SAFETY DATASHEET - Insulating

REVISION 3 - 22/05/2023

Section 1: Identification of the Substance and Company

1.1 Product Identifier

Substance or preparation trade name: Insulating Render

1.2 Identified uses for the product

Insulating Render for traditional solid wall and cavity wall construction. Not appropriate for use as building or pointing mortar.

1.3 Details of the Manufacturer

Company name & address:

Cornerstone

Brims Park, Old Callywith Road, Bodmin, PL31 2DZ

Telephone:

01208 79779

1.4 Emergency Information and Contacts

You can contact Cornerstone on +44 1208 79779 (7.30am-5pm, Monday to Friday only)

In the event of an Emergency in the UK dial 999 or 112 and ask for the relevant services.

In Europe dial 112; this datasheet must be made available to the emergency services.

In the event of a poisoning Healthcare professionals can contact the UK National Poisons Centre at https://www.npis.org/, or their database at https://www.toxbase.org/; please note this service is not available to the general public.

Section 2: Hazard Identification

2.1 Classification of the Substance

2.1.1 Classification according to Regulation (EC) 1272/2008

Hazard classes

Skin irritation: hazard category 2

STOT Single Exposure; Inhalation: hazard category 3

Serious eye damage: hazard category 1

2.2 Labelling Information

2.2.1 Labelling according to Regulation (EC) 1272/2008

Signal word: Danger

Hazard Statements

H315: Causes skin irritation

H318: Causes serious eye damage

H335: May cause respiratory irritation

Precautionary Statements

P102: Keep out of reach of children

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

P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a POISON CENTRE or doctor.

P302 + P352 + P313: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: seek medical advice/attention.

P261: Avoid breathing dust/spray

P304 + P340 + P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.

P501: Dispose of contents/container to a suitable waste collection point in accordance with current waste regulations.

2.3 Other Hazards

- The product does not meet the criteria for PBT or vPvB substance.
- Lime products can cause serious and permanent damage to the eyes, appropriate eye protection should be mandatory at all times.

Section 3: Product Composition

3.1 Product Characterisation: Mixture

Main Constituents in the mixture listed below.

Raw Material	Approximate Content w/w	CAS No.	EC No.	CLP Hazard Category	Hazard Statements
Lime (chemical), Hydraulic	45%	85117-09-5	285-561-1	• STOT SE 3 (H335 (Respiratory tract) (Inhalation)) • Skin irritation 2 (H315) • Serious eye damage (H318)	H315: Causes skin irritation H318: Causes serious eye damage H335: May cause respiratory irritation
Glass Oxide	42%	65997-17-3	266-46-0	Not Classified	Not Classified
Calcium Carbonate	14%	471-34-1	207-439-9	Not Classified	Not Classified

Section 4: First Aid Measures

4.1 First Aid Measures

Hazard Class: No special measures required.

Skin contact: Carefully and gently brush the contaminated body surfaces in order to remove all traces of product. Wash affected area immediately with plenty of water. Remove contaminated clothing. If necessary, seek medical advice

Eye contact: Rinse eyes immediately with plenty of water/saline solution and seek medical advice.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Obtain medical attention.

Inhalation: Move patient to fresh air, put in a seated position, give oxygen if required. If the patient doesn't improve seek medical attention.

4.2 Symptoms & Effects, Acute & Delayed

This product is not toxic. This product is irritating to skin and eyes, can cause chemical burns if not washed off. Risk of serious and permanent damage to eyes if not washed out – keep saline eyewash available when working with Lime. In case of eye irritation after washing seek immediate medical attention.

4.3 In Case of Need of Medical Treatment

Refer to Section 4.1, make this SDS available on request to medical professionals.

Section 5: Fire Fighting Measures

5.1 Suitable Extinguishing Media

The product is not combustible. Use a dry powder, foam or CO2 fire extinguisher to extinguish the surrounding fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Unsuitable Extinguishing Media

Do not use water.

5.3 Special Hazards in Fire

Avoid generation of dust. Use breathing apparatus. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.4 Required Special Protective Equipment for Fire Fighters

Use breathing apparatus, avoid aeration of dust.

Section 6: Accidental Release Measures

6.1 Personal Precautions & P.P.E.

- Ensure adequate ventilation.
- Keep unprotected persons away.
- Avoid contact with skin, eyes, and clothing – wear suitable protective equipment (see section 8).
- Avoid inhalation of dust – ensure that sufficient ventilation or suitable respiratory protective equipment is used, wear suitable protective equipment (see section 8).
- We recommend gloves, goggles and a half face PFF3 mask.

6.2 Environmental Precautions

Contain the spillage. Keep the material dry if possible. Cover area, if possible, to avoid unnecessary hazard. Avoid brushing which will cause dust clouds. Avoid uncontrolled spills to watercourses and drains

(pH increase). Any large spillage into watercourses must be alerted to the Environment Agency or other regulatory body. Inform the Environment Agency or other relevant regulatory body in the event of a large spillage into watercourses or drains (spillage may cause pH increase).

6.3 Methods for cleaning

Wet down the material and shovel into a suitable container OR dry vacuum with a HEPA filter (preferred method), wash away the minimum amount possible. In all cases avoid dust formation as much as possible. Wear suitable P.P.E. at all times.

