

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878

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

#### 1.1. Product identifier

Code: **358**  
Product name: **CEM-OX**

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

Intended use: **Rustproofing passivating slurry for reinforcement bars**

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

Name: **NORD RESINE S.p.A.**  
Full address: **Via Fornace Vecchia, 79**  
District and Country: **31058 Susegana (TV) Italia**  
Tel.: **+39 0438-437511**  
Fax: **+39 0438-435155**

e-mail address of the competent person responsible for the Safety Data Sheet: **annabreda@nordresine.com**

Supplier: **NORD RESINE S.p.A.**

#### 1.4. Emergency telephone number

For urgent inquiries refer to:

**Ireland**  
**National Poisons Information Centre**  
**+353 018092166**  
**+353 018092566**

**Malta**  
**Malta Competition and Consumer Affairs Authority (MCCAA)**  
**+356 2395 2000**

**Belgium**  
**Centre Antipoisons: +32 022649636**

**Germany**  
**BfR Bundesinstitut für Risikobewertung: +49 30184120**

**Netherlands**  
**National Poisons Information Center / University Medical Center Utrecht**  
**+31 88 75 585 61**

**Croatia**  
**Croatian Institute of Public Health, Division for Toxicology: +38514686910**

**Sveden**  
**Swedish Poisons Information Centre: +46104566750**

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Serious eye damage, category 1

H318

Causes serious eye damage.

## SECTION 2. Hazards identification ... / >>

|                                                              |      |                                      |
|--------------------------------------------------------------|------|--------------------------------------|
| Skin irritation, category 2                                  | H315 | Causes skin irritation.              |
| Specific target organ toxicity - single exposure, category 3 | H335 | May cause respiratory irritation.    |
| Skin sensitization, category 1                               | H317 | May cause an allergic skin reaction. |

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

|             |                                      |
|-------------|--------------------------------------|
| <b>H318</b> | Causes serious eye damage.           |
| <b>H315</b> | Causes skin irritation.              |
| <b>H335</b> | May cause respiratory irritation.    |
| <b>H317</b> | May cause an allergic skin reaction. |

Precautionary statements:

|                       |                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>P305+P351+P338</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| <b>P280</b>           | Wear protective gloves / eye protection / face protection.                                                                       |
| <b>P310</b>           | Immediately call a POISON CENTER / doctor.                                                                                       |
| <b>P261</b>           | Avoid breathing dust.                                                                                                            |
| <b>P403+P233</b>      | Store in a well-ventilated place. Keep container tightly closed.                                                                 |
| <b>P264</b>           | Wash your hands thoroughly with soap and water after use.                                                                        |

Contains: PORTLAND CEMENT  
FLUE DUST

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

| Identification              | x = Conc. %      | Classification (EC) 1272/2008 (CLP)                                     |
|-----------------------------|------------------|-------------------------------------------------------------------------|
| <b>PORTLAND CEMENT</b>      |                  |                                                                         |
| INDEX                       | $20 \leq x < 25$ | Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1B H317 |
| EC 266-043-4                |                  |                                                                         |
| CAS 65997-15-1              |                  |                                                                         |
| REACH Reg. esente           |                  |                                                                         |
| <b>FLUE DUST</b>            |                  |                                                                         |
| INDEX                       | $0,5 \leq x < 1$ | Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1B H317 |
| EC 270-659-9                |                  |                                                                         |
| CAS 68475-76-3              |                  |                                                                         |
| REACH Reg. 01-2119486767-17 |                  |                                                                         |

### SECTION 3. Composition/information on ingredients ... / >>

#### FORMALDEHYDE

INDEX 605-001-00-5 0 &lt; x &lt; 0,01

EC 200-001-8

CAS 50-00-0

REACH Reg. 01-2119488953-20

**Carc. 1B H350, Muta. 2 H341, Acute Tox. 2 H330, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1A H317, EUH071, Classification note according to Annex VI to the CLP Regulation: B, D, F Skin Corr. 1B H314: ≥ 25%, Skin Irrit. 2 H315: ≥ 5% - < 25%, Eye Dam. 1 H318: ≥ 25%, Eye Irrit. 2 H319: ≥ 5% - < 25%**

ATE Oral: 500 mg/kg, ATE Inhalation mists/powders: 0,051 mg/l

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### SECTION 4. First aid measures

#### 4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

#### Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

Specific information on symptoms and effects caused by the product are unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

Immediately call a POISON CENTER / doctor.

