
- GL-5003 Nature Conservation when Exploiting Mineral Resources
- GL5004 Transparency and Social Responsibility
- GL5010 Low-emission building products
- GL5020 Climate compatibility and energy efficiency

2.1 Functional Suitability

Insulating plasters/renders must fulfil the requirements of EN 988-1.

Gypsum based insulating plasters/renders must comply with the requirements of EN 13279.

The cement employed must comply with EN 197 or a comparable standard.

The lime employed must comply with EN 459-1 or a comparable standard.

Insulating plasters/renders should exhibit the following characteristics:

- Thermal conductivity $\lambda \leq 0.13$ W/(m x K)
- Capillary water absorption coefficient ≤ 0.40 kg/m² x min0.5 (as per EN 1015-18 cf. EN 998-1category W1)

The following additional requirements apply to insulating plasters/renders which are to be used in interior areas

- Water vapour diffusion resistance number μ < 15 according to EN 1015-19, as long as this does not conflict with the characteristics of the application area i.e. damp locations and moisture prone areas/rooms (with the exception of residential kitchens and bathrooms).
- Compression resistance ≥ 0.4 N/mm². Products suitable for subsequent tiling must exhibit aminimum compression resistance ≥ 2.0 N/mm².

The manufacturer must provide documentary evidence of compliance with aforementioned standards.

2.2 Composition, Forbidden Substances, Substance Restrictions

The product must be made to at least 99M-% from renewable and/or mineral raw materials.

The following components are permitted: mineralbinding agents such as cement, hydrated lime, gypsum or trass-lime, as well as sand and mineral or renewable raw material lightweight aggregates.

The proportion of synthetic organic components within the product is restricted to a maximum of 1 M-% of the product.

The use and addition of biozides is not permitted.

The use of halogen-organic compounds is prohibited.

The following substances must not be added to the product:

- glycol ether and esters
- APEOs (alkylphenol ethoxylates)
- halogenated isothiazolinones
- formaldehyde releasing substances

Products containing cement must comply with the limit value defined in “Annex XVII of the REACH Regulation (as of October 2, 2025), Section 47: Chromium VI Compounds, Point 1.”

Only pigments prepared from iron oxides or anorganic substances with comparable or less toxicity may be added to the product.

The product must not be prepared with pigments and siccatives based on lead, cadmium, chrome VI and their compounds.

The product is subject to assessments as detailed in section 3 and must comply with the limits specified therein.

If renewable or secondary materials are used the product may, if required, be tested for material specific parameters.

2.3 Raw Material Sourcing, Production of Preliminary Products, Production

A certificate of origin must be provided for all raw materials.

A certificate of the quality of the mineral and renewable raw materials must be provided. In particular, it must be ensured that the secondary raw materials are of a consistent quality level.

When using mineral raw materials, the requirements of RL-5003 " Nature conservation in the mining of mineral raw materials" must be complied with.

If cement is employed as a binding agent, the cement manufacturer must provide confirmation that the following requirements have been met:

- The cement production equipment must meet modern standards of energy efficiency for the ovens and for the flue gas cleaning equipment.
- If waste products are also incinerated, the emissions must comply with the guideline 2000/76/EG of 4. December 2000 concerning the incineration of waste – Point II.1 “Special Regulations for Cement Ovens in which Waste Products are Incinerated”

If gypsum is employed as a binding agent, the manufacturer must provide proof that the following requirements have been met:

- Particular consideration of the need to protect the natural environment and biodiversity in the extraction of natural gypsum.
- The use of suitable secondary raw materials (e.g. flue gas desulphurisation (FGD)-gypsum, industrial gypsum, recycled production and building-site waste).

Proof must be provided of compliance with statutory regulations relating to the extraction of the natural, mineral raw materials for the binding agent(s).

Documentation on the energy consumption levels and emission analyses must be provided in order that they can be confirmed.

For renewable raw materials, proof must be provided that regionally available or secondary raw materials (e.g. production waste) have been used.

2.4 Usage

The product must not exhibit any unpleasant or foreign smells or odours. The emissions during use have to be in compliance with the limit values according to section 3.

