

## Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

### KLIMA FIX GRIGIO

Date of first edition: 10/15/2020

Safety Data Sheet dated 2/2/2023

version 3

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

### 1.1. Product identifier

Mixture identification:

Trade name: KLIMA FIX GRIGIO

Trade code: SK0356 .041

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

Recommended use: Mortar for levelling and finishing layers

Uses advised against: All uses other than recommended ones

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

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

safety@kerakoll.com

### 1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

#### Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2 Causes skin irritation.

Eye Dam. 1 Causes serious eye damage.

Skin Sens. 1B May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

#### Regulation (EC) No 1272/2008 (CLP):

#### Pictograms and Signal Words



Danger

#### Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

#### Precautionary statements

- P102

Keep out of reach of children.
- P260

Do not breathe dust.
- P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501

Dispose of contents/container in accordance with applicable regulations.

Contains

Portland Cement (Cr VI < 0,0002%)  
Calcium dihydroxide  
Flue Dust, Portland Cement

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

When mixtures containing cement react with water, for instance when making concrete or mortar, or when the cement becomes wet, a strong alkaline solution is produced (high pH caused by the formation of calcium, sodium and potassium hydroxides).  
Cement and mixtures containing cement may irritate the eyes, the mucous system, the throat and the respiratory system and cause coughing. Frequent inhalation of cement dust or mixtures containing cement over a long period of time increases the risk of developing lung diseases.  
In case of prolonged contact with the skin, both cement and mixtures containing cement, including pastes, may cause skin sensitisation due to the presence of trace amounts of chromium VI salts. Where necessary, such an effect can be minimized by incorporating a special reducing agent to maintain the water-soluble chromium VI content to concentration rates below 0.0002% (2 ppm) on the total dry weight of cement.

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: KLIMA FIX GRIGIO

Hazardous components within the meaning of the CLP regulation and related classification:

| Qty   | Name                              | Ident. Numb.                                      | Classification  | Registration Number |
|---|-----------------------------------|---|---|---------------------|
| 10-19,9 %   | Portland Cement (Cr VI < 0,0002%) | CAS:65997-15-1<br>EC:266-043-4                    | Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1B, H317; STOT SE 3, H335                 |                     |
| 1-2,4 %   | Calcium dihydroxide               | CAS:1305-62-0<br>EC:215-137-3                     | Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335                                      | 01-2119475151-45    |
| < 1 %   | Flue Dust, Portland Cement        | CAS:68475-76-3<br>EC:270-659-9                    | Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335                  | 01-2119486767-17    |
| < 0,05 %  | Quartz                            | CAS:14808-60-7<br>EC:238-878-4                    | STOT RE 1, H372   |                     |
| < 0,0015 %  | methanol                          | CAS:67-56-1<br>EC:200-659-6<br>Index:603-001-00-X | Flam. Liq. 2, H225 STOT SE 1, H370 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 | 01-2119433307-44    |
| Specific Concentration Limits:<br>C ≥ 10%: STOT SE 1 H370<br>3% ≤ C < 10%: STOT SE 2 H371 |                                   |   |   |                     |

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:  
Immediately take off all contaminated clothing.  
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.  
OBTAIN IMMEDIATE MEDICAL ATTENTION.  
Wash thoroughly the body (shower or bath).  
Remove contaminated clothing immediatley and dispose off safely.  
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

#### **5.2. Special hazards arising from the substance or mixture**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### **5.3. Advice for firefighters**

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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

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

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

#### **6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

#### **6.3. Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

#### **6.4. Reference to other sections**

See also section 8 and 13

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

#### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

The product must be stored in waterproof, dry, clean conditions and protected from contamination. Do not use aluminum containers due to incompatibility of the materials.

The product contains cement with an addition of a Chromium reducing agent (VI) and its effectiveness decreases with time. Consequently, packagings of the material indicate information about the production date, storing conditions and the appropriate storage period for the maintaining of the activity of the reducing agent and for maintaining the soluble Chromium (VI) amount under 2ppm over the total dry weight referred to cement (EN 196-10).

Instructions as regards storage premises:

Adequately ventilated premises.

### 7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Community Occupational Exposure Limits (OEL)

| Component | OEL Type | Country                  | Ceiling | Long Term<br>mg/m3 | Long Term<br>ppm | Short Term<br>mg/m3 | Short Term<br>ppm | Notes   |
|-----------|----------|--------------------------|---------|--------------------|------------------|---------------------|-------------------|---|
| Quartz    | NATIONAL | AUSTRALIA                |         | 0.050              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | AUSTRIA                  |         | 0.050              |                  |                     |                   | MAK value, Respirable fraction  |
|           | NATIONAL | BELGIUM                  |         | 0.100              |                  |                     |                   | Respirable dust , Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work |
|           | NATIONAL | CANADA                   |         | 0.100              |                  |                     |                   | Canada Ontario; Respirable aerosol  |
|           | NATIONAL | CANADA                   |         | 0.100              |                  |                     |                   | Canada Quebec, Respirable fraction  |
|           | NATIONAL | DENMARK                  |         | 0.300              |                  | 0.600               |                   | Inhalable aerosol   |
|           | NATIONAL | DENMARK                  |         | 0.100              |                  | 0.200               |                   | Respirable aerosol  |
|           | NATIONAL | FINLAND                  |         | 0.050              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | FRANCE                   |         | 0.100              |                  |                     |                   | Respirable aerosol  |
|           | NATIONAL | HUNGARY                  |         | 0.100              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | IRELAND                  |         | 0.100              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | SPAIN                    |         | 0.050              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | SWEDEN                   |         | 0.100              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | SWITZERLAND              |         | 0.150              |                  |                     |                   | Respirable aerosol  |
|           | NATIONAL | NETHERLANDS              |         | 0.075              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | ITALY                    |         | 0.100              |                  |                     |                   | Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008   |
|           | NATIONAL | UNITED STATES OF AMERICA |         | 0.050              |                  |                     |                   | NIOSH   |
|           | NATIONAL | UNITED STATES OF AMERICA |         | 0.050              |                  |                     |                   | Respirable fraction, mppcf × 35.3 = million particles per cubic meter = particles per c.c.  |
|           | NATIONAL | INDIA                    |         | 10.000             |                  |                     |                   |   |
|           | NATIONAL | NORWAY                   |         | 0.300              |                  |                     |                   | Total dust  |
|           | NATIONAL | NORWAY                   |         | 0.100              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | POLAND                   |         | 0.100              |                  |                     |                   | Respirable fraction   |
|           | NATIONAL | PORTUGAL                 |         | 0.050              |                  |                     |                   | Respirable fraction   |
| Limestone | NATIONAL | SLOVENIA                 |         | 0.050              | 0.400            |                     |                   |   |
|           | NATIONAL | BELGIUM                  |         | 10.000             |                  |                     |                   |   |
|           | NATIONAL | HUNGARY                  |         | 10.000             |                  |                     |                   |   |
|           | NATIONAL | SPAIN                    |         | 10.000             |                  |                     |                   | Inhalable aerosol   |
|           | NATIONAL | SWITZERLAND              |         | 3.000              |                  |                     |                   | Respirable aerosol  |

