

## Safety Data Sheet

### MAPETHERM AR1 LIGHT

Safety Data Sheet dated 18/6/2015, version 2

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

1.1. Product identifier

Trade name: MAPETHERM AR1 LIGHT

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

Recommended use:

Cement based powder adhesive

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

MAPEI S.p.A. - Via Cafiero 22 - Milan - ITALY

Competent person responsible for the safety data sheet:

sicurezza@mapei.it

1.4. Emergency telephone number

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

#### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Danger, Eye Dam. 1, Causes serious eye damage.
- ⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.
- ⚠ Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



Danger

Hazard Statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

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H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary Statements:

P261 Avoid breathing dust.

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

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

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/...

Special Provisions:

None

Contents:

Portland cement, Cr(VI) < 2 ppm

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

### SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 25% - < 50% Portland cement, Cr(VI) < 2 ppm

CAS: 65997-15-1, EC: 266-043-4

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/1 Eye Dam. 1 H318

⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

### SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

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

Protect uninjured eye.

In case of Ingestion:

Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.

In case of Inhalation:

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- In case of inhalation, consult a doctor immediately and show him packing or label.
- 4.2. Most important symptoms and effects, both acute and delayed  
 If inhaled, the product causes irritation in the airways. and if brought into contact with the skin, it causes appreciable inflammation, with erythema, scabs, and oedema.  
 If brought into contact with the eyes, the product causes serious eye injury, such as opacity of the cornea or lesions to the iris.  
 If brought into contact with the skin, the product may cause sensitisation of the skin.  
 This preparation contains cement. Contact between cement and body fluids (e.g. sweat and eye fluids) may cause irritation or burns.
- 4.3. Indication of any immediate medical attention and special treatment needed  
 In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).  
 Treatment:  
 (see paragraph 4.1)

#### SECTION 5: Firefighting measures

- 5.1. Extinguishing media  
 Suitable extinguishing media:  
 Carbon dioxide (CO<sub>2</sub>).  
 Extinguishing media which must not be used for safety reasons:  
 None in particular.
- 5.2. Special hazards arising from the substance or mixture  
 The product does not present a fire hazard
- 5.3. Advice for firefighters  
 Use suitable breathing apparatus .  
 Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
 Move undamaged containers from immediate hazard area if it can be done safely.

#### SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures  
 Wear personal protection equipment.  
 Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
 Provide adequate ventilation.  
 Use appropriate respiratory protection.  
 See protective measures under point 7 and 8.
- 6.2. Environmental precautions  
 Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
 Retain contaminated washing water and dispose it.  
 In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
 Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up  
 Rapidly recover the product, wearing protective clothing.  
 Scoop into containers and seal for disposal.  
 After the product has been recovered, rinse the area and materials involved with water.  
 Wash with plenty of water.
- 6.4. Reference to other sections  
 See also section 8 and 13

#### SECTION 7: Handling and storage

- 7.1. Precautions for safe handling  
 Avoid contact with skin and eyes and exposure to high dust concentration.  
 Avoid powder development and deposit

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- Use localized ventilation system.  
 Contaminated clothing should be changed before entering eating areas.  
 Do not eat or drink while working.  
 See also section 8 for recommended protective equipment.  
 Fine dust may form explosive mixture with air. Keep away from open flames, heat and sparks.  
 Do not remove shrink film in hazardous locations (because of risk of static charging/discharge)
- 7.2. Conditions for safe storage, including any incompatibilities  
 Always keep the containers tightly closed.  
 Incompatible materials:  
 Keep away from water or from damp surroundings.  
 Instructions as regards storage premises:  
 Adequately ventilated premises.
- 7.3. Specific end use(s)  
 None in particular

#### SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters  
 Portland cement, Cr(VI) < 2 ppm - CAS: 65997-15-1  
 ACGIH - LTE mg/m<sup>3</sup>(8h): 1 mg/m<sup>3</sup> - Notes: A4, (E,R) - Pulm func, resp symptoms, asthma  
 DNEL Exposure Limit Values  
 N.A.  
 PNEC Exposure Limit Values  
 N.A.
- 8.2. Exposure controls  
 Eye protection:  
 Safety goggles.  
 Protection for skin:  
 Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.  
 Protection for hands:  
 Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.  
 Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves  
 Respiratory protection:  
 Not needed for normal use.  
 A dust mask (P2) should be worn if above exposure limits  
 In case of insufficient ventilation use mask with B type filters (EN 14387).  
 Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.
- Thermal Hazards:  
 None  
 Environmental exposure controls:  
 None

#### SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties
- |                  |                           |
|------------------|---------------------------|
| Appearance:      | powder                    |
| Colour:          | grey                      |
| Odour:           | slight, typical of cement |
| Odour threshold: | N.A.                      |