Emissions must not exceed the natureplus limits according to section 3 during the use phase. (see section 3 and RL5010)

2.5 Reuse, recycling and disposal

The products must be disposable in inert landfills in accordance with the "Decision of the EU Council of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC".

2.6 Ecological Parameters

All products in this product group must be manufactured in such a way that the environmental parameters listed in RL5020 are complied with.

2.7 Public Declaration

A public declaration of ingredients[1] must be provided in the official language of the country in which the product is intended for sale. It must be freely accessible. Ingredients must be listed in descending order of weight. The following publicly accessible documentation paths are permitted:

- Product packaging
- Technical data sheet
- Sales brochures
- Website

Ingredients from preliminary products or preparations that remain in the final product with a content of >1 M% must also be included in the full declaration.

The following applies to the public declaration of ingredients:

- above 1 M% the name of the ingredient
- below 1 M% at least the functional name of the ingredient, the mass order is cancelled.

[1] Ingredients are substances and mixtures that remain in the final product. Reactants and ancillary input materials are included in the non-public full declaration submitted to the assessment body

Furthermore, there is an obligation to include the following information with the product or to make it available to the consumer or user in an appropriate manner (e.g. online):

- Instructions for use and safety instructions
- Storage and disposal instructions
- Batch numbers
- Country of production
- Country of origin of input materials > 20 M-% where there is a deviation from the country of production

When using ingredients with an environmentally hazardous potential, the applicant must indicate at an appropriate place which measures are to be taken within the framework of dismantling and demolition work to protect the environment (e.g. controlled dismantling).

Additionally, the following product-specific information must be made available to the consumer or user.

- Specification of the main binder and the lightweight aggregate.
- Vapour diffusion resistance according to EN 1015
- Compressive strength according to EN 998-1

2.8 Processing and Installation

The manufacturer must provide qualified processing/usage guidelines which contain comprehensive details on the correct methods of preparation and application with

respects to structural aspects. In particular, the processing/usage instructions should include:

- Measures for the correct preparation of the foundation substrate.
- Recommendations on the correct coating sequence and/or constructions in relation to the compressive strength and water vapour diffusion characteristics.
- Advice on measures to avoid the formation of cracks in the finishing coating.

Products containing cement must comply with the requirements of EU-RL 2003/53/EG.

2.9 Packaging

The packaging used must be recyclable. The manufacturer must belong to a recycling system, if one exists for the corresponding material.

Paper and cardboard packaging must be made from recycled paper. Alternatively, paper from sources as per GL-5002 is also permitted.

Plastic packaging must be made from polyolefins. PET, polystyrene or polycarbonates are allowed exceptionally in reasonablecases.

PVC packaging is generally not permitted.

Packaging must not contain biocides.

The natureplus certification mark has to be printed on the packaging after it has been awarded.

3 LaboratoryTests

The products are subject to laboratory analyses to test for harmful substances and undesirable ancillary ingredients. A representative sample is collected during the production audit. If the sample collection cannot be conducted by a natureplus examiner, an independent person designated by natureplus can collect the sample. For products with different sizes but the same composition, a single sample is sufficient.

3.1 Volatile Organic Compounds VOC / TVOC

To check the emission of VOC and to determine the TVOC and TSVOC, an emission chamber test is carried out with the product. Measurements are usually performed after 3 and 28 days. The test-chamber examination is performed according to the current version of natureplus guideline 5010. The product must comply with the limit values specified in guideline 5010.

3.2 Element Analyses

The product is subject to an element analysis to determine the content of harmful elements and to check for undesirable contaminations. The measurements have to be in compliance with the limit values. The analysis is performed according to the current version of the test method TM-02 metals.

An eluate analysis is mandatory if the required values of the content analysis are not met.

