## according to Regulation (EC) No. 1907/2006 (REACH)



**Trade name :** Floortec Hardener 471 Floortec Härter 471

**Revision date:** 12.12.2022 **Version (Revision):** 3.0.0 (2.0.1)

**Print date :** 12.12.2022

#### SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### 1.1 Product identifier

Floortec Hardener 471 Floortec Härter 471

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

#### **Relevant identified uses**

#### **Products Category [PC]**

PC 9 - Coatings and paints, fillers, putties, thinners.

#### **Uses advised against**

There are no information about relevant identified uses of the product according to the Regulation (EC) No. 1907/2006 (REACH-Regulation), which are advised against. For using the product observe the information in the Technical data sheet of the product.

## 1.3 Details of the supplier of the safety data sheet

#### **Supplier**

Brillux GmbH & Co KG www.brillux.de

Street: Weseler Straße 401

Postal code/City: D - 48163 Münster

**Telephone:** +49 (0)251-7188-0 **Telefax:** +49 (0)251-7188-280 **Information contact:** 

Electronic mail address of the well-informed person for safety data sheets:sdb@brillux.de

#### 1.4 Emergency telephone number

Outside the business hours (9 a.m. to 5 p.m.):

(Giftinformationszentrum-Nord, Göttingen, consultation in german or english language)

Telephone: +49 (0)551-19240.

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

#### 2.2 Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

#### **Hazard pictograms**



Corrosion (GHS05)

#### Signal word

Danger

#### Hazard components for labelling

CEMENT, PORTLAND; CAS No.: 65997-15-1

**Hazard statements** 

H318 Causes serious eye damage.

**Precautionary statements** 

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> P261 Avoid breathing dust.

P102 Keep out of reach of children.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER or a doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501 Dispose of contents/container to approved disposal company or local collection.

#### 2.3 Other hazards

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605. The product does not contain any substances, which fulfil the criteria for PBT or vPvB in accordance with the Annex XIII of the Regulation (EC) No 1907/2006 (REACH-Regulation).

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Description

Mixture based on components, which are called following, and other components.

#### **Hazardous ingredients**

CEMENT, PORTLAND; EC No.: 266-043-4; CAS No.: 65997-15-1

Weight fraction: ≥ 5 - < 10 %

Classification 1272/2008 [CLP]: Eye Dam. 1; H318 Skin Irrit. 2; H315 STOT SE 3; H335

#### Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

### **General information**

In all cases of doubt, or when symptoms persist, seek medical attention. Immediately remove all contaminated clothing. If unconscious no administration by mouth, storage in recovery position and seek medical advice. If medical advice is needed, have product container or label at hand.

## Following inhalation

When symptoms persists, take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration.

## In case of skin contact

Take off immediately all contaminated clothes. Wash away with soap and water and rinse. Do NOT use solvents or thinners. If skin irritation continues, consult a doctor.

Remove contact lenses, keep eyelids open. Rinse open eye immediately with plenty of running water. Seek medical adivce if complaint continues.

#### Following ingestion

Drink water in small draught. Keep at rest. Do not induce vomiting. When swallowed immediately consult and show packing or label to physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

Possible symptoms:

At eye contact: Irritation, burning, pain.

At skin contact: Irritation.

Irritation of the respiratory tract.

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#### 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

## Suitable extinguishing media

This product is not flammable. In case of a fire extingnish surroundings as indicated.

#### Unsuitable extinguishing media

None known.

## 5.2 Special hazards arising from the substance or mixture

#### **Hazardous combustion products**

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

#### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

When extinguishing fires, use breathing apparatus with an independent source of air.

#### 5.4 Additional information

Cool endangered containers with water in case of fire. Do not allow run-off from fire-fighting to enter drains or water courses. With water for fire fighting arises an alkaline solution which can lead to irritations.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Keep no protective persons away, personal should wear protective clothings. Avoid contact with eyes and skin. Do not breathe dust. Avoid dust formation.

#### 6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations. Aqueous cement slurries have an alkaline effect.

## 6.3 Methods and material for containment and cleaning up

#### For cleaning up

Take up dust-free and set down dust-free. Remove residue by rinsing thoroughly with water. Thoroughly clean contaminated objects and floors and observe environmental regulations.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

You find information about the safety equipment of persons in the section 8,

information about the refuse disposal in section 13.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

## **Protective measures**

No special measures necessary in the case of regulation storage and handling. Avoid contact with skin and eyes. Ensure a good ventilation in room and working area. For personal protection see Section 8. Read label before use. Mixtures of cement and water also can cause irritations.

#### Measures to prevent fire

This product is not flammable. No special precautionary measure necessary.

## Measures to prevent aerosol and dust generation

Do not breathe dust. Avoid dust development.

#### Advices on general occupational hygiene

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> While working do not eat, drink or smoke. Wash hands and face before breaks and after work and take a shower if necessary. Immediately remove all contaminated clothing.

#### 7.2 Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly in a dry, cool and good ventilated place. Do not store the product in lounge room. Keep only in the original container. Protect against frost. Keep out of the reach of children. Avoiding contact with water also during the storage.