|                                   |          |  |   |
|-----------------------------------|----------|--|---|
| Portland Cement (Cr VI < 0,0002%) | ND       |  |   |
|                                   | NATIONAL | UNITED STATES OF AMERICA                             | 15.000  |
|                                   |          |  | OSHA: Total dust  |
|                                   | NATIONAL | UNITED STATES OF AMERICA                             | 5.000   |
|                                   |          |  | OSHA: Respirable dust   |
|                                   | NATIONAL | UNITED STATES OF AMERICA                             | 10.000  |
|                                   |          |  | NIOSH: total dust   |
|                                   | NATIONAL | UNITED STATES OF AMERICA                             | 5.000   |
|                                   |          |  | NIOSH: Respirable aerosol   |
|                                   | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 10.000  |
|                                   |          |  | Inhalable aerosol   |
|                                   | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 4.000   |
|                                   |          |  | Respirable aerosol  |
|                                   | NATIONAL | CROATIA  | 10.000  |
|                                   | NATIONAL | FRANCE   | 10.000  |
|                                   | NATIONAL | NETHERLANDS  | 10.000  |
|                                   | NATIONAL | PORTUGAL   | 10.000  |
|                                   | NATIONAL | AUSTRALIA  | 10.000  |
|                                   |          |  | This value is for inhalable dust containing no asbestos and < 1% crystalline silica.  |
|                                   | NATIONAL | AUSTRIA  | 5.000   |
|                                   | NATIONAL | BELGIUM  | 1.000   |
|                                   |          |  | Inhalable aerosol   |
|                                   |          |  | Respirable fractionRespirable fraction, no asbestos fibres and < 1% crystalline silica  |
|                                   | NATIONAL | CANADA   | 1.000   |
|                                   |          |  | Canada Ontario. The value is for particulate matter containing no asbestos an <1 % crystalline silica. Respirable fraction                            |
|                                   | NATIONAL | CANADA   | 1.000   |
|                                   |          |  | Canada - Québec Respirable fraction. The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1% |
|                                   | NATIONAL | CROATIA  | 10.000  |
|                                   | NATIONAL | FINLAND  | 5.000   |
|                                   | NATIONAL | FINLAND  | 1.000   |
|                                   | NATIONAL | GERMANY  | 5.000   |
|                                   | NATIONAL | HUNGARY  | 10.000  |
|                                   | NATIONAL | IRELAND  | 1.000   |
|                                   | NATIONAL | LATVIA   | 6.000   |
|                                   | NATIONAL | NETHERLANDS  | 1.000   |
|                                   |          |  | Respirable dust   |
|                                   | NATIONAL | POLAND   | 2.000   |
|                                   | NATIONAL | PORTUGAL   | 10.000  |
|                                   |          |  | Respirable fraction   |

|                     |          |  |        |        |  |  |
|---------------------|----------|--|--------|--------|--|--|
| Calcium dihydroxide | NATIONAL | PORTUGAL   | 1.000  |        |  |  |
|                     | NATIONAL | SPAIN  | 4.000  |        |  | Respirable fraction  |
|                     | NATIONAL | SWITZERLAND  | 5.000  |        |  | Inhalable aerosol  |
|                     | NATIONAL | UNITED STATES OF AMERICA                             | 15.000 |        |  | OSHA; Total dust   |
|                     | NATIONAL | UNITED STATES OF AMERICA                             | 10.000 |        |  | NIOSH; Total dust  |
|                     | NATIONAL | UNITED STATES OF AMERICA                             | 5.000  |        |  | NIOSH; Respirable fraction   |
|                     | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 10.000 |        |  | Inhalable aerosol  |
|                     | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 4.000  |        |  | Respirable aerosol   |
|                     | NATIONAL | AUSTRALIA  | 5.000  |        |  |  |
|                     | NATIONAL | AUSTRIA  | 1.000  |        |  | Inhalable fraction   |
|                     | NATIONAL | AUSTRIA C  |        | 4.000  |  | Inhalable fraction   |
|                     | NATIONAL | BELGIUM  | 5.000  |        |  |  |
|                     | NATIONAL | CANADA   | 5.000  |        |  | Ontario  |
|                     | NATIONAL | CANADA   | 5.000  |        |  | Quebec   |
|                     | NATIONAL | DENMARK  | 5.000  | 10.000 |  |  |
|                     | NATIONAL | FINLAND  | 1.000  | 4.000  |  |  |
|                     | NATIONAL | FRANCE   | 1.000  | 4.000  |  | Italics type: Indicative statutory limit values; long term and short term: respirable fraction |
|                     | NATIONAL | GERMANY  | 1.000  | 2.000  |  | ASG; Long term and short term: inhalable fraction  |
|                     | NATIONAL | GERMANY  | 1.000  | 2.000  |  | DFG; Long term and short term: inhalable aerosol   |
|                     | NATIONAL | HUNGARY  | 5.000  |        |  |  |
|                     | NATIONAL | IRELAND  | 5.000  |        |  |  |
|                     | NATIONAL | LATVIA   | 1.000  | 4.000  |  | Long term and short term: respirable fraction  |
|                     | NATIONAL | NEW ZEALAND  | 5.000  |        |  |  |
|                     | NATIONAL | ROMANIA  | 1.000  | 4.000  |  | Long term and short term: respirable fraction  |
|                     | NATIONAL | SINGAPORE  | 5.000  |        |  |  |
|                     | NATIONAL | SPAIN  | 5.000  |        |  |  |
|                     | NATIONAL | SWEDEN   | 1.000  | 4.000  |  | Long term and short term: respirable fraction  |
|                     | NATIONAL | SWITZERLAND  | 5.000  |        |  | Inhalable aerosol  |
|                     | NATIONAL | TURKEY   | 5.000  |        |  |  |
|                     | NATIONAL | UNITED   | 5.000  |        |  | NIOSH  |

