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EN

|  | Safety Data Sheet  |  |  |  |
|--|--|--|--|--|
| According to Annex II to REACH - Regulation 2015/830                         |  |  |  |  |
| SECTION 1. Identification of the s   | ubstance/mixture and of the company/undertaking  |  |  |  |
| 1.1. Product identifier  |  |  |  |  |
| Code:<br>Product name  | DRAP208<br>POLIFLOW  |  |  |  |
| 1.2. Relevant identified uses of the substance of                            | or mixture and uses advised against  |  |  |  |
| Intended use   | Additive for cement slurries   |  |  |  |
| 1.3. Details of the supplier of the safety data sh                           | leet   |  |  |  |
| Name<br>Full address<br>District and Country                                 | DRACO ITALIANA S.p.A.<br>Via Monte Grappa, 11 D-E<br>20067 Tribiano (MI)<br>Italia<br>Tel. +39 02.90632917<br>Fax +39 02.90631976  |  |  |  |
| e-mail address of the competent person responsible for the Safety Data Sheet | info@draco-edilizia.it   |  |  |  |
| 1.4. Emergency telephone number  |  |  |  |  |
| For urgent inquiries refer to  | Centro Antiveleni di Bergamo 800883300 (Azienda Ospedaliera Papa Giovanni XXII)<br>Centro Antiveleni di Firenze 0557947819 (Az. Osp. "Careggi" U.O. Tossicologia<br>Medica)<br>Centro Antiveleni di Foggia 80018345 (Az. Osp. Univ. Foggia)<br>Centro Antiveleni di Milano 0266101029 (Osp. Niguarda Ca' Granda)<br>Centro Antiveleni di Napoli 0817472870 (Az. Osp. "A. Cardarelli")<br>Centro Antiveleni di Pavia 038224444 (CAV Centro Nazionale di Informazione<br>Tossicologica)<br>Centro Antiveleni di Roma 063054343 (CAV Policlinico "A. Gemelli")<br>Centro Antiveleni di Roma 0649978000 (CAV Policlinico "Umberto I")<br>Centro Antiveleni di Roma 06 68593726 (CAV "Osp. Pediatrico Bambino Gesù" Dip.<br>Emergenza e Accettazione DEA) |  |  |  |

# **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 2015/830. 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.        |
| Skin irritation, category 2                       | H315 | Causes skin irritation.           |
| Specific target organ toxicity - single exposure, | H335 | May cause respiratory irritation. |
| category 3  |      |                                   |

# 2.2. Label elements

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

#### Hazard pictograms:



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

| Signal words:             | Danger  |  |  |  |
|---------------------------|---|--|--|--|
| Hazard statements:        |   |  |  |  |
| H318                      | Causes serious eye damage.  |  |  |  |
| H315                      | Causes skin irritation.   |  |  |  |
| H335                      | May cause respiratory irritation.   |  |  |  |
| Precautionary statement   | S   |  |  |  |
| P305+P351+P338            | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.<br>Continue rinsing. |  |  |  |
| P280                      | Wear protective gloves / eye protection / face protection.  |  |  |  |
| P310                      | Immediately call a POISON CENTER / doctor /   |  |  |  |
| P261                      | Avoid breathing dust / fume / gas / mist / vapours / spray.   |  |  |  |
| P403+P233                 | Store in a well-ventilated place. Keep container tightly closed.  |  |  |  |
| P264                      | Wash thoroughly after handling.   |  |  |  |
| Contains:                 | Calcium oxide   |  |  |  |
| 2.3. Other hazards        |   |  |  |  |
| On the basis of available | data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.   |  |  |  |

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

### 3.2. Mixtures

#### Contains:

| Identification                      | x = Conc. %                             | Classification 1272/2008 (CLP)                      |
|-------------------------------------|---|---|
| Calcium oxide<br>CAS<br>EC<br>INDEX | 9<br>1305-78-8 30 ≤ x < 50<br>215-138-9 | Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335 |
| Reg. no.                            | 01-2119475325-36-XXXX                   |   |

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

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again. INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

Calcium oxide Following inhalation: Remove the source of dust or transport the injured person outdoors. Get immediate medical attention.

Following skin contact:

Use a brush to scrupulously and gently clean the contaminated body surfaces until all traces of product have been eliminated. Wash the affected area immediately and thoroughly with water. Remove contaminated clothing. If necessary consult a doctor.

Following eye contact: Wash immediately with plenty of water and consult a doctor.

Following ingestion: Wash out mouth with water and drink abundantly. DO NOT induce vomiting. Consult a doctor.