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pH:	12	
Melting point / freezing point:	== °C	
Initial boiling point and boiling range:	== °C	
Solid/gas flammability:	N.A.	
Upper/lower flammability or explosive limits:		N.A.
Vapour density:	N.A.	
Flash point:	== °C	
Evaporation rate:	N.A.	
Vapour pressure:	== kPa (23°C)	
Relative density:	N.A.	
Apparent density:	1.5 g/cm <sup>3</sup>	
Vapour density (air=1):	N.A.	
Solubility in water:	partly soluble	
Solubility in oil:	insoluble	
Viscosity:	N.A.	
Auto-ignition temperature:	== °C	
Explosion limits(by volume):	==	
Decomposition temperature:	N.A.	
Partition coefficient (n-octanol/water):		N.A.
Explosive properties:	==	
Oxidizing properties:	N.A.	
9.2. Other information		
Miscibility:	N.A.	
Fat Solubility:	N.A.	
Conductivity:	N.A.	
Substance Groups relevant properties		N.A.

#### SECTION 10: Stability and reactivity

- 10.1. Reactivity
  - Stable under normal conditions
- 10.2. Chemical stability
  - Stable under normal conditions
- 10.3. Possibility of hazardous reactions
- 10.4. Conditions to avoid
  - Stable under normal conditions.
- 10.5. Incompatible materials
  - None in particular.
- 10.6. Hazardous decomposition products
  - None.

#### SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
  - Route(s) of entry:
  - Ingestion: Yes
  - Inhalation: Yes
  - Contact: No
- Toxicological information related to the product:
  - There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.
  - Toxicological information of the mixture:
    - N.A.
  - Toxicological information of the main substances found in the mixture:
    - N.A.
  - Corrosive/Irritating Properties:

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**Skin:**

The product can cause irritation by contact.

**Eye:**

The product can cause damage to eyes by contact

**Sensitizing Properties:**

Frequent and prolonged skin contacts with cement paste may cause dermatitis.

**Cancerogenic Effects:**

No effects are known.

**Mutagenic Effects:**

No effects are known.

**Teratogenic Effects:**

No effects are known.

**Additional Information:**

Susceptibility to skin irritation and sensitization varies from person to person.

In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact.

Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

## SECTION 12: Ecological information

**12.1. Toxicity**

Adopt good industrial practices, so that the product is not released into the environment.

Not available data on the mixture

Biodegradability: not readily biodegradable

Biodegradability: no data available on the preparation.

N.A.

**12.2. Persistence and degradability**

N.A.

**12.3. Bioaccumulative potential**

N.A.

**12.4. Mobility in soil**

N.A.

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

vPvB Substances: None - PBT Substances: None

**12.6. Other adverse effects**

Not available data on the mixture

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#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of hardened product (EC waste code) : 17 01 01

Disposal of not hardened product (EC waste code) : 17 01 01

The suggested European waste code is just based on the composition of the product.

According to the specific process or application field a different waste code may be necessary.

#### SECTION 14: Transport information

##### 14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

UN Number: ==

##### 14.2. UN proper shipping name

N.A.

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

Rail/Road(RID/ADR): no dangerous good

ADR-Upper number: NA

Air (ICAO/IATA): no dangerous good

Sea (IMO/IMDG): no dangerous good

N.A.

##### 14.4. Packing group

N.A.

##### 14.5. Environmental hazards

Marine pollutant: No

N.A.

##### 14.6. Special precautions for user

N.A.

##### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

No

#### SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

REACH Regulation (1907/2006) – All. XVII

The product contains Cr (VI) under the limitse established by annex. XVII pt.47. Respect the duration

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according to the information described on the packaging

Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"  
Directive 2000/39/CE and s.m.i. (Professional threshold limit)  
Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)  
Directive 105/2003/CE (Seveso III): N.A.  
ADR Agreement – IMDG Code – IATA Regulation  
VOC (2004/42/EC) : N.A. g/l

15.2. Chemical safety assessment  
No

#### SECTION 16: Other information

Text of phrases referred to under heading 3:  
H335 May cause respiratory irritation.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H317 May cause an allergic skin reaction.  
Paragraphs modified from the previous revision:

SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.  
Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances  
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities  
SAX'S - Dangerous properties of industrial materials  
Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.  
This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of  
Dangerous Goods by Road.



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CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
OEL:	European threshold limit value
VLE:	Threshold Limiting Value.
WGK:	German Water Hazard Class.
TSCA:	United States Toxic Substances Control Act Inventory
DSL:	DSL - Canadian Domestic Substances List