|        |          |  |        |       |  |
|--------|----------|--|--------|-------|--|
| Quartz |          | STATES OF AMERICA                                    |        |       |  |
|        | NATIONAL | UNITED STATES OF AMERICA                             | 15.000 |       | OSHA; inhalable aerosol                                    |
|        | NATIONAL | UNITED STATES OF AMERICA                             | 5.000  |       | OSHA; respirable aerosol                                   |
|        | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 5.000  |       | Inhalable fraction   |
|        | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 1.000  |       | Respirable fraction  |
|        | NATIONAL | ITALY  | 1.000  | 4.000 |  |
|        | NATIONAL | ARGENTINA  | 5.000  |       |  |
|        | NATIONAL | KOREA, REPUBLIC OF                                   | 5.000  |       |  |
|        | NATIONAL | INDONESIA  | 5.000  |       |  |
|        | NATIONAL | PORTUGAL   | 5.000  |       |  |
|        | NATIONAL | SOUTH AFRICA   | 5.000  |       |  |
|        | NATIONAL | TAIWAN, PROVINCE OF CHINA                            | 5.000  |       |  |
|        | NATIONAL | BULGARIA   | 1.000  | 4.000 |  |
|        | NATIONAL | CZECHIA  | 1.000  | 4.000 |  |
|        | NATIONAL | CROATIA  | 1.000  | 4.000 | Long term and short term: respirable dust                  |
|        | NATIONAL | ESTONIA  | 1.000  | 4.000 |  |
|        | NATIONAL | ICELAND  | 1.000  | 4.000 |  |
|        | NATIONAL | LITHUANIA  | 1.000  | 4.000 |  |
|        | NATIONAL | NORWAY   | 1.000  | 4.000 |  |
|        | NATIONAL | NETHERLANDS  | 1.000  | 4.000 |  |
|        | NATIONAL | SLOVAKIA   | 1.000  | 4.000 |  |
|        | NATIONAL | SLOVENIA   | 1.000  | 4.000 |  |
|        | NATIONAL | RUSSIAN FEDERATION                                   |        | 2.000 |  |
|        | NATIONAL | POLAND   | 2.000  | 6.000 | Long term and short term: inhalable fraction               |
|        | NATIONAL | POLAND   | 1.000  | 4.000 | Long term and short term: respirable fraction              |
|        | ACGIH    | NNN  | 5.000  |       | Eye, URT and skin irr                                      |
|        | EU       | NNN  | 1.000  | 4.000 | Respirable fraction  |
|        | NATIONAL | AUSTRALIA  | 0.050  |       | Respirable fraction  |
|        | NATIONAL | AUSTRIA  | 0.050  |       | respirable fraction  |
|        | NATIONAL | BELGIUM  | 0.100  |       | Respirable dust , Additional indication "C" means that the |

|                 |          |                          |         |         |          |         |   |
|-----------------|----------|--------------------------|---------|---------|----------|---------|---|
|                 |          |                          |         |         |          |         | agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work  |
|                 | NATIONAL | CANADA                   | 0.100   |         |          |         | Canada Ontario. Respirable aerosol  |
|                 | NATIONAL | CANADA                   | 0.100   |         |          |         | Canada Quebec, respirable fraction  |
|                 | NATIONAL | DENMARK                  | 0.300   |         | 0.600    |         | Inhalable aerosol   |
|                 | NATIONAL | DENMARK                  | 0.100   |         | 0.200    |         | Respirable aerosol  |
|                 | NATIONAL | FINLAND                  | 0.050   |         |          |         | Respirable fraction   |
|                 | NATIONAL | FRANCE                   | 0.100   |         |          |         | Respirable aerosol  |
|                 | NATIONAL | HUNGARY                  | 0.100   |         |          |         | Respirable aerosol  |
|                 | NATIONAL | IRELAND                  | 0.100   |         |          |         | Respirable fraction   |
|                 | NATIONAL | SPAIN                    | 0.050   |         |          |         | Respirable fraction   |
|                 | NATIONAL | SWEDEN                   | 0.100   |         |          |         | Respirable aerosol  |
|                 | NATIONAL | SWITZERLAND              | 0.150   |         |          |         | Respirable aerosol  |
|                 | NATIONAL | NETHERLANDS              | 0.075   |         |          |         | Respirable dust   |
|                 | NATIONAL | ITALY                    | 0.100   |         |          |         | Polvere di silice cristallina respirabile (frazione inalabile). D.Lgs 81/2008   |
|                 | NATIONAL | UNITED STATES OF AMERICA | 0.050   |         |          |         | NIOSH   |
|                 | NATIONAL | CROATIA                  | 0.100   |         |          |         |   |
|                 | NATIONAL | ESTONIA                  | 0.100   |         |          |         |   |
|                 | NATIONAL | LITHUANIA                | 0.100   |         |          |         |   |
|                 | NATIONAL | NORWAY                   | 0.300   |         |          |         | Total dust  |
|                 | NATIONAL | NORWAY                   | 0.100   |         |          |         | Respirable dust   |
|                 | NATIONAL | POLAND                   | 0.100   |         |          |         | Respirable fraction   |
|                 | NATIONAL | PORTUGAL                 | 0.050   |         |          |         |   |
|                 | NATIONAL | SLOVENIA                 | 0.050   | 0.400   |          |         |   |
|                 | EU       | NNN                      | 0.100   |         |          |         | Polvere di silice cristallina respirabile, frazione inalabile. (R), A2 - Pulm fibrosis, lung cancer. Directive 2017/2398  |
| sodium chloride | NATIONAL | INDIA                    | 10.000  |         |          |         |   |
|                 | NATIONAL | LATVIA                   | 5.000   |         |          |         |   |
|                 | NATIONAL | LITHUANIA                | 5.000   |         |          |         |   |
| methanol        | EU       | NNN                      | 260     | 200     |          |         | Skin  |
|                 | NATIONAL | AUSTRIA                  | 260.000 | 200.000 | 1040.000 | 800.000 |   |
|                 | NATIONAL | BELGIUM                  | 266.000 | 200.000 | 333.000  | 250.000 | Additional indication "D" means that the absorption of the agent through the skin, mucous membranes or eyes is an important part of the total exposure. It can be the result of both direct contact and its presence in the air |
|                 | NATIONAL | CANADA                   |         | 200.000 |          | 250.000 | Ontario   |
|                 | NATIONAL | CANADA                   | 262.000 | 200.000 | 328.000  | 250.000 | Quebec  |
|                 | NATIONAL | DENMARK                  | 260.000 | 200.000 | 328.000  | 250.000 |   |
|                 | NATIONAL | FINLAND                  | 270.000 | 200.000 | 330.000  | 250.000 |   |
|                 | NATIONAL | FRANCE                   | 260.000 | 200.000 |          |         | Bold type: Restrictive statutory limit values Skin  |



