

Trade name : Revision date : Print date : OSMOCEM RD Comp. A 22.03.2017 22.03.2017

Version (Revision) :

2.0.0 (1.0.0)

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

1.1 Product identifier

OSMOCEM RD Comp. A (OSM.0088)

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

Building and construction preparations: Composed cement osmotic two-component coatings, leveling etc. "to thickness". Component A

1.3 Details of the supplier of the safety data sheet

Producer/supplier : Street : Postal code/city: Telephone : Fax : Information contact: AZICHEM S.r.I. Via G. Gentile, 16/A 46044 GOITO (MN) Italy +39 0376 604185/604365 +39 0376 604398 info@azichem.com

1.4 Emergency telephone number

Centro Antiveleni di Milano +39 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (24h) Centro Antiveleni di Pavia +39 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia) Centro Antiveleni di Bergamo +39 800 883300 (CAV Ospedali Riuniti - Bergamo) Centro Antiveleni di Firenze +39 055 7947819 (CAV Ospedale Careggi - Firenze) Centro Antiveleni di Roma +39 06 3054343 (CAV Policlinico Gemelli - Roma) Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli +39 081 7472870 (CAV Ospedale Cardarelli - Napoli)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage. Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation. Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction. STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

2.2 Label elements

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

Hazard pictograms



Corrosion (GHS05) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

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

H318 Causes serious eye damage.

H315 Causes skin irritation.

- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.



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Precautionary statements

| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
|-----------|--|
| P264 | Wash hands thoroughly after handling. |
| P310 | Immediately call a POISON CENTER/doctor |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| | |

2.3 Other hazards

None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Hazardous ingredients

CEMENT, PORTLAND, CHEMICALS ; EC No. : 266-043-4; CAS No. : 65997-15-1Weight fraction : $\geq 40 - < 45 \%$ Classification 1272/2008 [CLP] :Eye Dam. 1 ; H318 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 STOT SE 3 ; H335LIME (CHEMICAL), HYDRAULIC ; REACH registration No. : 01-2119475523-36 ; EC No. : 285-561-1; CAS No. : 85117-09-5Weight fraction : $\geq 1 - < 5 \%$ Classification 1272/2008 [CLP] :Eye Dam. 1 ; H318 Skin Irrit. 2 ; H315 STOT SE 3 ; H335Additional information

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

Following inhalation

Remove victim out of the danger area. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

In case of skin contact

Wash immediately with: Water Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician. In case of skin reactions, consult a physician.

After eye contact

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

After ingestion

Never give anything by mouth to an unconscious person or a person with cramps.

4.2 Most important symptoms and effects, both acute and delayed

On contact with moist skin may cause thickening, cracking and cracking of the skin. Prolonged contact in combination with existing abrasions can cause burns. Direct contact with the product may cause corneal injury due to mechanical stress, immediate or delayed irritation or inflammation. The direct contact with large quantities of product dry or with projections of wet product can cause effects ranging from irritation ocular moderate (eg. Conjunctivitis or blepharitis) to chemical burns and blindness. Dust may irritate throat and respiratory system. Coughing, sneezing and panting may occur as a result of exposure above the occupational exposure limits.

4.3 Indication of any immediate medical attention and special treatment needed None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media



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Extinguishing powder alcohol resistant foam Carbon dioxide (CO2) Water mist

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Remove persons to safety.

Special protective equipment for firefighters

Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Clear spills immediately. Wear a self-contained breathing apparatus and chemical protective clothing. Wear a self-contained breathing apparatus and chemical protective clothing.

For non-emergency personnel

Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

For cleaning up

The contaminated area should be cleaned up immediately with: Water Retain contaminated washing water and dispose it.

6.4 Reference to other sections

Reference to other sections Safe handling: see section 7 Personal protection equipment: see section 8

SECTION 7: Handling and storage



7.1 Precautions for safe handling

Protective measures

Specific requirements or handling rules

Do not breathe dust. Do not breathe gas/fumes/vapour/spray. See section 8.

