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



Trade name : OSMOCEM MR

Revision date : 23.10.2018 **Version (Revision) :** 3.0.0 (2.0.0)

Print date : 23.10.2018

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

1.1 Product identifier

OSMOCEM MR

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

Building and construction preparations: Osmotic cementitious mortar component for protective coatings, waterproofing "thickness"

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

AZICHEM Srl

Street: Via G. Gentile16/A

Postal code/city: 46044 Goito (MN) **Telephone:** +390376604185/604365

Telefax: +39 0376 604398

Information contact: info@azichem.com

1.4 Emergency telephone number

Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (24h)

Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia) Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo) Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze) Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli 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

FLUE DUST; CAS No.: 68475-76-3

Hazard statements

Page: 1 / 10

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



Trade name : OSMOCEM MR

Revision date : 23.10.2018 **Version (Revision) :** 3.0.0 (2.0.0)

Print date : 23.10.2018

H318 Causes serious eye damage. H315 Causes skin irritation.

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

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

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

P302+P352 IF ON SKIN: Wash with plenty of water/....

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.: 65997-15-1

Weight fraction : \geq 35 - < 45 %

Classification 1272/2008 [CLP]: Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335

 $\hbox{FLUE DUST} \; ; \; \hbox{REACH registration No.} \; : \; 01\text{-}2119486767\text{-}17 \; ; \; \hbox{EC No.} \; : \; 270\text{-}659\text{-}9; \; \hbox{CAS No.} \; : \; 68475\text{-}76\text{-}3 \; ; \; \hbox{CAS No$

Weight fraction : $\geq 0.1 - < 0.5 \%$

Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 STOT SE 3 ; H335

Additional 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

Page: 2 / 10

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



Trade name : OSMOCEM MR

Revision date : 23.10.2018 **Version (Revision) :** 3.0.0 (2.0.0)

Print date : 23.10.2018

occur as a result of exposure above the occupational exposure limits. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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.

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

Page: 3 / 10

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



Trade name : OSMOCEM MR

Revision date : 23.10.2018 **Version (Revision) :** 3.0.0 (2.0.0)

Print date : 23.10.2018

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

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: DNEL worker (local) (CEMENT, PORTLAND, CHEMICALS; CAS No.: 65997-15-1)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)

Limit value: 1 mg/m³

PNEC

Limit value type : PNEC aquatic, freshwater (FLUE DUST ; CAS No. : 68475-76-3)

Limit value : 28 mg/m³

Limit value type: PNEC aquatic, intermittent release (FLUE DUST; CAS No.: 68475-76-3)

Limit value: 282 mg/m³

Limit value type : PNEC aquatic, marine water (FLUE DUST ; CAS No. : 68475-76-3)

Limit value : 3 mg/m³

Limit value type : PNEC sediment, freshwater (FLUE DUST ; CAS No. : 68475-76-3)

Limit value: 0,875 mg/kg

Limit value type : PNEC sediment, marine water (FLUE DUST ; CAS No. : 68475-76-3)

Limit value : 0,088 mg/kg

Limit value type : PNEC soil, freshwater (FLUE DUST ; CAS No. : 68475-76-3)

Limit value : 5 mg/kg

Limit value type: PNEC sewage treatment plant (STP) (FLUE DUST ; CAS No. : 68475-76-3)

Limit value : 6 mg/l

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

Page: 4 / 10

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



Trade name : OSMOCEM MR

Revision date: 23.10.2018 **Version (Revision):** 3.0.0 (2.0.0)

Print date : 23.10.2018

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 Data not available ((air = 1))Initial boiling point and boiling (1013 hPa) No data available range: **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 Upper explosion limit: No data available Not applicable **Explosive properties** 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 (20°C) **Log Pow** 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): Wt % 0 **Oxidizing properties** Not oxidising

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

Page: 5 / 10

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



Trade name : OSMOCEM MR

Revision date : 23.10.2018 **Version (Revision) :** 3.0.0 (2.0.0)

Print date : 23.10.2018

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 properties.