Element	Limit value [mg/kg]
Arsenic (As)	≤ 10
Cadmium (Cd)	≤ 1
Cobalt (Co)	≤ 20
Chromium (Cr)	≤ 50
Copper (Cu)	≤ 35
Mercury (Hg)	≤ 0,5
Nickel (Ni)	≤ 40
Lead (Pb)	≤ 15
Antimon (Sb)	≤ 5
Tin (Sn)	≤ 5
Zinc (Zn)	≤ 300

In case the limit values are exceeded, an element analysis will be performed for the raw materials. If the metal/metalloid concentrations recorded can be linked to the raw materials, an additional eluate analysis of the product will be conducted. The requirements of the elemental analysis are deemed to be met if the measurements are in compliance with the eluate limit values as listed below. If the metal/metalloid concentrations can not be attributed to the raw materials, additionalresearch is necessary to elucidate the causes of the element contents.

The analysis is carried out according to the eluate in accordance with DIN 38414 Part 4; DIN EN ISO 17294 in the respective current version. The applicable limit values are listed in the following table.

Element	Limit value [mg/l]
Arsenic (As)	≤ 0,05
Barium (Ba)	≤ 2
Cadmium (Cd)	≤ 0,005
Chromium (Cr)	≤ 1
Cobalt (Co)	≤ 0,1
Mercury (Hg)	≤ 0,001
Nickel (Ni)	≤ 0,2
Lead (Pb)	≤ 0,04

3.3 Other Analyses

Chromium VI

Test parameters	Limit values	Unit	Method
Chromium VI (Cr VI)	≤ 1	mg/kg	DIN EN 196-10:2016-11 (appendix D)

Halogenic organic compounds

Test parameters	Limit values	Unit	Method
Halogenic organic compounds: AOX/EOX	≤ 1	mg/kg	TM-03 Halo

Polycyclic aromatic hydrocarbons

If the product contains secondary materials:

Test parameters	Limit values	Unit	Method
Polycyclic aromatic hydrocarbons	≤ 0,003	mg/l	DIN 38407 part 18

Phenol

If the product contains secondary materials:

Test parameters	Limit values	Unit	Method
Phenol	≤ 0,02	mg/l	DIN 38409 part16

pH value

Test parameters	Limit values	Unit	Method
pH value	≤ 12,75		ISO 10390

Asbestos fibres

If the product contains secondary materials:

Test parameters	Limit values	Unit	Method
Asbestos fibres	asbestos free per DAB[1]		SEM

1: DAB: German Register of Medicines

Odour

Test parameters	Limit values	Unit	Method
Odour	≤ 3	Odour intensity	TM-04 Odour

Pesticides

Analysis if necessary, if the product contains input materials based on renewable raw materials from agriculture or forestry:

Test parameters	Limit values	Unit	Method
Total pesticides	≤ 1	mg/kg	TM-05 Pesticides
Individual pesticides Organochlorine pesticides: Aldrin, Chlordane, DDD, DDE, DDT, Dichlofluanid, Dieldrin, Endrin, Heptachlor, Hexachlorobenzene, Lindane, Pentachlorophenol Organophosphate pesticides: Dimethoat, Fenthion, Parathion-methyl, Parathion-ethyl, Phosalon Pyrethroids: Cypermethrin, Lambda-Cyhalothrin, Permethrin Other: Benomyl, Carbendazim, Prochloraz	≤ 0,1	mg/kg	TM-05 Pesticides

4 Appendix

Test methods

TM-01 VOC : Volatile Organic Compounds VOC/TVOC, formaldehyde, acetaldehyde and TSVOC: DIN EN ISO 16000 series expanded by the natureplus implementation rules in guideline 5010.

TM-02 Metals: ICP-MS measurements according to DIN EN ISO 17294-2, supplemented with the natureplus implementation rules and a sample preparation adjusted to the issue analysed.

TM-03 Halo: Halogenic organic compounds after combustion, determined by microcoulometry according to the natureplus implementation rules "AOX/EOX".

TM-04 Odour: natureplus implementation rules "odour intensity", 6-degree grading scale 3 days after loading the test chamber following VDA 270:2018.

TM-05 Pesticides: DFG S 19 extended by natureplus implementing regulations

TM-08 Foreign fibres and foreign substances: scanning electron microscopy SEM

TM-09 Monomeric isocyanates: 24h after test chamber loading

TM-10 PAH: HPLC / GC-MS, sum according to EPA