Advices on general occupational hygiene

Normal precautions taken when handling chemicals should be observed.

7.2 Conditions for safe storage, including any incompatibilities

Only use containers specifically approved for the substance/product. **Requirements for storage rooms and vessels**

Keep in a cool, well-ventilated place. Protect against UV-radiation/sunlight Humidity.

Hints on joint storage Storage class: 13 Storage class (TRGS 510): 13 Keep away from



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Store at least 3 metres apart from: Chemicals/products that react together readily

Further information on storage conditions

Keep container tightly closed and in a well-ventilated place.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters DNEL/DMEL and PNEC values DNEL/DMEL

Limit value type : Exposure route : Exposure frequency : Limit value : DNEL worker (local) (CEMENT, PORTLAND, CHEMICALS ; CAS No. : 65997-15-1) Inhalation Short-term (acute) 1 mg/m³

8.2 Exposure controls

Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Personal protection equipment



When using do not eat, drink, smoke, sniff.

Eye/face protection

Suitable eye protection Eye glasses with side protection DIN EN 166

Skin protection

. Hand protection

.

Tested protective gloves must be worn DIN EN 374

Respiratory protection

Quarter-face mask (DIN EN 140) Half-face mask (DIN EN 140) Filtering Half-face mask (DIN EN 149)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Safety relevant basis data

| Aspect | | powder |
|---|---------------|--------------------|
| Colour | | greyish |
| Odour | | none |
| Melting point/melting range : | (1013 hPa) | No data available |
| Vapour density | ((air = 1)) | Data not available |
| Initial boiling point and boiling range : | (1013 hPa) | No data available |
| Decomposition temperature : | | No data available |
| Self flammability | | not applicable |
| Flash point : | | Not flammable |
| Flammability (solid, gas) | | Data not available |
| Lower explosion limit : | | No data available |



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| Upper explosion limit : | | | No data available | |
| Explosive properties | | | Not applicable | |
| Vapour pressure | (20 °C) | | negligible | |
| Density : | (20 °C) | | No data available | |
| Density : | (23 °C) | | No data available | |
| Water solubility : | (20 °C) | | almost insoluble | |
| pH: | | > | 11 | |
| Log Pow | (20 °C) | | not applicable | |
| Viscosity : | (20 °C) | | No data available | |
| Viscosity : | (23 °C) | | No data available | |
| Odour threshold | | | Data not available | |
| Evaporation rate | | | Data not available | |
| Maximum VOC content (EC) | : | | 0 | Wt % |
| Oxidizing properties | | | Not oxidising | |
| 2 Other information | | | _ | |

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Basic reaction when in mixed with water before to became a solid inert compound.

10.2 Chemical stability

Stable under recommended storage and handling conditions. See section 7. No additional measures necessary.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled properly.

10.4 Conditions to avoid

Protect from contact with water to avoid solidification of the product.

10.5 Incompatible materials

Acid

10.6 Hazardous decomposition products None

None

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| Acute effects Acute oral toxicity | |
|---------------------------------------|---|
| Parameter : | LD50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | > 2000 mg/kg bw/day |
| Method : | OECD 425 |
| It has no significant toxicity proper | rties. |
| STOT-single exposure | |
| None | |
| Practical experience/human e | vidence |
| None | |
| Acute dermal toxicity | |
| Parameter : | LD50 (CEMENT, PORTLAND, CHEMICALS ; CAS No. : 65997-15-1) |
| Exposure route : | Dermal |
| Species : | Rabbit |



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| Effective dose : | > 2000 mg/kg bw/day |
|-------------------------------------|---------------------|
| Exposure time : | 24 days |
| It has no significant toxicity prop | erties. |

Irritant and corrosive effects

Primary irritation to the skin

On contact with moist skin may cause thickening, cracking and cracking of the skin. Prolonged contact in combination with existing abrasions can cause burns.