#### Hints on joint storage

Store away from foodstuffs. Do not store together with acids and ammonium salts.

Storage class (TRGS 510): 13

## 7.3 Specific end use(s)

For using the product observe the information in the Technical data sheet of the product.

#### **Industrial sector specific solutions**

GISCODE: Produkt-Code gemäß GISBAU (Gefahrstoff-Informationssystem der deutschen Berufsgenossenschaften der Bauwirtschaft) für Verlegewerkstoffe (GISCODE): ZP1.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### Occupational exposure limit values

The general dust limiting values has to be taken into account: 1,25 mg/m3 and 10 mg/m3.

CEMENT, PORTLAND; CAS No.: 65997-15-1

Limit value type (country of origin): TRGS 900 ( D ) Parameter: E: inhalable fraction

Limit value: 10 ma/ka

Version:

Limit value type (country of origin): TRGS 900 ( D ) Parameter: A: respirable fraction

Limit value: 1,25 mg/kg

Version:

#### Remark

Taking into account the details mentioned in the TRGS 900 for the supervision of AGW.

#### 8.2 Exposure controls

## **Appropriate engineering controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn. Observe data available of section 7.

## Personal protection equipment

## **Eye/face protection**

Use tightly fitting safety glasses. Keep eyewashbath with pure water ready.

#### Skin protection

#### **Hand protection**

At use as agreed a protective gloves from nitrile rubber, tested according to EN 374, with a material thickness 0,38 mm has to be used. Notes of the manufacturer have to be taken into account. Penetration time of the glove material: > = 8 h.

By longer or repeated contact the penetration times can be considerably shorter. The protective gloves should replaced after the first wear out or a damage of the gloves. Gloves of cotton should be used under the gloves of polychloropren or nitrile rubber. After washing hands replace lost skin fat by fat containing skin creams.

## **Body protection**

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Using closed long-sleeved protective clothing and thick footwear. For mixing and stirring a rubber apron and protective boots is recommended.

#### Respiratory protection

Use respiratory masks by formation of dust. Use the dust respirator of the filter class FFP3.

#### **General information**

Avoid contact with eyes and skin. Immediately remove all contaminated clothing. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Ensure a good ventilation in room and working area. Not breathing in dust.

#### **Environmental exposure controls**

The product should not reach waters and the ground. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

No data available

not applicable

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

## **Appearance**

Physical state: Solid.

**Colour:** conformable to product designation.

#### **Odour**

odourless

### Safety characteristics Melting point/freezing point:

Initial boiling point and boiling (1013 hPa) not applicable range: **Decomposition temperature:** (1013 hPa) not applicable not applicable Flash point: **Auto-ignition temperature:** not applicable not applicable Lower explosion limit: not applicable Upper explosion limit: Vapour pressure: (50°C) not applicable Density: (20°C) No data available Solvent separation test : (20°C) not applicable Water solubility: (20°C) mixable pH: 10,5 - 11,4 log P O/W: not applicable

(1013 hPa)

 Viscosity:
 (20 °C)
 not applicable

 Kinematic viscosity:
 (40 °C)
 not applicable

 Relative vapour density:
 (20 °C)
 No data available

(20°C)

Relative vapour density: (20 °C)
Flammable solids: Not applicable.

Flammable solids: Not applicable.

Particle Characterics: No data available

#### 9.2 Other information

Flow time:

Other physical and chemical data have not been determined.

### **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No dangers connected by a possible reactivity of the product are known to proper handling and storage.

#### 10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

#### 10.3 Possibility of hazardous reactions

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(EN/D)

DIN-cup 4 mm

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No dangerous reactions are known if stored and handled the product correctly.

#### 10.4 Conditions to avoid

Keep away from frost, heat and direct sunlight. Avoid exposure to air and moisture over a longer period.

#### 10.5 Incompatible materials

No dangerous reaction known. Materials to avoid: acids, ammonium salts, aluminium, humidity and water.

#### 10.6 Hazardous decomposition products

No dangerous decomposition product are known if stored and handled correctly.

#### **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Acute toxicity:

- Acute oral toxicity: No data available:
- Acute dermal toxicity: No data available;
- Acute inhalation toxicity: No data available.

#### **Corrosion**

Irritation:

- Skin contact: Irritating to skin.
- Eye contact: Causes serious eye damage.
- Respiratory: May cause respiratory irritation.

#### Respiratory or skin sensitisation

A sensitizing effect by the product is not known.

The product contains chromate reducers, whereby the content of water-soluble chromium (VI) is less than 0.0002%. However, the chromate reducer contained may prematurely lose its effectiveness if the storage (moisture penetration) or overlaying is not appropriate, and a sensitizing effect of the cement on skin contact may occur.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The product is not classified as human germ cell mutagenic, carcinogenic or human reproductive toxic (CMR effects).

## **STOT-single exposure**

May cause respiratory and mucous irritation.

#### **STOT-repeated exposure**

No risk expected.