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

Treatment: see section 4.1

#### Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

### SECTION 5. Firefighting measures

#### 5.1. Extinguishing media

##### SUITABLE EXTINGUISHING EQUIPMENT

Choose the most appropriate extinguishing equipment for the specific case.

##### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

##### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

The product is neither flammable nor combustible.

#### 5.3. Advice for firefighters

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

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

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid both for workers and for emergency interventions.

### 6.2. Environmental precautions

Prevent the product from entering sewers, surface waters and groundwater.

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

Dry concrete

Use dry cleaning methods such as vacuum cleaners or extractors (portable industrial units, equipped with high efficiency particulate filters or equivalent techniques), which do not disperse dust into the environment. Never use compressed air.

Ensure workers wear appropriate personal protective equipment and prevent the spread of cement dust (see Section 8).

Avoid inhaling cement dust and contact with skin.

Place spilled material in containers for future use.

Wet concrete

Remove the wet cement and place it in a container. Allow the material to dry and solidify before disposing of it as described in Section 13.

### 6.4. Reference to other sections

Any information regarding personal protection and disposal is reported in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory references:

|     |                 |                                                                                                                                                                                                                                                                                                                                                       |
|-----|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CZE | Česká Republika | NAŘÍZENÍ VLÁDY ze dne 18. října 2023, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů                                                                                                                                                                                |
| DEU | Deutschland     | WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe                                                                                                                                                                                                                              |
| ESP | España          | Límites de exposición profesional para agentes químicos en España 2024                                                                                                                                                                                                                                                                                |
| FRA | France          | Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021                                                                                                                                                                                                                                    |
| GRC | Ελλάδα          | Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"» |
| HUN | Magyarország    | Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről                                                                                                                                                                   |
| HRV | Hrvatska        | PRAVILNIK O IZMJENAMA I DOPUNAMA PRAVILNIKA O ZAŠTITI RADNIKA OD                                                                                                                                                                                                                                                                                      |

**SECTION 8. Exposure controls/personal protection**    ... / >>

|     |                |                                                                                                                                                                                                                                                                                            |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                | IZLOŽENOSTI OPASNIM KEMIKAJIJAMA NA RADU, GRANIČNIM VRIJEDNOSTIMA                                                                                                                                                                                                                          |
|     |                | IZLOŽENOSTI I BIOLOŠKIM GRANIČNIM VRIJEDNOSTIMA                                                                                                                                                                                                                                            |
| ITA | Italia         | Decreto Legislativo 9 Aprile 2008, n.81                                                                                                                                                                                                                                                    |
| NLD | Nederland      | Regeling van de Minister van Sociale Zaken en Werkgelegenheid van 13 mei2024, nr. 2024-0000092805, tot wijziging van deArbeidsomstandighedenregeling in verband met de implementatie vanRichtlijn 2022/431                                                                                 |
| PRT | Portugal       | Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração                           |
| POL | Polska         | ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 24 czerwca 2024 r. zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy                                                               |
| ROU | România        | HOTĂRÂRE nr. 179 din 28 februarie 2024 pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți ca                            |
| RUS | Россия         | ПОСТАНОВЛЕНИЕ от 13 февраля 2018 г. N 25 ОБ УТВЕРЖДЕНИИ ГИГИЕНИЧЕСКИХ НОРМАТИВОВ ГН 2.2.5.3532-18 "ПРЕДЕЛЬНО ДОПУСТИМЫЕ КОНЦЕНТРАЦИИ (ПДК) ВРЕДНЫХ ВЕЩЕСТВ В ВОЗДУХЕ РАБОЧЕЙ ЗОНЫ"                                                                                                         |
| SVN | Slovenija      | Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti rakotvornim, mutagenim ali reprotoksičnim snovem pri delu. Ljubljana, četrtek 4. 4. 2024                                                                                                                              |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020)                                                                                                                                                                                                                                  |
| EU  | OEL EU         | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
|     | ACGIH          | ACGIH 2025                                                                                                                                                                                                                                                                                 |