Irritation to eyes

Direct contact with the product may cause corneal injury due to mechanical stress, immediate or delayed irritation or inflammation. The direct contact with large quantities of product dry or with projections of wet product can cause effects ranging from irritation ocular moderate (eg. Conjunctivitis or blepharitis) to chemical burns and blindness.

Irritation to respiratory tract

Dust may irritate throat and respiratory system. Coughing, sneezing and panting may occur as a result of exposure above the occupational exposure limits.

Sensitisation

Eczema can be developed as a result of exposure to dust damp, caused both by the high pH which induces irritant contact dermatitis after prolonged contact, either by an immunological reaction to Cr (VI) soluble which causes allergic contact dermatitis.

In case of inhalation

not sensitising.

Repeated dose toxicity (subacute, subchronic, chronic)

Subacute inhalation toxicity

The available evidence indicates clearly that occupational exposure to cement dust content in the product causes deficits in lung function. However, the evidence available at present are insufficient to establish with certainty the dose-response relationship for these effects.

Chronic inhalation toxicity

There were no chronic effects or effects at low concentrations.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The ingredients in this mixture do not meet the criteria for classification as CMR according to CLP.

SECTION 12: Ecological information

Do not allow uncontrolled discharge of product into the environment.

12.1 Toxicity

| Aquatic toxicity Acute (short-term) fish toxicity | |
|--|--|
| Parameter : | LC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| Species : | Fresh Water fish |
| Effective dose : | 50,6 mg/l |
| Exposure time : | 96 h |
| Parameter : | LC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| Species : | Saltwater Fish |
| Effective dose : | 457 mg/l |
| Exposure time : | 96 h |
| Acute (short-term) daphnia tox | icity |
| Parameter : | EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| Species : | Freshwater invertebrates. |
| Effective dose : | 49,1 mg/l |
| Exposure time : | 48 h |
| Parameter : | EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| Species : | Saltwater invertebrates |
| Effective dose : | 158 mg/l |



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| | Exposure time : | 96 h |
|-------|---|---|
| | Chronic (long-term) daphnia t | - |
| | Parameter : | NOEC (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| | Species : | Saltwater invertebrates |
| | Effective dose : | 32 mg/l 96 h |
| | Exposure time : Acute (short-term) algae toxic | |
| | Parameter : | EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| | Species : | Freshwater algae |
| | Effective dose : | 184,57 mg/l |
| | Exposure time : | 72 h |
| | Parameter : | EC0 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5) |
| | Species : | Freshwater algae |
| | Effective dose : | 48 mg/l |
| | Exposure time : | 72 h |
| 12.2 | Persistence and degradab | ility |
| | Poorly watersoluble, inorganic prod | luct. Can be mechanically precipitated to a large extent in biological sewage plants. |
| 12.3 | Bioaccumulative potential | |
| | not applicable | |
| 12.4 | Mobility in soil | |
| | Low solubility in soil. | |
| 175 | Results of PBT and vPvB a | occocment |
| 12.5 | | |
| | • | ontain a substance called a PBT or vPvB |
| 12.6 | Other adverse effects | |
| | No information available. | |
| 12.7 | Additional ecotoxicologica | al information |
| | None | |
| SEC | TION 13: Disposal conside | rations |
| SEC | | |
| 13.1 | Waste treatment methods | 5 |
| | Product/Packaging dispo | osal |
| | Dispose according to legislation. | |
| | | |
| SEC | TION 14: Transport inform | ation |
| 1.4.1 | | |
| 14.1 | UN number | |
| | No dangerous goods in sense of thi | |
| 14.2 | UN proper shipping name | |
| | No dangerous goods in sense of thi | |
| 14.3 | Transport hazard class(es | |
| | No dangerous goods in sense of thi | is transport regulation. |
| 14.4 | Packing group | |
| | No dangerous goods in sense of thi | is transport regulation. |
| 14 5 | Environmental hazards | |
| 1-1.5 | No dangerous goods in sense of thi | is transport regulation |
| 140 | | |
| 14.0 | Special precautions for us | |
| | None | |
| 14.7 | Transport in bulk according | ng to Annex II of MARPOL 73/78 and the IBC Code |
| | Transport in bulk accordin | ig to Amex II of MARI OL 75770 and the IDe code |