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# SECTION 4. First aid measures ... / >>

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

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

Calcium oxide

Calcium oxide is not acutely toxic if ingested, inhaled, or if it comes into contact with the skin. The substance is classified as irritating to the skin and respiratory tract, and carries the risk of serious eye damage. No systemic adverse effects are feared because the main health hazard is local effects (effect on pH).

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

Information not available

# **SECTION 5. Firefighting measures**

### 5.1. Extinguishing media

## SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT None in particular.

Calcium oxide Suitable extinguishing media

Suitable extinguishing media: the product is not combustible. To extinguish fires, use dry powder, foam or CO2. Use extinguishing systems compatible with local circumstances and with the surrounding environment

Unsuitable extinguishing media Do not use water. Avoid humidification.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

Calcium oxide

Calcium oxide reacts with water and generates heat. This can cause risks for flammable materials.

# 5.3. Advice for firefighters

### **GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. 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).

Calcium oxide

Avoid generating dust. Use a respirator. Use extinguishing media compatible with local circumstances and the surrounding environment.

# **SECTION 6. Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

#### Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Calcium oxide

Ensure adequate ventilation. Keep dust levels to a minimum. Keep away people who do not wear any protective equipment. Avoid contact with skin, eyes and clothing - wear suitable protective equipment (see point 8). Avoid inhalation of dust - ensure adequate ventilation or wear a suitable protective mask / protections (see point 8). Avoid humidification.

#### 6.2. Environmental precautions

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## SECTION 6. Accidental release measures .... / >>

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### Calcium oxide

Contain spill. Keep the material as dry as possible. Cover the area, if possible, to avoid the danger of unnecessary dust dispersion. Prevent the product from reaching uncontrolled waterways or the sewage system (raising the pH). Any copious spills in water courses must be reported to the Environmental Agency or other body responsible for environmental protection.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given 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.

# Calcium oxide

Avoid contact with skin and eyes. Wear protective equipment (see point 8 of this safety data sheet). Do not wear contact lenses when working with this product. It is advisable to have a pocket-sized personal eye drops with you. Keep dust levels to a minimum. Minimize dust generation. Isolate dust sources, use exhaust ventilation systems (dust collector at handling points). The handling systems should preferably be closed. When handling the bags, follow the normal precautions provided for by Council Directive 90/269 / EEC to reduce the risks that these operations pose for workers.

Avoid inhalation, ingestion or contact with skin and eyes. General occupational hygiene measures are required to ensure safe handling of the substance. This means observing the principles of good personal hygiene and cleaning (e.g. periodic cleaning with suitable cleaning systems); do not drink, eat and smoke during use. Take a shower and change at the end of each shift. Do not wear contaminated clothing at home.

### 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:

| FRA | France         | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
|-----|----------------|--|
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020)                                  |
| EU  | OEL EU         | 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.                |
|     | TLV-ACGIH      | ACGIH 2020   |

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

| Calcium oxide   |           |               |      |          |          |                 |            |         |          |
|---|-----------|---------------|------|----------|----------|-----------------|------------|---------|----------|
| Threshold Limit Value                                   |           |               |      |          |          |                 |            |         |          |
| Туре  | Country   | TWA/8h        |      | STEL/15r | nin      | Remarks / Ob    | servations |         |          |
|   |           | mg/m3         | ppm  | mg/m3    | ppm      |                 |            |         |          |
| VLEP  | FRA       | 1             |      | 4        |          |                 |            |         |          |
| WEL   | GBR       | 2             |      |          |          | INHAL           |            |         |          |
| WEL   | GBR       | 1             |      |          |          | RESP            |            |         |          |
| OEL   | EU        | 1             |      | 4        |          | RESP            |            |         |          |
| TLV-ACGIH   |           | 2             |      |          |          |                 | URT irr    |         |          |
| Predicted no-effect                                     | concentra | tion - PNEC   |      |          |          |                 |            |         |          |
| Normal value in fresh water 0,49 mg/l                   |           |               |      |          |          |                 |            |         |          |
| Normal value in marine water 0,32 mg/l                  |           |               |      |          |          |                 |            |         |          |
| Normal value of STP microorganisms                      |           |               |      |          | 3        | mg/l            |            |         |          |
| Normal value for the terrestrial compartment 1080 mg/kg |           |               |      |          |          |                 |            |         |          |
| Health - Derived no-effect level - DNEL / DMEL          |           |               |      |          |          |                 |            |         |          |
|   | Effec     | cts on consur | ners |          |          | Effects on work | kers       |         |          |
| Route of exposure                                       | e Acut    | e Acut        | е    | Chronic  | Chronic  | Acute           | Acute      | Chronic | Chronic  |
|   | local     | syste         | emic | local    | systemic | local           | systemic   | local   | systemic |
| Inhalation  | 4         |               |      | 1        |          | 4               |            | 1       |          |
|   | mg/n      | n3            |      | mg/m3    |          | mg/m3           |            | mg/m3   |          |

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.