|          |  |         |         |          |         |  |
|----------|--|---------|---------|----------|---------|--|
| NATIONAL | GERMANY  | 270.000 | 200.000 | 1080.000 | 800.000 | AGS  |
| NATIONAL | GERMANY  | 130.000 | 100.000 | 260.000  | 200.000 | DFG  |
| NATIONAL | HUNGARY  | 260.000 |         |          |         |  |
| NATIONAL | IRELAND  | 260.000 | 200.000 |          |         |  |
| NATIONAL | ITALY  | 260.000 | 200.000 |          |         | Cute   |
| NATIONAL | LATVIA   | 260.000 | 200.000 |          |         |  |
| NATIONAL | NEW ZEALAND  | 262.000 | 200.000 | 328.000  | 250.000 |  |
| NATIONAL | CHINA  | 25.000  |         | 50.000   |         |  |
| NATIONAL | POLAND   | 100.000 |         | 300.000  |         |  |
| NATIONAL | ROMANIA  | 260.000 | 200.000 |          |         |  |
| NATIONAL | SINGAPORE  | 262.000 | 200.000 | 328.000  | 250.000 |  |
| NATIONAL | KOREA, REPUBLIC OF                                   | 260.000 | 200.000 | 310.000  | 250.000 |  |
| NATIONAL | SPAIN  | 266.000 | 200.000 | 333.000  | 250.000 |  |
| NATIONAL | SWEDEN   | 250.000 | 200.000 | 350.000  | 250.000 |  |
| NATIONAL | SWITZERLAND  | 260.000 | 200.000 | 1040.000 | 800.000 |  |
| NATIONAL | NETHERLANDS  | 133.000 |         |          |         |  |
| NATIONAL | TURKEY   | 260.000 | 200.000 |          |         |  |
| NATIONAL | UNITED STATES OF AMERICA                             | 260.000 | 200.000 | 325.000  | 250.000 | NIOSH  |
| NATIONAL | UNITED STATES OF AMERICA                             | 260.000 | 200.000 |          |         | OSHA   |
| NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 266.000 | 200.000 | 333.000  | 250.000 |  |
| NATIONAL | ITALY  | 262.000 | 200.000 | 328.000  | 250.000 | TWA  |
| NATIONAL | ITALY  | 260.000 | 200.000 | 1040.000 | 800.000 | TLV  |
| NATIONAL | ARGENTINA  |         | 200.000 |          | 250.000 |  |
| NATIONAL | BULGARIA   | 260.000 | 200.000 |          |         |  |
| NATIONAL | CZECHIA  | 250.000 |         | 1000.000 |         |  |
| NATIONAL | CHILE  | 229.000 | 175.000 | 328.000  | 230.000 |  |
| NATIONAL | CROATIA  | 260.000 | 200.000 |          |         |  |
| NATIONAL | ESTONIA  | 250.000 | 200.000 | 350.000  | 250.000 |  |
| NATIONAL | GREECE   | 260.000 | 200.000 | 325.000  | 250.000 |  |
| NATIONAL | INDONESIA  |         | 200.000 |          | 250.000 |  |
| NATIONAL | IRELAND  | 260.000 | 200.000 |          |         |  |
| NATIONAL | ICELAND  | 260.000 | 200.000 |          |         |  |
| NATIONAL | LITHUANIA  | 260.000 | 200.000 |          |         |  |
| NATIONAL | NORWAY   | 130.000 | 100.000 |          |         |  |
| NATIONAL | PORTUGAL   |         | 200.000 |          | 250.000 |  |
| ACGIH    | NNN  |         | 200.000 |          | 250.000 | Skin, BEI - Headache, eye dam, dizziness, nausea |
| EU       | NNN  | 260.000 | 200.000 |          |         | Skin   |

#### Biological limit values

| CAS-No. | Component | Value | UoM  | Medium | Biological Indicator | Sampling Period                  |
|---------|-----------|-------|------|--------|----------------------|----------------------------------|
| 67-56-1 | methanol  | 30    | mg/L | Urine  | Methyl alcohol       | End of turn; End of working week |

### Predicted No Effect Concentration (PNEC) values

| Component                  | CAS-No.    | PNEC Limit     | Exposure Route                      | Exposure Frequency |
|----------------------------|------------|----------------|-------------------------------------|--------------------|
| Calcium dihydroxide        | 1305-62-0  | 490.000 µg/l   | Freshwater                          |                    |
|                            |            | 490.000 µg/l   | Intermittent releases (freshwater)  |                    |
|                            |            | 320.000 µg/l   | Marine water                        |                    |
|                            |            | 3.000 mg/l     | Microorganisms in sewage treatments |                    |
|                            |            | 1080.000 mg/kg | Soil                                |                    |
| Flue Dust, Portland Cement | 68475-76-3 | 282.000 µg/l   | Freshwater                          |                    |
|                            |            | 282.000 µg/l   | Intermittent releases (freshwater)  |                    |
|                            |            | 28.000 µg/l    | Marine water                        |                    |
|                            |            | 6.000 mg/kg    | Microorganisms in sewage treatments |                    |
|                            |            | 88.000 µg/kg   | Marine water sediments              |                    |
| methanol                   | 67-56-1    | 875.000 µg/kg  | Freshwater sediments                |                    |
|                            |            | 20.800 mg/l    | Freshwater                          |                    |
|                            |            | 1540.000 mg/l  | Intermittent releases (freshwater)  |                    |
|                            |            | 2.080 mg/l     | Marine water                        |                    |
|                            |            | 100.000 mg/l   | Microorganisms in sewage treatments |                    |
|                            |            | 77.000 mg/kg   | Freshwater sediments                |                    |
|                            |            | 7.700 mg/kg    | Marine water sediments              |                    |
|                            |            | 100.000 mg/kg  | Soil                                |                    |

### Derived No Effect Level (DNEL) values

| Component                  | CAS-No.    | Worker Industry | Worker Professional | Consumer      | Exposure Route   | Exposure Frequency           |
|----------------------------|------------|-----------------|---------------------|---------------|------------------|------------------------------|
| Calcium dihydroxide        | 1305-62-0  |                 | 1.000 mg/m³         | 1.000 mg/m³   | Human Inhalation | Long Term, local effects     |
|                            |            |                 | 4.000 mg/m³         | 4.000 mg/m³   | Human Inhalation | Short Term, local effects    |
| Flue Dust, Portland Cement | 68475-76-3 |                 | 840.000 µg/m³       | 840.000 µg/m³ | Human Inhalation | Long Term, local effects     |
|                            |            |                 | 4.000 mg/m³         |               | Human Inhalation | Short Term, local effects    |
| methanol                   | 67-56-1    |                 | 130.000 mg/m³       | 26.000 mg/m³  | Human Inhalation | Long Term, systemic effects  |
|                            |            |                 | 130.000 mg/m³       | 26.000 mg/m³  | Human Inhalation | Short Term, systemic effects |
|                            |            |                 | 130.000 mg/m³       | 26.000 mg/m³  | Human Inhalation | Long Term, local effects     |
|                            |            |                 | 130.000 mg/m³       | 26.000 mg/m³  | Human Inhalation | Short Term, local effects    |
|                            |            |                 | 20.000 mg/kg        | 4.000 mg/kg   | Human Dermal     | Long Term, systemic effects  |
|                            |            |                 | 20.000 mg/kg        | 4.000 mg/kg   | Human Dermal     | Short Term, systemic effects |
|                            |            |                 |                     | 4.000 mg/kg   | Human Oral       | Long Term, systemic effects  |
|                            |            |                 |                     | 4.000 mg/kg   | Human Oral       | Short Term, systemic effects |

## 8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Disposable suit.; Safety shoes.

Protection for hands:

Neoprene, Nitrile rubber.