## **Aspiration hazard**

No risk expected.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

#### Other adverse effects

This product is unlikely to harm health, given normal and proper handling and hygenic precautions.

#### **Additional information**

The product is classified in toxicological terms on the basis of the results of the calculation procedure outlined within the Regulation (EC) No 1272/2008 (CLP-Regualtion), listed in sections 2 and 3.

At proper dealing and use as agreed the product does not cause any effects bad for health after our experiences and the information submitted to us.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

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No information available.

#### 12.2 Persistence and degradability

These are not data avaible about the potential of the product concerning his persistency and degradability.

#### 12.3 Bioaccumulative potential

These are not data availble about the bio accumulation potential of the product.

#### 12.4 Mobility in soil

These are not datas availble about the potential of the product concerning his mobility in the ground.

A penetrating into soil, waters and sewage system should be prevented.

#### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6 Endocrine disrupting properties

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

#### 12.7 Other adverse effects

Acute or chronic damages to water organisms by the product in the aquatic environment are not expecting.

#### 12.8 Additional ecotoxicological information

Avoid exposing into ground, waterways and drainage.

The classification of the product is based on summation of classified components according to the Regulation (EC) No 1272/2008 (CLP-Regulation). See details in sections 2 and 3.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

### **Directive 2008/98/EC (Waste Framework Directive)**

### Before intended use

Dispose of contents/container to approved disposal company or local collection according to the local regulations. Packaging with not dry uped residues have to droped at official collecting sites. Packaging with dry uped residues can be disposed together with household garbage or building site garbage. Do not empty into waters or drains.

#### Waste codes/waste designations according to EWC/AVV

For the product:

Disposal-definition No. (EWC-Code): 17 01 01 - concrete.

#### After intended use

Only empty packaging can be transfered to recycling. Uncleaned packaging must be disposed of in the same manner as the medium.

#### Waste codes/waste designations according to EWC/AVV

Disposal-definition No.: 17 09 04 - mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03.

### **SECTION 14: Transport information**

#### 14.1 UN number

No dangerous good in sense of these transport regulations.

## 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

#### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

#### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

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#### 14.6 Special precautions for user

None

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant because the product in type of delivery does not transport in bulks according to the Internationa Maritime Organization (IMO) instruments.

## **SECTION 15: Regulatory information**

## Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **EU** legislation

Other regulations (EU)

#### Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

The product is not subject to the EU guideline 2004/42/EC about the limitation of the issues of brief organic connections due to the use of organic solvents in certain colours and varnishes.

#### **National regulations**

#### Water hazard class

Classification according to AwSV - Class: 1 (Slightly hazardous to water)

#### **Additional information**

The product is classified as a solid substance according to the criteria of the Penetrometer test (ADR, part 2, section 2.3.4) and also fulfils the criteria for solid substances according to the TRwS 779 number 2.1.1.

Maternity regulations and Young Persons Employment Act are to take into account.

#### 15.2 Chemical Safety Assessment

A chemical safety assessments was not carried out.

## **SECTION 16: Other information**

#### 16.1 Indication of changes

None

#### 16.2 Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif

ADR: European agreement concerning the international carriage of dangerous goods by road (Accord europeen relatif transport des merchandises dangereuses par route)

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany) AOX: Adsorbable Organic halogen compounds

ATEmix: Calculated acute toxicity estimate of mixture

BCF: Bio-Concentration Factor CAS: Chemical Abstract Service

CLP: Classification, Labelling and Packaging

CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction

CSR: Chemical Safety Report DNEL: Derived No Effect Level EC: European Commission EC50: Effective Concentration 50% ECHA: European Chemical Agency

EEC: European Economic Community
EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EWC: European Waste Catalogue

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IC50: Inhibition Concentration 50%

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IMDG Code: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

LC50: Lethal concentration 50%

LD50: Lethal Dose 50%

LOAEL: Lowest Observed Adverse Effect Level

LOEL: Lowest observable effect level

MAK: Treshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG)

MARPOL: Convention for the Preventation of Marine Pollution from Ships

MVZ: molar ratio n.a.: Not applicable n.d.: Not determined n.r.: Not relevant NLP: No Longer Polymers

NOAEC: No Observed Adverse Effect Concentration NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration

NOEL: No Observed Effect Level
OEL: Occupational Exposure Limit
PBT: Persistent, bioaccumulative, toxic
PNEC: Predicted No Effect Concentration
RCP: Reciprocal calculation procedure

REACH: Registration, Evaluation and Authorization of Chemical)

RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant

le transport de marchandises dangereuses par chemin de fer)

STEL: Short-term Exposure Limit SVHC: Substance of Very High Concern

TLV - TWA: Threshold Limit Value - Time Weighed Average

VOC: Volatile Organic Compounds

vPvB: Very persistent, very bioaccumulative.

## 16.3 Key literature references and sources for data

None

## Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The evaluation of hazard information of the product was carried out in accordance to Annex I of the REGULATION (EC) No 1272/2008 (CLP Regulation).

#### 16.5 Relevant H- and EUH-phrases (Number and full text)

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

## 16.6 Training advice

None

#### 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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