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not applicable

SECTION 15: Regulatory information

^{15.1} Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Regulation (EC) 1907/2006/CE (REACh). Regulation (EC) No 1272/2008 (CLP). Regulation (EU) 2015/830 requirements for the compilation of safety data sheets. Commission Regulation (EC) No 790/2009/CE (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 286/2011 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EC) No 1272/2008). Commission Regulation (EU) No 618/2012 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 487/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 758/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 605/2014 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 605/2014 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EC) No 1272/2008). Commission Regulation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EC) No 1272/2008). Commission Regulation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EC) No 1272/2008). Commission Regulation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EC) No 1272/2008). Co

Other regulations (EU)

Regulation (CE) 1907/2006: Substance of very high concern included in the SVHC Candidate List None

National regulations

Italy: Legislative Decree 81/2008 (Consolidated Law on protection of health and safety at work), as amended and Directive 2009/161/UE - chemical risk assessment in accordance with Title IX

Water hazard class (WGK)

Class : nwg (Non-hazardous to water) Classification according to VwVwS

15.2 Chemical Safety Assessment

not applicable

SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

LEGENDA:

| ADR: | Accord européen relative au transport international des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada) |
|---------------|---|
| ASTM: | ASTM International, originariamente nota come American Society for Testing and Materials (ASTM) |
| EINECS: | European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio) |
| EC(0/50/100): | Effective Concentration 0/50/100 (Concentrazione Effettiva Massima per 0/50100% degli Individui) |
| LC(0/50/100): | Lethal Concentration 0/50/100 (Concentrazione Letale per 0/50100% degli Individui) |
| IC50: | Inhibitor Concentration 50 (Concentrazione Inibente per il 50% degli Individui) |
| NOEL: | No Observed Effect Level (Dose massima senza effetti) |
| NOEC: | No Observed Effect Concentration (Concentrazione massima senza effetti) |
| LOEC: | Lowest Observed Effect Concentration (Concentrazione massima alla quale è possibile evidenziare un effetto) |
| DNEL: | Derived No Effect Level (Dose derivata di non effetto) |
| DMEL: | Derived Minimum Effect Level (Dose derivata di minimo effetto) |
| CLP: | Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio) |
| CSR: | Rapporto sulla Sicurezza Chimica (Chemical Safety Report) |
| | |



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| LD(0/50/100): | Lethal Dose 0/50/100 (Dose Letale per 0/50/100% degli Individui) | |
|---|--|--|
| IATA: | International Air Transport Association (Associazione Internazionale del Trasporto Aereo) | |
| ICAO: | International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile) | |
| Codice IMDG: | International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo) | |
| PBT: | Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche) | |
| RID: | Règlement concernent le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose) | |
| STEL: | Short term exposure limit (limite di esposizione a breve termine) | |
| TLV: | Threshold limit value (soglia di valore limite) | |
| TWA: | Time Weighted Average (media ponderata nel tempo) | |
| UE: | Unione Europea | |
| vPvB: | Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili) | |
| N.D.: | Non disponibile. | |
| N.A.: | Non applicabile | |
| VwVwS.: | Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes (Verwaltungsvorschrift wassergefährdende Stoffe – VwVwS) | |
| PNEC: | Predicted No Effect Concentration | |
| PNOS: | Particulates not Otherwise Specified | |
| BOD: | Biochemical Oxygen Demand | |
| COD: | Chemical Oxygen Demand | |
| BCF: | BioConcentration Factor | |
| TRGS : | Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal Institute for Occupational Safety and Health, Germany | |
| LCLo: | Lethal Concentration Low (La minima concentrazione letale) | |
| ThOD: | Theoretical Oxygen Demand | |
| 16.3 Key literature references and sources for data | | |

None

^{16.4} Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

calculated.

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

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

16.6 Training advice

None

16.7 Additional information

None

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