Respiratory protection:

Particle filter P2 .

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

---

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical State Solid

Color: Grey

Odour: Odourless

Odour threshold: N.A.

pH: =12.70

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: Not Applicable

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.49 g/cm<sup>3</sup>

Solubility in water: Slightly soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0.00 % ; 0.01 g/l

#### Particle characteristics:

Particle size: N.A.

### 9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A. No other relevant information

---

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions

### 10.2. Chemical stability

The product is stable as long as it is properly stored (see Section 7).

Wet product is alkaline and incompatible with acids, with ammonium salts, with aluminium or other base metals. When in contact with hydrofluoric acid, mixtures containing cement dissolve to produce corrosive silicon tetrafluoride gas. Mixtures containing cement react with water to form silicates and calcium hydroxide. Silicates in cement react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

Intact packaging and compliance with the appropriate storage conditions as indicated in Subsection 7.2 (adequate tightly closed and sealed containers, dry and cool place, no ventilation) are the essential conditions to keep the effectiveness of the reducing agent unaltered throughout the shelf life declared on bag.

### 10.3. Possibility of hazardous reactions

None.

### 10.4. Conditions to avoid

Stable under normal conditions.

### 10.5. Incompatible materials

Acids, ammonium salts, aluminium or other base metals. Uncontrolled use of aluminium dust in wet cement-containing products is to be

avoided because it causes the production of hydrogen.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

|                                      |  |
|--------------------------------------|--|
| a) acute toxicity                    | Not classified   |
|                                      | Based on available data, the classification criteria are not met |
| b) skin corrosion/irritation         | The product is classified: Skin Irrit. 2(H315)                   |
| c) serious eye damage/irritation     | The product is classified: Eye Dam. 1(H318)                      |
| d) respiratory or skin sensitisation | The product is classified: Skin Sens. 1B(H317)                   |
| e) germ cell mutagenicity            | Not classified   |
|                                      | Based on available data, the classification criteria are not met |
| f) carcinogenicity                   | Not classified   |
|                                      | Based on available data, the classification criteria are not met |
| g) reproductive toxicity             | Not classified   |
|                                      | Based on available data, the classification criteria are not met |
| h) STOT-single exposure              | Not classified   |
|                                      | Based on available data, the classification criteria are not met |
| i) STOT-repeated exposure            | Not classified   |
|                                      | Based on available data, the classification criteria are not met |
| j) aspiration hazard                 | Not classified   |
|                                      | Based on available data, the classification criteria are not met |

Toxicological information on main components of the mixture:

|                            |                                      |  |       |
|----------------------------|--------------------------------------|--|-------|
| Calcium dihydroxide        | a) acute toxicity                    | LD50 Oral Rat > 2000.00000 mg/kg                           |       |
|                            |                                      | LC50 Inhalation Dust Rat > 6.04000 mg/l 4h                 |       |
|                            |                                      | LD50 Skin Rabbit > 2500.00000 mg/kg                        |       |
|                            | b) skin corrosion/irritation         | Skin Irritant Rabbit Positive                              |       |
|                            | c) serious eye damage/irritation     | Eye Irritant Rabbit Yes                                    |       |
|                            | d) respiratory or skin sensitisation | Skin Sensitization Negative                                |       |
|                            | f) carcinogenicity                   | Carcinogenicity Oral Rat = 517.00000 mg/kg                 | NOAEL |
| Flue Dust, Portland Cement | a) acute toxicity                    | LD50 Oral Rat > 1848.00000 mg/kg                           |       |
|                            |                                      | LC50 Inhalation Dust Rat > 6.04000 mg/l 4h                 |       |
|                            |                                      | LD50 Skin Rat >= 2000.00000 mg/kg 24h                      |       |
|                            | b) skin corrosion/irritation         | Skin Irritant Negative                                     |       |
|                            | c) serious eye damage/irritation     | Eye Irritant Yes   |       |
|                            | d) respiratory or skin sensitisation | Skin Sensitization Positive                                |       |
|                            | f) carcinogenicity                   | Genotoxicity Rat Negative                                  |       |
|                            | g) reproductive toxicity             | No Observed Adverse Effect Level Oral Rat = 16.00000 mg/kg |       |
| Quartz                     | a) acute toxicity                    | LD50 Oral > 2000.00000 mg/kg                               |       |
| methanol                   | a) acute toxicity                    | LD50 Oral Rat >= 2528.00000 mg/kg                          |       |
|                            |                                      | LC50 Inhalation = 43.68000 mg/l 6h                         | Cat   |
|                            |                                      | LD50 Skin Rabbit = 17100.00000 mg/kg                       |       |
|                            | b) skin corrosion/irritation         | Skin Irritant Rabbit Negative                              |       |

|                                      |  |                             |
|--------------------------------------|--|-----------------------------|
| c) serious eye damage/irritation     | Eye Irritant Rabbit No                                       |                             |
| d) respiratory or skin sensitisation | Skin Sensitization Guinea pig Negative                       |                             |
| f) carcinogenicity                   | Genotoxicity Negative  | Mouse intraperitoneal route |
|                                      | Carcinogenicity Rat Negative                                 |                             |
| g) reproductive toxicity             | Lowest Observed Adverse Effect Level Oral = 1000.00000 mg/kg | Mouse                       |