#### 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

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

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 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529. ENVIRONMENTAL EXPOSURE CONTROLS

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

Value

powder light grey no odour Not available Not determined Not available

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

9.1. Information on basic physical and chemical properties

| Properties                     |
|--------------------------------|
| Appearance                     |
| Colour                         |
| Odour                          |
| Odour threshold                |
| рН                             |
| Melting point / freezing point |

Information

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

| Initial boiling point<br>Boiling range<br>Flash point<br>Evaporation rate<br>Flammability (solid, gas) |
|--|
| Lower inflammability limit   |
| Upper inflammability limit   |
| Lower explosive limit  |
| Upper explosive limit  |
| Vapour pressure  |
| Vapour density   |
| Relative density   |
| Solubility   |
| Partition coefficient: n-octanol/water   |
| Auto-ignition temperature  |
| Decomposition temperature  |
| Viscosity  |
| Explosive properties   |
| Oxidising properties   |

Not determined Not available Not applicable Not available not applicable Not available Not available Not determined Not available Not available Not available

# 9.2. Other information

Information not available

# **SECTION 10. Stability and reactivity**

## 10.1. Reactivity

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

Calcium oxide

Calcium oxide reacts exothermically in contact with water, forming calcium dihydroxide.

### 10.2. Chemical stability

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

## 10.3. Possibility of hazardous reactions

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

#### Calcium oxide

Calcium oxide reacts exothermically in contact with acids, forming calcium salts.

#### 10.4. Conditions to avoid

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

Calcium oxide

Minimize exposure to air and humidity to prevent the substance from degrading.

# 10.5. Incompatible materials

Calcium oxide

Calcium oxide reacts exothermically in contact with water, forming calcium dihydroxide: CaO + H2O -> Ca (OH) 2 + 1155 kJ / kg CaO Calcium oxide reacts exothermically in contact with acids, forming calcium salts. In the presence of humidity, calcium oxide reacts on contact with aluminum and brass, thus forming hydrogen: CaO + 2 AI + 7 H2O -> Ca (AI (OH) 4) 2 + 3 H2.

#### 10.6. Hazardous decomposition products

#### Calcium oxide

calcium oxide absorbs moisture and carbon dioxide from the air, forming calcium carbonate, which is a substance widespread in nature.

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# **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 toxicological effects

#### Calcium oxide

The product causes serious eye damage and can cause corneal opacity, iris injury, irreversible eye coloration. Acute effects: on contact with the skin there is irritation with erythema, edema, dryness and cracking. Ingestion can cause health problems, which include abdominal pain with burning, nausea and vomiting. Acute effects: inhalation of the product causes irritation of the lower and upper respiratory tract with coughing and breathing difficulties; at higher concentrations it can also cause pulmonary edema. Ingestion can cause health problems, which include abdominal pain with burning, nausea and vomiting, nausea and vomiting.

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: ATE (Oral) of the mixture: ATE (Dermal) of the mixture:

> Calcium oxide LD50 (Oral) LD50 (Dermal)

Not classified (no significant component) Not classified (no significant component) Not classified (no significant component)

> 2000 mg/kg Rat, OECD 425> 2500 mg/kg NaOH, EOCD 402, Rabbit

Calcium oxide

Oral LD50> 2000 mg / kg bw (OECD 425, rat) Dermal LD50> 2500 mg / kg bw (calcium dihydroxide, OECD 402, rabbit); with the read-across method these results are also applicable to calcium oxide, since in contact with moisture it reacts, forming calcium hydroxide. Inhalation no data available Calcium oxide is not acutely toxic. The classification for acute toxicity is not justified.

### **SKIN CORROSION / IRRITATION**

Causes skin irritation

Calcium oxide Calcium oxide is irritating to the skin (in vivo, rabbit). Based on the experimental results, calcium oxide must be classified as irritating to the skin.

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

Calcium oxide

Calcium oxide carries the risk of serious eye damage (studies on eye irritation (in vivo, rabbit)). Based on the experimental results, calcium oxide must be classified as highly irritating to the eyes.

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

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

#### Calcium oxide

There is no data available. Calcium oxide is not considered a skin sensitizing substance, based on the nature of the effects (change in pH) and the importance of calcium for nutrition.

