

Trade name : Revision date : Print date : OSMOCEM D COMP. A 23.10.2018 24.10.2018

Version (Revision) :

3.0.0 (2.0.0)

SECTION 1: Identification of the substance/mixture and of the company/ undertaking 1.1 Product identifier OSMOCEM D COMP. A 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. **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 H318 Causes serious eye damage.

Page : 1 / 10



Trade name : Revision date : Print date :	OSMOCEM D COMP. A 23.10.2018 24.10.2018	Version (Revision) :	3.0.0 (2.0.0)
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H335	May cause respiratory irritation.		
Precautionary state	ements		
P261	Avoid breathing dust/fume/gas/mist/	vapours/spray.	
P264	Wash hands thoroughly after handlin	g.	
P280	Wear protective gloves/protective clo	thing/eye protection/face protection.	
P302+P352	IF ON SKIN: Wash with plenty of wat	er/	
P333+P313	If skin irritation or rash occurs: Get n	nedical advice/attention.	
P305+P351+P338	IF IN EYES: Rinse cautiously with wa and easy to do. Continue rinsing.	ter for several minutes. Remove contact	lenses, if present
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 ≥ 35 - < 45 % Weight fraction : Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 STOT SE 3 ; H335 FLUE DUST ; REACH registration No. : 01-2119486767-17 ; EC No. : 270-659-9; CAS No. : 68475-76-3 Weight fraction : ≥ 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 (eq. 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. May cause an allergic skin reaction.



Trade name : Revision date : Print date : OSMOCEM D COMP. A 23.10.2018 24.10.2018

Version (Revision) :

3.0.0 (2.0.0)

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

Only use containers specifically approved for the substance/product.

Page : 3 / 10



Trade name : **Revision date :** Print date :

OSMOCEM D COMP. A 23.10.2018 24.10.2018

Version (Revision) :

3.0.0 (2.0.0)

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 va

DNEL/DIFIEL	
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/m ³
PNEC	
Limit value type :	PNEC aquatic, freshwater (FLUE DUST ; CAS No. : 68475-76-3)
Limit value :	28 mg/m ³
Limit value type :	PNEC aquatic, intermittent release (FLUE DUST ; CAS No. : 68475-76-3)
Limit value :	282 mg/m ³
Limit value type :	PNEC aquatic, marine water (FLUE DUST ; CAS No. : 68475-76-3)
Limit value :	3 mg/m ³
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

Skin protection

Page: 4 / 10



Trade name : Revision date : Print date : OSMOCEM D COMP. A 23.10.2018 24.10.2018

Version (Revision) :

3.0.0 (2.0.0)

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	
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	
рН :		> 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	
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



Trade name : Revision date : Print date : OSMOCEM D COMP. A 23.10.2018 24.10.2018

Version (Revision):

3.0.0 (2.0.0)

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	ties.
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 proper	ties.
Acute inhalation toxicity	
Parameter :	LD50 (FLUE DUST ; CAS No. : 68475-76-3)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 6,04 mg/l

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

Exposure time :

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)

4 h

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.



 Trade name :
 OSMOCEM D COMP. A

 Revision date :
 23.10.2018

 Print date :
 24.10.2018

Version (Revision) :

3.0.0 (2.0.0)

Do not pllow upcontrolled discharge	of product into the environment
Do not allow uncontrolled discharge	of product into the environment.
2.1 Toxicity	
Aquatic toxicity	
Acute (short-term) fish toxicit	У
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 to	
Parameter :	EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5)
Species : Effective dose :	Freshwater invertebrates.
Exposure time :	49,1 mg/l 48 h
Parameter :	EC50 (LIME (CHEMICAL), HYDRAULIC ; CAS No. : 85117-09-5)
Species :	Saltwater invertebrates
Effective dose :	158 mg/l
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
Exposure time :	96 h
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
2.2 Persistence and degradab	ility
-	uct. Can be mechanically precipitated to a large extent in biological sewage plants.
,	
2.3 Bioaccumulative potential	
not applicable	
2.4 Mobility in soil	
Low solubility in soil.	
2.5 Results of PBT and vPvB a	ssessment
This product is none, or does not co	ontain a substance called a PBT or vPvB
2.6 Other adverse effects	
No information available.	
	linformation
2.7 Additional ecotoxicologica	ii information
None	



Trade name : Revision date : Print date : OSMOCEM D COMP. A 23.10.2018 24.10.2018

3.0.0 (2.0.0)

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

^{15.1} 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

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Labelling according to Regulation (EC) No.



Trade name :	OSMOCEM D COMP. A		
Revision date :	23.10.2018	Version (Revision) :	3.0.0 (2.0.0)
Print date :	24.10.2018		

1272/2008 [CLP] - Hazard components for labelling · 03. Hazardous ingredients · 15. EU legislation

LEGENDA:	-
ADR:	Accord européen relative au transport international des marchandises dangereuses par route (accor 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 u 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 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
AwSV.:	Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlag 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
	ature references and sources for data
None	
	ation for mixtures and used evaluation method according to regulatio
calculated.	1272/2008 [CLP]
16.5 Relevant	t 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.
2001	may cause respiratory initiation.
	Page : 9 / 10
	Fage : 57 10



Trade name : Revision date : Print date : OSMOCEM D COMP. A 23.10.2018 24.10.2018

Version (Revision) :

3.0.0 (2.0.0)

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.