

SECTION 1: IDENTIFICATION OF MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Substance name: Mixture of magnesium hydroxide and water
Synonyms: Magnesium hydroxide slurry
Chemical name and formula: Magnesiumhydroxid - Mg(OH)₂, Water - H₂O
Trade name: PaperMag[®] 30, PaperMag[®] 3045

1.2 Relevant identified uses of the substance and uses advised against**Use of the mixture:**

The mixture is used in various applications such as pulp and paper applications, various flue gas treatments and pH adjustment of various waters and soils.

Uses advised against: There are no uses advised against.

1.3 Details of the supplier of the safety data sheet

| | | |
|--------------------------------|---------------------------------|-----------------------------|
| | Finland | Sweden |
| Name: | SMA Mineral Oy | SMA Mineral AB |
| Address: | Selleenkatu 281 95450 Tornio | Box 329 682 27 Filipstad |
| Phone number: | +358 40 712 2360 | +46 590 164 00 |
| E-mail of responsible of MSDS: | sds@smamineral.com | |

1.4 Emergency telephone number

| | |
|---|---|
| European Emergency No.: | 112 |
| Poison Information Centre, Finland | +358 9 4711 |
| Poison Information Centre, Norway | + 47 2259 1300 |
| Poison Information Centre, Sweden | +46 10 456 6700 |
| Poison Information Centre, United Kingdom | +44 191 260 6182/+44 191 260 6180 (24H) |

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance****2.1.1 Classification according to Regulation (EC) 1272/2008**

The product has not been classified as hazardous to health or environment or as a fire hazard in accordance with existing law and provisions.

2.2 Label elements

No label elements.

2.3 Other hazards

The substance does not meet the criteria for PBT or vPvB substance.

No other hazards identified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substance**

Not relevant

3.2 Mixture

| CAS number | EC number | REACH Registration No. | Identification name | Weight % content (or range) | Classification according to Regulation (EC) No 1272/2008 [CLP] |
|------------|-----------|------------------------|---------------------|-----------------------------|--|
| 1317-43-7 | 215-274-9 | | Magnesium hydroxide | 40-70 % | |
| 7732-18-5 | 231-791-2 | | Water | 30-60 % | |

Hazardous impurities: No impurities relevant for classification and labelling.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Move injured person away from source of exposure. Obtain rest, warmth and fresh air.

Following inhalation

Rinse nose and mouth with water. Obtain medical attention if necessary.

Following skin contact

Remove contaminated clothing. Wash affected skin with plenty of water.

Following eye contact

Rinse eyes immediately with plenty of water, for 15 minutes if necessary. Remove contact lenses and open eyes. Seek medical advice immediately. Keep rinsing, even during transportation.

Following ingestion

Drink plenty of water. Induce vomiting unless the person is unconscious. Obtain medical attention if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Follow the advises given in section 4.1.

4.3 Indication of any immediate medical attention and special treatment needed

Follow the advises given in section 4.1

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

5.1.1 Suitable extinguishing media

Use extinguishing media that are appropriate to surrounding environment.

5.1.2 Unsuitable extinguishing media

Do not use strong water spray.

5.2 Special hazards arising from the substance or mixture

Not flammable.

5.3 Advice for fire fighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Wear suitable protective equipment (see section 8). Keep dust levels to a minimum. Pick up the product mechanically in a dry way. In all cases avoid dust formation and spreading. Pick spillage up into a closed container and dispose in accordance with local and national legislation. Ensure good ventilation.

6.1.2 For emergency responders

Wear suitable protective equipment (see section 8). Keep dust levels to a minimum. Avoid spills to watercourses or soil.

6.2 Environmental precautions

Avoid spills to watercourses or soil.

6.3 Methods and material for containment and cleaning up

Pick up the product mechanically in a dry way. In all cases avoid dust formation and spreading. Pick spillage up into a closed container and dispose in accordance with local and national legislation. Reference to other sections

6.4 Reference to other sections

For more information on exposure controls/personal protection or disposal considerations, please check section 8 and 13 and the Annex of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 Protective measures

Avoid inhalation and contact with skin and eyes. Arrange place for eyewash.

7.1.2 Advice on general occupational hygiene

Good personal and housekeeping practices (i.e. regular cleaning with suitable cleaning devices), no drinking, eating and smoking at the workplace. Shower and change clothes at end of work shift.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed.

7.3 Specific end use(s)

No specific.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No exposure limit noted for ingredients.

8.2 Exposure controls

It is recommended to use appropriate protection equipment: eye protection equipment, filter mask and protective gloves. If dust is generated in handling, use encapsulation, local ventilation or other technical equipment to keep airborne dust level under the recommended limit value.

8.2.1 Appropriate engineering controls

Arrange place for eyewash.

8.2.2 Individual protection measures, such as personal protective equipment

a. Eye/face protection

Risk of contact: Protective goggles.

b. Skin protection

Protective working clothes required when risk of contact or spatters.

c. Respiratory protection

In normal use situation respiratory protection is usually not needed. In case of dust formation, use respiratory protection. P2 (filter mask, fine dust).

d. Hand protection

Protective gloves: neoprene, nitrile, polyethylene or PVC. Breakthrough time is not known, exchange gloves often enough.

e. Thermal hazards

The substance does not represent a thermal hazard, thus special consideration is not required.