Acute dermal toxicity

Parameter: LD50 (CEMENT, PORTLAND, CHEMICALS ; CAS No. : 65997-15-1)

Exposure route : Dermal Species : Rabbit

Effective dose : > 2000 mg/kg bw/day

Exposure time: 24 days It has no significant toxicity properties.

Acute inhalation toxicity

Parameter: LD50 (FLUE DUST; CAS No.: 68475-76-3)

Exposure route: Inhalation
Species: Rat
Effective dose: > 6,04 mg/l
Exposure time: 4 h

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 eves

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 sensitisina.

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.

Page: 6 / 10

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



OSMOCEM MR Trade name:

Revision date: 23.10.2018 Version (Revision): 3.0.0 (2.0.0)

Print date : 23.10.2018

SECTION 12: Ecological information

Do not allow uncontrolled discharge of product into the environment.

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

LC50 (LIME (CHEMICAL), HYDRAULIC; CAS No.: 85117-09-5) Parameter:

Species: Fresh Water fish Effective dose : 50,6 mg/l Exposure time: 96 h

LC50 (LIME (CHEMICAL), HYDRAULIC; CAS No.: 85117-09-5) Parameter:

Species: Saltwater Fish Effective dose: 457 mg/l Exposure time: 96 h Acute (short-term) daphnia toxicity

EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No.: 85117-09-5) Parameter:

Species: Freshwater invertebrates.

Effective dose: 49.1 ma/l Exposure time: 48 h

Parameter: EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No.: 85117-09-5)

Species: Saltwater invertebrates

Effective dose: 158 mg/l Exposure time: Chronic (long-term) daphnia toxicity

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 toxicity

Parameter:

EC50 (LIME (CHEMICAL), HYDRAULIC; CAS No.: 85117-09-5)

Species: Freshwater algae 184,57 mg/l Effective dose: Exposure time: 72 h

Parameter: ECO (LIME (CHEMICAL), HYDRAULIC; CAS No.: 85117-09-5)

Species: Freshwater algae Effective dose: 48 mg/l Exposure time: 72 h

12.2 Persistence and degradability

Poorly watersoluble, inorganic product. 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.

12.5 Results of PBT and vPvB assessment

This product is none, or does not contain a substance called a PBT or vPvB

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

None

Page: 7 / 10

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



Trade name : OSMOCEM MR

Revision date: 23.10.2018 **Version (Revision):** 3.0.0 (2.0.0)

Print date : 23.10.2018

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Dispose according to legislation.

SECTION 14: Transport information

14.1 UN number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

None

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

not applicable

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) 1907/2006 (REACh).

Regulation (EC) No 1272/2008 (CLP).

Regulation (EU) 2015/830 requirements for the compilation of safety data sheets.

Amendings, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008: Commission Regulation (EC) No 790/2009 (I ATP). Commission Regulation (EU) No 286/2011(II ATP). Commission Regulation (EU) No 618/2012 (III ATP). Commission Regulation (EU) No 487/2013 (IV ATP). Commission Regulation (EU) No 944/2013 (V ATP). Commission Regulation (EU) No 605/2014 (VI ATP). Commission Regulation (EU) No 1297/2014 (VII ATP). Commission Regulation (EU) No 2015/1221 (VIII ATP).

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

Page: 8 / 10

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



Trade name : OSMOCEM MR

Revision date: 23.10.2018 **Version (Revision):** 3.0.0 (2.0.0)

Print date : 23.10.2018

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 03. Hazardous ingredients · 15. EU legislation

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)
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 Maritimo)

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

AwSV.: Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlagen

zum Umgang mit wassergefährdenden Stoffen (AwSV))

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) No 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.

Page: 9 / 10

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : OSMOCEM MR

Revision date : 23.10.2018 **Version (Revision) :** 3.0.0 (2.0.0)

Print date : 23.10.2018

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.

Page: 10 / 10