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

### Calcium oxide

Reverse bacterial mutation assay (Ames test, OECD 471): Negative Considering that calcium is an omnipresent and essential element and that any pH variation induced by calcium oxide in aqueous media is not relevant, CaO is obviously devoid of any genotoxic potential, including mutagenicity.

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### Calcium oxide

Calcium (administered in the form of Ca lactate) is not carcinogenic (experimental result, rat). The effect on the pH produced by calcium oxide does not give rise to any carcinogenic risk. Epidemiological data obtained on humans confirm that calcium oxide is devoid of any carcinogenic potential.

# REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### Calcium oxide

Calcium (administered in the form of Ca carbonate) is not toxic for reproduction (experimental result, mouse). The effect on pH does not give rise to any reproductive risk. Epidemiological data obtained on humans confirm that calcium oxide is free of any potential reproductive toxicity. No effect on reproductive and developmental toxicity was identified in both animal and human clinical studies conducted with different calcium salts. v. also the Scientific Committee for Food (section 16.6) Therefore, calcium oxide is not toxic for reproduction and / or development.

# STOT - SINGLE EXPOSURE

May cause respiratory irritation

#### Calcium oxide

From the data obtained on humans, it can be concluded that CaO is irritating to the respiratory tract. As reported briefly and according to what is recommended by the SCOEL Committee (Anonymous, 2008), based on the data obtained on humans, calcium oxide is classified as irritating to the respiratory tract.

# STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### Calcium oxide

The toxicity of calcium through the oral route of exposure is demonstrated by the increase in the maximum tolerable intake levels (UL) for adults determined by the Scientific Committee for Food (SCF), where UL = 2500 mg / day, equal to 36 mg / kg weight / day (individual weighing 70 kg) for calcium. The toxicity of CaO through contact with the skin is not considered relevant by virtue of the expected insignificant absorption through the skin and due to the fact that local irritation is the primary health effect (change in pH). The toxicity of CaO by inhalation (local effect, irritation of the mucous membranes) taking into account an average time weighed for a shift of 8 hours, was determined by the Scientific Committee for Occupational Exposure Limits (SCOEL) in 1 mg / m3 of dust breathable (see Section 8.1).

### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

# **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 ... / >>

Calcium oxide LC50 (96h) on freshwater fish: 50.6 mg / I LC50 (96h) on sea fish: 457 mg / EC50 (48h) on freshwater invertebrates: 49.1 mg / I LC50 (96h) on sea invertebrates: 158 mg / I EC50 (72h) on freshwater algae: 184.57 mg / I NOEC (72h) on freshwater algae: 48 mg /

NOEC (14 days) for sea invertebrates: 32 mg / I EC10 / LC10 or NOEC on soil macro-organisms: 2000 mg / kg soil dw EC10 / LC10 or NOEC on soil microorganisms: 12000 mg / kg soil dw NOEC (21 days) on land plants: 1080 mg / kg

At high concentration, by raising the temperature and pH, calcium oxide is used for the disinfection of wastewater sludge.

Acute effect on pH. Although this substance is useful for correcting the acidity of the water, an excess over 1 g / I can be harmful to aquatic organisms. A pH value> 12 will decrease rapidly following dilution and carbonation.

### 12.2. Persistence and degradability

Calcium oxide Solubility in water

1337,6 mg/l

# 12.3. Bioaccumulative potential

Information not available

## 12.4. Mobility in soil

Calcium oxide

Calcium oxide reacts on contact with water and / or carbon dioxide, forming, respectively, calcium dihydroxide and / or calcium carbonate. These substances are moderately soluble, and have poor mobility in most soils.

# 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 ≥ than 0,1%.

### 12.6. 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. 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

Not applicable

SECTION 14. Transport information ... / >>

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

## 14.4. Packing group

Not applicable

# 14.5. Environmental hazards

Not applicable

# 14.6. Special precautions for user

Not applicable

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

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/EC:

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 Product 3

None

Point

Regulation (EC) No. 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 (EC) Reg. 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.

### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances Calcium oxide

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# **SECTION 16. Other information**

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

| Eye Dam. 1<br>Skin Irrit. 2 | Serious eye damage, category 1<br>Skin irritation, category 2 |
|-----------------------------|---|
| STOT SE 3                   | Specific target organ toxicity - single exposure, category 3  |
| H318                        | Causes serious eye damage.                                    |
| H315                        | Causes skin irritation.                                       |
| H335                        | May cause respiratory irritation.                             |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- 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) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 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
- 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) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Regulation (EU) 2020/217 (XIV Atp. CLP)

- The Merck Index. - 10th Edition

- Handling Chemical Safety

- INRS - Fiche Toxicologique (toxicological sheet)

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

- 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: 09 / 15. ΕN