## 11.2 Information on other hazards

### Endocrine disrupting properties:

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

#### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

#### List of Eco-Toxicological properties of the components

| Component                  | Ident. Numb.                           | Ecotox Data  |
|----------------------------|--|--|
| Calcium dihydroxide        | CAS: 1305-62-0<br>- EINECS: 215-137-3  | <p>a) Aquatic acute toxicity : LC50 Fish rainbow trout = 50.60000 mg/L 96h</p> <p>a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 49.10000 mg/L 48h</p> <p>b) Aquatic chronic toxicity : NOEC Crangon septemspinosa = 32.00000 mg/L 48h - 14days</p> <p>a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 184.57000 mg/L 72h „OECD Guideline 201 (Alga, Growth Inhibition Test)</p> <p>a) Aquatic acute toxicity : EC50 Sludge activated sludge = 300.40000 mg/L 3h „OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)</p> <p>d) Terrestrial toxicity : NOEC Worm Eisenia fetida = 2000.00000 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests)</p> <p>d) Terrestrial toxicity : EC10 soil microorganisms = 4000.00000 mg/kg „Guideline: BBA VI, 1-1 (1990) under consideration of OECD 216 (2000) and OECD 217 (2000).</p>                               |
| Flue Dust, Portland Cement | CAS: 68475-76-3<br>- EINECS: 270-659-9 | <p>a) Aquatic acute toxicity : NOEC Fish zebrafish = 11.10000 mg/L 96h ECHA</p> <p>a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 100.00000 mg/L 48h OECD 202</p> <p>b) Aquatic chronic toxicity : NOELR Daphnia Daphnia magna = 50.00000 mg/L 48h OECD 211</p> <p>b) Aquatic chronic toxicity : EL10 Daphnia Daphnia magna = 68.20000 mg/L 48h OECD 211 - 21 days</p> <p>a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 28.20000 mg/L 72h OECD 20</p> <p>a) Aquatic acute toxicity : EC50 Sludge activated sludge = 596.00000 mg/L OECD Guideline No. 209</p> <p>b) Aquatic chronic toxicity : EC50 = 9931.00000 mg/kg „PARCOM (1994): MAFF/ERT Harmonised Protocol: A sediment Bioassay using an Amphipod, Corophium sp. Draft 1994. - sediment</p> <p>d) Terrestrial toxicity : EC50 Worm Eisenia fetida = 1000.00000 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests)</p> |

methanol

CAS: 67-56-1 -  
EINECS: 200-  
659-6 - INDEX:  
603-001-00-X

a) Aquatic acute toxicity : LC50 Fish *Lepomis macrochirus* = 15400.00000 mg/L 96h

b) Aquatic chronic toxicity : NOEC Fish = 450.00000 mg/L

a) Aquatic acute toxicity : EC50 *Daphnia magna* = 22200.00000 mg/L 48h

b) Aquatic chronic toxicity : NOEC *Daphnia magna* = 208.00000 mg/L

a) Aquatic acute toxicity : EC50 *Selenastrum capricornutum* = 22000.00000 mg/L 96h OECD 201 Guideline.

d) Terrestrial toxicity : NOEC *Eisenia andrei* = 10000.00000 mg/kg

d) Terrestrial toxicity : NOEC *Folsomia candida* = 1000.00000 mg/kg OECD Guideline 232

## 12.2. Persistence and degradability

| Component | Persistence/Degradability: |
|-----------|----------------------------|
| methanol  | Readily biodegradable      |

## 12.3. Bioaccumulative potential

| Component | Bioaccumulation     | Test                          | Notes |
|-----------|---------------------|-------------------------------|-------|
| methanol  | Not bioaccumulative | BCF - Bioconcentration factor | < 10  |

## 12.4. Mobility in soil

N.A.

## 12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

## 12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

## 12.7 Other adverse effects

N.A.

---

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

### Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 4: Irritant — skin irritation and eye damage; HP 13: Sensitising

---

## SECTION 14: Transport information

### 14.1. UN number or ID number

N/A

### 14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

### 14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

### 14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

### 14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

#### 14.6. Special precautions for user

Road and Rail ( ADR-RID ) :

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air ( IATA ) :

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A

Sea ( IMDG ) :

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisioning: N/A

#### 14.7. Maritime transport in bulk according to IMO instruments

N.A.

---

### SECTION 15: Regulatory information

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

EN 196-10 – “Methods of Testing Cement - Part 10: Determination of the water-soluble chromium (VI) content of cement”

According to Annex XVII, Point 47, under Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as amended by Regulation No. 552/2009, cement and mixtures containing cement shall not be placed on the market or used if they contain, after mixing with water, more than 0.0002% (2 ppm) of soluble chromium (VI) of the total dry weight of the cement. Compliance with this threshold limit is ensured through the introduction of a reducing agent into the preparation, the effectiveness of which is guaranteed for a certain period of time (shelf life), and the maintenance of the appropriate storage conditions (see Subsection 7.2 and Section 10).

Cement is a mixture and, as such, is not subject to REACH registration, which is mandatory for substances. Cement clinker is a substance, but it is exempt from registration pursuant to article 2.7 (b) and Annex V.10 of REACH.

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None

Restrictions related to the substances contained: 40, 69, 75

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

**Regulation (EU) 649/2012 (PIC regulation):**

No Substance Listed

German Water Hazard Class.

NWG: Not hazardous for water

SVHC Substances:

No data available

**15.2. Chemical safety assessment**

A Chemical Safety Assessment has been carried out for the mixture.

---

**SECTION 16: Other information**

| Code | Description   |
|------|---|
| H225 | Highly flammable liquid and vapour.                             |
| H301 | Toxic if swallowed.   |
| H311 | Toxic in contact with skin.                                     |
| H315 | Causes skin irritation.   |
| H317 | May cause an allergic skin reaction.                            |
| H318 | Causes serious eye damage.                                      |
| H331 | Toxic if inhaled.   |
| H335 | May cause respiratory irritation.                               |
| H370 | Causes damage to organs.  |
| H372 | Causes damage to organs through prolonged or repeated exposure. |

| Code         | Hazard class and hazard category | Description  |
|--------------|----------------------------------|--|
| 2.6/2        | Flam. Liq. 2                     | Flammable liquid, Category 2                                   |
| 3.1/3/Dermal | Acute Tox. 3                     | Acute toxicity (dermal), Category 3                            |
| 3.1/3/Inhal  | Acute Tox. 3                     | Acute toxicity (inhalation), Category 3                        |
| 3.1/3/Oral   | Acute Tox. 3                     | Acute toxicity (oral), Category 3                              |
| 3.2/2        | Skin Irrit. 2                    | Skin irritation, Category 2                                    |
| 3.3/1        | Eye Dam. 1                       | Serious eye damage, Category 1                                 |
| 3.4.2/1      | Skin Sens. 1                     | Skin Sensitisation, Category 1                                 |
| 3.4.2/1B     | Skin Sens. 1B                    | Skin Sensitisation, Category 1B                                |
| 3.8/1        | STOT SE 1                        | Specific target organ toxicity — single exposure, Category 1   |
| 3.8/3        | STOT SE 3                        | Specific target organ toxicity — single exposure, Category 3   |
| 3.9/1        | STOT RE 1                        | Specific target organ toxicity — repeated exposure, Category 1 |