8.2.3 Environmental exposure controls

All ventilation systems should be filtered before discharge to atmosphere. Avoid releasing to the environment. Any large spillage into watercourses must be alerted to the regulatory authority responsible for environmental protection or other regulatory body.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---------------------------|---------------------------------------|
| Appearance | paste or slurry |
| Odour | odourless or no characteristic odour |
| Colour | white |
| Odour threshold | not applicable |
| pH | 10,5 (saturated solution at 20 °C) |
| Melting point | no data available |
| Boiling point | no data available |
| Flash point | no data available |
| Evaporation rate | no data available |
| Flammability | no data available |
| Explosive limits | non explosive |
| Vapour pressure | not applicable |
| Vapour density | not applicable |
| Relative density | 1,35 - 1,62 g/cm ³ |
| Solubility in water | dispersible in water, soluble in acid |
| Partition coefficient | not applicable (inorganic substance) |
| Auto ignition temperature | no data available |
| Decomposition temperature | not applicable |
| Viscosity | not applicable |
| Oxidising properties | no oxidising properties |

9.2 Other information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No information.

10.2 Chemical stability

Stable in recommended storing conditions.

10.3 Possibility of hazardous reactions

No information.

10.4 Conditions to avoid

No information.

10.5 Incompatible materials

Materials to avoid: acid

10.6 Hazardous decomposition products

None

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Substance

Not relevant

11.1.2 Mixture

a. Acute toxicity

Magnesiumhydroxide: LD50 8500 mg/kg (dermal, rat).

b. Skin corrosion/irritation

May irritate.

c. Serious eye damage/irritation

Direct contact may irritate.

d. Respiratory or skin sensitisation

Unlikely to cause allergies.

e. Germ cell mutagenicity

No heritable or mutagenic effects.

f. Carcinogenicity

No evidence of carcinogenic properties.

g. Reproductive toxicity

No known hazardous effects on reproduction, fertility or the unborn child.

h. STOT-single exposure

No information available

i. STOT-repeated exposure

No information available

j. Aspiration hazard

Magnesium hydroxide is not known to present an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not classified as hazardous to environment. Spillage in large quantities may increase the pH of discharged water, which may have local effects on aquatic organisms.

12.2 Persistence and degradability

Not relevant for inorganic substances. The product consists of inorganic substances which are not biodegradable.

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The mixture does not meet the criteria for PBT or vPvB substance.

12.6 Other adverse effects

No other adverse effects are identified.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal in accordance with local and national regulations

Waste class: Not classified

SECTION 14: TRANSPORT INFORMATION

Product is not classified as hazardous for transport (ADR (Road), RID (Rail), IMDG/GGVSea (Sea), IATA/ICAO).

14.1 UN-Number

Not regulated

14.2 UN proper shipping name

Not regulated

14.3 Transport hazard class(es)

Not regulated

14.4 Packing group

Not regulated

14.5 Environmental hazards

None

14.6 Special precautions for user

Avoid any release of dust during transportation, by using air-tight tanks.

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

Not regulated

SECTION 15: REGULATORY INFORMATION

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

Authorisations: Not required

Restrictions on use: None

Other EU regulations: Calcium oxide is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant.

National regulations: Water endangering class 1 (Germany)

15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this mixture.

SECTION 16: OTHER INFORMATION

Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship.

16.1 Abbreviations

LD₅₀: median lethal dose

IATA: international air transport association

PBT: persistent, bioaccumulative, toxic chemical

vPvB: very persistent, very bioaccumulative chemical

ICAO: international civil aviation organization

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

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Dangerous Goods Code

RID: Regulations concerning the international railway transport of dangerous goods

16.2 Key literature references

Anonymous, 2006: Tolerable upper intake levels for vitamins and minerals Scientific Committee on Food, European Food Safety Authority, ISBN: 92-9199-014-0 [SCF document]

Anonymous, 2008: Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL) for calcium oxide (CaO) and calcium dihydroxide (Ca(OH)₂), European Commission, DG Employment, Social Affairs and Equal Opportunities, SCOEL/SUM/137 February 2008

16.3 Revision

September 2018 (Version 4.0/EN)

Updated styles

Section 1.1 Updated trade names

Section 1.3: Added Oy as a supplier

Section 1.4: Updated emergency telephone numbers

Section 2.1.2: Deleted classification according to Directive 67/548/EEC

Section 3.2: Updated percentages

Section 5: Updated formatting

Section 7.1: Updated precautions

Section 8.2.2: Added thermal hazards

Section 8.2.3: Environmental exposure controls

Section 9.1: Added physical properties

Section 14: Updated with IATA/ICAO

Section 15: Formatted

Section 6.1: Added

November 2016 (Version 3.0/EN)

Formatting of the safety data sheet

Disclaimer

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex II), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.