**FORMALDEHYDE**

| Threshold Limit Value |         |        |     |            |     |                        |
|-----------------------|---------|--------|-----|------------|-----|------------------------|
| Type                  | Country | TWA/8h |     | STEL/15min |     | Remarks / Observations |
|                       |         | mg/m3  | ppm | mg/m3      | ppm |                        |
| TLV                   | CZE     | 0,37   | 0,3 | 0,74       | 0,6 | C = 1,2 mg/m3          |
| AGW                   | DEU     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| MAK                   | DEU     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| VLA                   | ESP     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| VLEP                  | FRA     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| TLV                   | GRC     | 0,37   | 0,3 | 0,74       | 0,6 | SKIN                   |
| AK                    | HUN     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| GVI/KGVI              | HRV     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| VLEP                  | ITA     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| TGG                   | NLD     | 0,15   |     | 0,5        |     |                        |
| VLE                   | PRT     | 0,37   | 0,3 | 0,74       | 0,6 | SKIN                   |
| NDS/NDSch             | POL     | 0,37   |     | 0,74       |     |                        |
| TLV                   | ROU     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| ПДК                   | RUS     |        |     | 0,5        |     |                        |
| MV                    | SVN     | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| WEL                   | GBR     | 2,5    | 2   | 2,5        | 2   | п, O, A                |
| OEL                   | EU      | 0,37   | 0,3 | 0,74       | 0,6 |                        |
| ACGIH                 |         |        | 0,1 |            | 0,3 |                        |

**PORTLAND CEMENT**

| Threshold Limit Value |         |        |     |            |     |                        |
|-----------------------|---------|--------|-----|------------|-----|------------------------|
| Type                  | Country | TWA/8h |     | STEL/15min |     | Remarks / Observations |
|                       |         | mg/m3  | ppm | mg/m3      | ppm |                        |
| ACGIH                 |         | 1      |     |            |     | RESP                   |

### SECTION 8. Exposure controls/personal protection ... / >>

#### FLUE DUST

##### Predicted no-effect concentration - PNEC

|                                                     |     |       |
|-----------------------------------------------------|-----|-------|
| Normal value in fresh water                         | 282 | µg/L  |
| Normal value in marine water                        | 282 | µg/L  |
| Normal value for fresh water sediment               | 875 | µg/kg |
| Normal value for marine water sediment              | 88  | µg/kg |
| Normal value for marine water, intermittent release | 28  | µg/L  |
| Normal value of STP microorganisms                  | 6   | mg/l  |
| Normal value for the terrestrial compartment        | 5   | mg/kg |
| Normal value for the atmosphere                     | NPI |       |

##### Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers |                |               |                  | Effects on workers |                |               |                  |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
|                   | Acute local          | Acute systemic | Chronic local | Chronic systemic | Acute local        | Acute systemic | Chronic local | Chronic systemic |
| Oral              |                      | LOW            |               | LOW              |                    |                |               |                  |
| Inhalation        |                      | NPI            | 840,0 µg/m³   | NPI              | 4,0 mg/m³          | NPI            | 840,0 µg/m³   | NPI              |
| Skin              |                      | LOW            | LOW           | LOW              | LOW                | LOW            | LOW           | LOW              |

##### Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment. The above values are not TLVs, but guide values, to be used for particles that do not have their own TLV and that are insoluble or poorly soluble in water and have low toxicity.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

Protect your hands with gloves of the following type:

Material: Nitrile rubber (NBR)

Thickness: 0,35 mm

Breakthrough time: 480 min

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

#### RESPIRATORY PROTECTION

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties

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

| Properties                     | Value          | Information |
|--------------------------------|----------------|-------------|
| Appearance                     | powder         |             |
| Colour                         | red            |             |
| Odour                          | odourless      |             |
| Melting point / freezing point | not applicable |             |

## SECTION 9. Physical and chemical properties ... / >>

|                                        |                |
|----------------------------------------|----------------|
| Initial boiling point                  | not applicable |
| Flammability                           | incombustible  |
| Lower explosive limit                  | not applicable |
| Upper explosive limit                  | not applicable |
| Flash point                            | not applicable |
| Auto-ignition temperature              | not applicable |
| Decomposition temperature              | not applicable |
| pH                                     | not determined |
| Kinematic viscosity                    | not applicable |
| Solubility                             | insoluble      |
| Partition coefficient: n-octanol/water | not applicable |
| Vapour pressure                        | not applicable |
| Density and/or relative density        | 1,25 kg/l      |
| Relative vapour density                | not applicable |
| Particle characteristics               | not available  |

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Oxidising properties not applicable

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### FORMALDEHYDE

Decomposes under the effect of heat.