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure   |
|---|----------------------------|
| 3.2/2   | Calculation method         |
| 3.3/1   | On basis of test data (pH) |
| 3.4.2/1B  | Calculation method         |

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)



BCF: Biological Concentration Factor  
 BEI: Biological Exposure Index  
 BOD: Biochemical Oxygen Demand  
 CAS: Chemical Abstracts Service (division of the American Chemical Society).  
 CAV: Poison Center  
 CE: European Community  
 CLP: Classification, Labeling, Packaging.  
 CMR: Carcinogenic, Mutagenic and Reprotoxic  
 COD: Chemical Oxygen Demand  
 COV: Volatile Organic Compound  
 CSA: Chemical Safety Assessment  
 CSR: Chemical Safety Report  
 DMEL: Derived Minimal Effect Level  
 DNEL: Derived No Effect Level.  
 DPD: Dangerous Preparations Directive  
 DSD: Dangerous Substances Directive  
 EC50: Half Maximal Effective Concentration  
 ECHA: European Chemicals Agency  
 EINECS: European Inventory of Existing Commercial Chemical Substances.  
 ES: Exposure Scenario  
 GefStoffVO: Ordinance on Hazardous Substances, Germany.  
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
 IARC: International Agency for Research on Cancer  
 IATA: International Air Transport Association.  
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
 IC50: half maximal inhibitory concentration  
 ICAO: International Civil Aviation Organization.  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
 IMDG: International Maritime Code for Dangerous Goods.  
 INCI: International Nomenclature of Cosmetic Ingredients.  
 IRCCS: Scientific Institute for Research, Hospitalization and Health Care  
 KAFH: Keep Away From Heat  
 KSt: Explosion coefficient.  
 LC50: Lethal concentration, for 50 percent of test population.  
 LD50: Lethal dose, for 50 percent of test population.  
 LDLo: Leathal Dose Low  
 N.A.: Not Applicable  
 N/A: Not Applicable  
 N/D: Not defined/ Not available  
 NA: Not available  
 NIOSH: National Institute for Occupational Safety and Health  
 NOAEL: No Observed Adverse Effect Level  
 OSHA: Occupational Safety and Health Administration.  
 PBT: Persistent, Bioaccumulative and Toxic  
 PGK: Packaging Instruction  
 PNEC: Predicted No Effect Concentration.  
 PSG: Passengers  
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
 STEL: Short Term Exposure limit.  
 STOT: Specific Target Organ Toxicity.  
 TLV: Threshold Limiting Value.  
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
 vPvB: Very Persistent, Very Bioaccumulative.  
 WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 5. FIRE-FIGHTING MEASURES
- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE

- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION



## Exposure Scenario

### Calcium dihydroxide

## Exposure Scenario, 24/06/2021

| Substance identity  |                     |
|---------------------|---------------------|
|                     | Calcium dihydroxide |
| CAS No.             | 1305-62-0           |
| EINECS No.          | 215-137-3           |
| Registration number | 01-2119475151-45    |

## Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC9b, PC15)

|  |  |   |  |
|--|--|---|--|
| 1. ES 1  |  | Widespread use by professional workers; Various products (PC9a, PC9b, PC15) |  |
| <b>1.1 TITLE SECTION</b>   |  |   |  |
| Exposure Scenario name   | Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants   |   |  |
| Date - Version   | 24/06/2021 - 1.0   |   |  |
| Life Cycle Stage   | Widespread use by professional workers   |   |  |
| Main user group  | Professional uses  |   |  |
| Sector(s) of use   | Professional uses (SU22)   |   |  |
| Product Categories   | Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b) - Non-metal surface treatment products (PC15) |   |  |
| <b>Environment Contributing Scenario</b>   |  |   |  |
| CS1  | ERC8c - ERC8f  |   |  |
| <b>Worker Contributing Scenario</b>  |  |   |  |
| CS2 Material transfers   | PROC8a   |   |  |
| CS3 Hand application - finger paints, pastels, adhesives - Rolling, Brushing   | PROC10   |   |  |
| CS4 Mixing operations - Manual   | PROC19   |   |  |
| <b>1.2 Conditions of use affecting exposure</b>  |  |   |  |
| <b>1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)</b>  |  |   |  |
| Environmental release categories   | Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)        |   |  |
| <i>Product (article) characteristics</i>   |  |   |  |
| <b>Physical form of product:</b><br>Solid, medium dustiness  |  |   |  |
| <b>Vapour pressure:</b><br>< 1E-05 Pa  |  |   |  |
| <b>1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)</b>   |  |   |  |
| Process Categories   | Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)   |   |  |
| <i>Product (article) characteristics</i>   |  |   |  |
| <b>Physical form of product:</b><br>Solid, medium dustiness  |  |   |  |
| <i>Amount used, frequency and duration of use/exposure</i>   |  |   |  |
| <b>Duration:</b><br>Exposure duration <= 480 min   |  |   |  |
| <i>Technical and organisational conditions and measures</i>  |  |   |  |
| <b>Technical and organisational measures</b>   |  |   |  |
| Ensure operatives are trained to minimise exposures.<br>Avoid direct eye contact with product, also via contamination on hands.<br>Do not ingest.<br>Local exhaust ventilation |  | Inhalation - minimum efficiency of: 72 %                                    |  |
| <i>Conditions and measures related to personal protection, hygiene and health evaluation</i>   |  |   |  |

|   |   |
|---|---|
| <b>Personal protection</b><br>Wear suitable gloves tested to EN374.<br>Use suitable eye protection.<br>Wear suitable face shield.   |   |
| <i>Other conditions affecting worker exposure</i>   |   |
| Covers indoor and outdoor use<br>Professional use<br><b>Temperature:</b> Covers use at ambient temperatures.<br><b>Body parts exposed:</b><br>Assumes that potential dermal contact is limited to upper part of the body. |   |
| <i>Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.</i>   |   |
| <b>Additional Good Practice Advice:</b><br>Ensure control measures are regularly inspected and maintained. Open doors and windows. Prevent leaks and prevent soil / water pollution caused by leaks.                      |   |
| <b>1.2. CS3: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives - Rolling, Brushing (PROC10)</b>  |   |
| <b>Process Categories</b>   | Roller application or brushing (PROC10)           |
| <i>Product (article) characteristics</i>  |   |
| <b>Physical form of product:</b><br>Solid, medium dustiness   |   |
| <i>Amount used, frequency and duration of use/exposure</i>  |   |
| <b>Duration:</b><br>Exposure duration <= 480 min  |   |
| <i>Technical and organisational conditions and measures</i>   |   |
| <b>Technical and organisational measures</b><br>Ensure operatives are trained to minimise exposures.<br>Avoid direct eye contact with product, also via contamination on hands.<br>Do not ingest.                         |   |
| <i>Conditions and measures related to personal protection, hygiene and health evaluation</i>  |   |
| <b>Personal protection</b><br>Wear suitable gloves tested to EN374.<br>Use suitable eye protection.<br>Wear suitable face shield.   |   |
| <i>Other conditions affecting worker exposure</i>   |   |
| Covers indoor and outdoor use<br>Professional use<br><b>Temperature:</b> Covers use at ambient temperatures.  |   |
| <i>Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.</i>   |   |
| <b>Additional Good Practice Advice:</b><br>Ensure control measures are regularly inspected and maintained. Prevent leaks and prevent soil / water pollution caused by leaks.  |   |
| <b>1.2. CS4: Worker Contributing Scenario: Mixing operations - Manual (PROC19)</b>  |   |
| <b>Process Categories</b>   | Manual activities involving hand contact (PROC19) |
| <i>Product (article) characteristics</i>  |   |
| <b>Physical form of product:</b><br>Solid, medium dustiness   |   |
| <i>Amount used, frequency and duration of use/exposure</i>  |   |
| <b>Duration:</b><br>Exposure duration <= 240 min  |   |
| <i>Technical and organisational conditions and measures</i>   |   |
| <b>Technical and organisational measures</b><br>Ensure operatives are trained to minimise exposures.<br>Avoid direct eye contact with product, also via contamination on hands.<br>Do not ingest.                         |   |

Local exhaust ventilation  
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

### *Conditions and measures related to personal protection, hygiene and health evaluation*

#### **Personal protection**

Wear suitable gloves tested to EN374.  
Use suitable eye protection.  
Wear suitable face shield.

#### *Other conditions affecting worker exposure*

Outdoor use  
Professional use

**Temperature:** Covers use at ambient temperatures.

#### **Body parts exposed:**

Assumes that potential dermal contact is limited to upper part of the body.

*Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.*

#### **Additional Good Practice Advice:**

Ensure control measures are regularly inspected and maintained. Open doors and windows. Prevent leaks and prevent soil / water pollution caused by leaks.

## 1.3 Exposure estimation and reference to its source

### 1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

| protection target | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|-------------------|----------------|--------------------|-----------------------------------|
| soil              | N/A            | N/A                | = 0.65                            |

### 1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative  | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

### 1.3. CS3: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives - Rolling, Brushing (PROC10)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative  | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

#### **Additional information on exposure estimation:**

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.

### 1.3. CS4: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative  | < 1 mg/m <sup>3</sup> | MEASE              | N/A                               |

## 1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

#### **Guidance to check compliance with the exposure scenario:**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least

equivalent levels.



## Exposure Scenario

### Flue dust, portland cement

## Exposure Scenario, 08/06/2021

| Substance identity  |                            |
|---------------------|----------------------------|
|                     | Flue dust, portland cement |
| CAS No.             | 68475-76-3                 |
| EINECS No.          | 270-659-9                  |
| Registration number | 01-2119486767-17           |

## Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15)



|  |   |  |  |
|--|---|--|--|
| 1. ES 1  |   | Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15) |  |
| <b>1.1 TITLE SECTION</b>   |   |  |  |
| Exposure Scenario name   | Road and construction applications - Professional use of floor care products - Tackifier  |  |  |
| Date - Version   | 25/03/2021 - 1.0  |  |  |
| Life Cycle Stage   | Widespread use by professional workers  |  |  |
| Main user group  | Professional uses   |  |  |
| Sector(s) of use   | Professional uses (SU22)  |  |  |
| Product Categories   | Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15)  |  |  |
| Article Category(ies)  | Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)  |  |  |
| <b>Environment Contributing Scenario</b>   |   |  |  |
| CS1 Low environmental release  |   | ERC2   |  |
| <b>Worker Contributing Scenario</b>  |   |  |  |
| CS2 Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance  |   | PROC5 - PROC8a - PROC8b - PROC10 - PROC11 - PROC19 - PROC26 - PROC28             |  |
| <b>1.2 Conditions of use affecting exposure</b>  |   |  |  |
| <b>1.2. CS1: Environment Contributing Scenario: Low environmental release (ERC2)</b>   |   |  |  |
| Environmental release categories   | Formulation into mixture (ERC2)   |  |  |
| <i>Product (article) characteristics</i>   |   |  |  |
| <b>Physical form of product:</b><br>Solid, very high dustiness   |   |  |  |
| <b>Vapour pressure:</b><br>< 1E-05 Pa  |   |  |  |
| <b>1.2. CS2: Worker Contributing Scenario: Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)</b> |   |  |  |
| Process Categories   | Mixing or blending in batch processes - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Non industrial spraying - Manual activities involving hand contact - Handling of solid inorganic substances at ambient temperature - Manual maintenance (cleaning and repair) of machinery (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28) |  |  |
| <i>Product (article) characteristics</i>   |   |  |  |
| <b>Physical form of product:</b><br>Solid, very high dustiness<br>Solid in solution<br>pasty   |   |  |  |
| <b>Concentration of substance in product:</b><br>Covers percentage substance in the product up to 5 %.   |   |  |  |
| <i>Amount used, frequency and duration of use/exposure</i>   |   |  |  |
| <b>Duration:</b><br>Exposure duration <= 480 min   |   |  |  |
| <b>Frequency:</b>  |   |  |  |

Use frequency = 8 h/event

### *Technical and organisational conditions and measures*

#### **Technical and organisational measures**

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.  
Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.  
Ensure operatives are trained to minimise exposures.  
For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8.  
Do not ingest.

### *Conditions and measures related to personal protection, hygiene and health evaluation*

#### **Personal protection**

Wear suitable gloves tested to EN374.  
Use eye protection according to EN 166.  
Wear a respirator conforming to EN140.

### *Other conditions affecting worker exposure*

Covers indoor and outdoor use  
Professional use

**Temperature:** Covers use at ambient temperatures. 23°C

#### **Body parts exposed:**

Assumes that potential dermal contact is limited to hands and forearms.

*Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.*

#### **Additional Good Practice Advice:**

Ensure regular inspection, cleaning and maintenance of equipment and machines. Ensure procedures and training for emergency decontamination and disposal are in place. Ensure control measures are regularly inspected and maintained.

## 1.3 Exposure estimation and reference to its source

**1.3. CS2: Worker Contributing Scenario: Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)**

| Exposure route, Health effect, Exposure indicator | Exposure level        | Calculation method | Risk Characterization Ratio (RCR) |
|---|-----------------------|--------------------|-----------------------------------|
| inhalative, local, short-term                     | < 1 mg/m <sup>3</sup> | MEASE              | <= 0.83                           |

#### **Additional information on exposure estimation:**

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

## 1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

#### **Guidance to check compliance with the exposure scenario:**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.