Aqueous solutions are stabilised with methanol but tend to polymerise over time.

#### PORTLAND CEMENT

When mixed with water, cement hardens into a stable mass that does not react with the environment.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### PORTLAND CEMENT

Wet cement is alkaline and incompatible with acids, ammonium salts, aluminum and other non-noble metals.

Cement, in contact with hydrofluoric acid, decomposes producing corrosive silicon tetrafluoride gas.

Cement reacts with water and forms silicates and calcium hydroxide. Silicates react with powerful oxidants such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen bifluoride.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### FORMALDEHYDE

Risk of explosion on contact with: nitromethane, nitrogen dioxide, hydrogen peroxide, phenols, performic acid, nitric acid. May polymerise on contact with: strong oxidising agents, alkalis. May react dangerously with: hydrochloric acid, magnesium carbonate, sodium hydroxide, perchloric acid, aniline. Forms explosive mixtures with: air.

### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

#### FORMALDEHYDE

Avoid exposure to: light, sources of heat, naked flames.

## SECTION 10. Stability and reactivity ... / >>

### 10.5. Incompatible materials

#### FORMALDEHYDE

Incompatible with: acids,alkalis,ammonia,tannin,strong oxidants,phenoles,copper salts,silver,iron.

#### PORTLAND CEMENT

Wet cement is alkaline and incompatible with acids, ammonium salts, aluminum and other non-noble metals.

### 10.6. Hazardous decomposition products

#### FORMALDEHYDE

When heated to decomposition releases: methanol,carbon monoxide.

## SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.  
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

#### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

#### Information on likely routes of exposure

Information not available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

#### Interactive effects

Information not available

#### ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

#### FLUE DUST

LD50 (Dermal):

2000 mg/kg (rat)

LD50 (Oral):

1848 mg/kg (rat)

LC50 (Inhalation mists/powders):

6,04 mg/L/4/h (rat)

#### FORMALDEHYDE

LD50 (Dermal):

270 mg/kg Rabbit

LD50 (Oral):

100 mg/kg Rat

LC50 (Inhalation vapours):

0,588 mg/l/4h Rat

#### SKIN CORROSION / IRRITATION

Causes skin irritation

#### PORTLAND CEMENT

Cement in contact with moist skin can cause thickening, cracking and splitting of the skin. Prolonged contact in combination with existing abrasions can cause severe burns.

Some individuals may develop eczema following exposure to moist cement dust, caused by the high pH which can induce irritant contact dermatitis after prolonged contact.

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage



## SECTION 11. Toxicological information ... / >>

### PORTLAND CEMENT

Portland cement clinker caused a mix of heterogeneous effects on the cornea and the calculated irritation index was 128. Direct contact with the cement can cause corneal lesions due to mechanical stress, immediate or delayed irritation or inflammation. Direct contact with large quantities of dry concrete or splashes of wet concrete can cause effects ranging from moderate eye irritation (e.g. conjunctivitis or blepharitis) to chemical burns and blindness.

### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

#### Skin sensitization

### PORTLAND CEMENT

Some individuals may develop eczema following exposure to wet concrete dust, caused by an immunological reaction to water-soluble Cr(VI) that causes allergic contact dermatitis.

The response can appear in a variety of forms that can range from a mild rash to severe dermatitis.

No sensitizing effect is expected if the cement contains a water-soluble Cr(VI) reducing agent until the indicated period of effectiveness of such reducing agent is exceeded

### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

### STOT - SINGLE EXPOSURE

May cause respiratory irritation

#### Target organs

### PORTLAND CEMENT

Cement dust can irritate the throat and respiratory system. Coughing, sneezing and shortness of breath may occur following exposures above the occupational exposure limits.

### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### Target organs

### PORTLAND CEMENT

Long-term exposure to respirable cement dust above the occupational exposure limit can lead to coughing, shortness of breath and chronic obstructive changes in the respiratory tract. No chronic effects were observed at low concentrations. Based on available data, the classification criteria are not met.

### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## 11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

## SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

### SECTION 12. Ecological information ... / >>

FLUE DUST  
EC50 - for Algae / Aquatic Plants > 22,4 mg/l/72h

#### 12.2. Persistence and degradability

FORMALDEHYDE  
Solubility in water 55000 mg/l  
Rapidly degradable

#### 12.3. Bioaccumulative potential

FORMALDEHYDE  
Partition coefficient: n-octanol/water 0,35  
BCF < 1

#### 12.4. Mobility in soil

FORMALDEHYDE  
Partition coefficient: soil/water 1,202

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

#### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

#### 12.7. Other adverse effects

Information not available

### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

#### 14.1. UN number or ID number

not applicable

#### 14.2. UN proper shipping name

not applicable

#### 14.3. Transport hazard class(es)

not applicable

## SECTION 14. Transport information ... / >>

### 14.4. Packing group

not applicable

### 14.5. Environmental hazards

not applicable

### 14.6. Special precautions for user

not applicable

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

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Contained substance

Point 75  
Point 72-77

FORMALDEHYDE  
REACH Reg.: 01-2119488953-20

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors  
not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

The product contains Cr (VI) in quantities lower than 0.0002% (2 ppm) through the addition of a reducing agent, as required by Annex. XVII pt. 47 of Regulation (EC) 1907/2006 (REACH). Compliance with the storage methods indicated on the packaging allows the effectiveness of the reducing agent to be maintained for the indicated storage period.

### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

|                     |                                    |
|---------------------|------------------------------------|
| <b>Carc. 1B</b>     | Carcinogenicity, category 1B       |
| <b>Muta. 2</b>      | Germ cell mutagenicity, category 2 |
| <b>Acute Tox. 2</b> | Acute toxicity, category 2         |
| <b>Acute Tox. 4</b> | Acute toxicity, category 4         |

**SECTION 16. Other information ... / >>**

|                      |                                                              |
|----------------------|--------------------------------------------------------------|
| <b>Skin Corr. 1B</b> | Skin corrosion, category 1B                                  |
| <b>Skin Corr. 1C</b> | Skin corrosion, category 1C                                  |
| <b>Skin Corr. 1</b>  | Skin corrosion, category 1                                   |
| <b>Eye Dam. 1</b>    | Serious eye damage, category 1                               |
| <b>Eye Irrit. 2</b>  | Eye irritation, category 2                                   |
| <b>Skin Irrit. 2</b> | Skin irritation, category 2                                  |
| <b>STOT SE 3</b>     | Specific target organ toxicity - single exposure, category 3 |
| <b>Skin Sens. 1</b>  | Skin sensitization, category 1                               |
| <b>Skin Sens. 1A</b> | Skin sensitization, category 1A                              |
| <b>Skin Sens. 1B</b> | Skin sensitization, category 1B                              |
| <b>H350</b>          | May cause cancer.                                            |
| <b>H341</b>          | Suspected of causing genetic defects.                        |
| <b>H330</b>          | Fatal if inhaled.                                            |
| <b>H302</b>          | Harmful if swallowed.                                        |
| <b>H314</b>          | Causes severe skin burns and eye damage.                     |
| <b>H318</b>          | Causes serious eye damage.                                   |
| <b>H319</b>          | Causes serious eye irritation.                               |
| <b>H315</b>          | Causes skin irritation.                                      |
| <b>H335</b>          | May cause respiratory irritation.                            |
| <b>H317</b>          | May cause an allergic skin reaction.                         |
| <b>EUH071</b>        | Corrosive to the respiratory tract.                          |

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament

### SECTION 16. Other information ... / >>

12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
27. Delegated Regulation (UE) 2024/2564 (XXII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

#### Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 06 / 08 / 09 / 10 / 11 / 12 / 15 / 16.