Section 7: Handling and Storage

7.1 Safe Handling

Avoid contact with skin and eyes. Wear protective equipment (refer to section 8 of this safety data sheet). Do not wear contact lenses when handling this product. It is also advisable to have individual pocket eyewash. When handling bags usual precautions should be paid to the risks outlined in the Council Directive 90/269/EEC.

Avoid inhalation or ingestion and contact with skin and eyes. General occupational hygiene measures are required to ensure safe handling of the substance. These measures involve 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. Do not wear contaminated clothing at home.

7.2 Storage

The substance should be stored under cool frost-free conditions to avoid product degradation from condensation. Any contact with air should be avoided. Keep away from acids, significant quantities of paper, straw, and nitro compounds. Keep out of reach of children. Do not use aluminium for transport or storage.

7.3 Specific End Uses

Please see the relevant Product Datasheet

Section 8: Exposure Controls

8.1 Control Parameters (Lime dust)

SCOEL recommendation (SCOEL/SUM/137 February 2008; see Section 16.6):

- Occupational Exposure Limit (OEL), 8 h TWA: 1 mg/m³ respirable dust of calcium dihydroxide
- Short-term exposure limit (STEL), 15 min: 4 mg/m³ respirable dust of calcium dihydroxide
- PNEC aqua = 490 μ g/l
- PNEC soil/groundwater = 1080 mg/l

8.2 Personal Protection Equipment:

Eye protection: Do not wear contact lenses. Wear tight fitting goggles with side shields, or wide vision full goggles in accordance with European standard EN166 (or equivalent). It is also advisable to have individual pocket eyewash.

Skin protection: Since calcium dihydroxide is classified as irritating to skin, dermal exposure has to be minimized as far as technically feasible. The use of protective gloves (nitrile), protective standard working clothes fully covering skin, full length trousers, long sleeved overalls, with close fittings at openings and shoes resistant to caustics and avoiding dust penetration are required to be worn. All clothing and gloves should be made to the relevant CE/UKCA Standards.

Inhalation protection: Calcium dihydroxide is acutely irritating to lungs. Half face masks are recommended to European standard EN149 (or equivalent).

8.4 Environmental Measures

Avoid releasing to the environment. Contain the spillage. 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

Appearance: Pastel/off-white coloured sand like dry powder containing fibres

Odour: none to earthy odour

pH: 12-13

Melting point: > 450 °C (Lime - study result, EU A.1 method)

Boiling point: not applicable (solid with a melting point > 450 °C)

Flashpoint: not applicable (solid with a melting point > 450 °C)

Explosive properties: non explosive (void of any chemical structures commonly associated with explosive properties)

Vapour pressure: not applicable (solid with a melting point > 450 °C)

Relative density: 1.5 to 2.2 Kg/L – will vary based on humidity, mix ratio, sand type and aeration of product

Solubility: (lime) 1844.9 mg/L (study results, EU A.6 method) – from powder form

Oxidising properties: N/A

Section 10: Stability and Reactivity

10.1 Reactivity: Reacts with water to form a solid mass.

10.2 Chemical Stability: Product is stable under normal conditions.

10.3 Conditions to avoid: Minimise exposure to air and moisture.

10.4 Materials to avoid: Calcium dihydroxide reacts exothermically with acids to form salts. Calcium dihydroxide reacts with aluminium and brass in the presence of moisture leading to the production of hydrogen. Avoid contact with acidic materials, oxidisers, aluminium, and brass.

$Ca(OH)_2 + 2\ Al + 6\ H_2O \rightarrow Ca[Al(OH)_4]_2 + 3\ H_2$

10.6 Hazardous decomposition products: None.

Further information: Calcium dihydroxide reacts with carbon dioxide to form calcium carbonate, which is a common material in nature.

Particle Characteristics: Particle size ranges from <63µm up to 5mm due to the nature of the product.

Section 11: Toxicological information

Acute toxicity:

- Calcium dihydroxide is not acutely toxic.
- Oral LD50 > 2000 mg/kg bw (OECD 425, rat)
- Dermal LD50 > 2500 mg/kg bw (OECD 402, rabbit)
- Inhalation no data available.
- Classification for acute toxicity is not warranted.

Excessive exposure may affect human health as follows:

Skin contact: Calcium dihydroxide is irritating to skin

Eye contact: Calcium dihydroxide entails a risk of serious damage to the eye

Inhalation/ingestion: From current data it is concluded that Ca(OH)2 is irritating to the respiratory tract.

Sensitisation: Calcium hydroxide is considered not to be a skin sensitiser, based on the nature of the effect (pH shift) and the essential requirement of calcium for human nutrition.

Long Term Toxic Effects: None Recognised

Section 12: Ecological information

12.1 Toxicity

12.1.1 Acute/Prolonged toxicity to fish

LC50 (96h) for freshwater fish: 50.6 mg/l
LC50 (96h) for marine water fish: 457 mg/l

12.1.2 Acute/Prolonged toxicity to aquatic invertebrates
EC50 (48h) for freshwater invertebrates: 49.1 mg/l
LC50 (96h) for marine water invertebrates: 158 mg/l

12.1.3 Acute/Prolonged toxicity to aquatic plants
EC50 (72h) for freshwater algae: 184.57 mg/l
NOEC (72h) for freshwater algae: 48 mg/l

12.1.4 Toxicity to micro-organisms e.g. bacteria
At high concentration, through the rise of temperature and pH, calcium dihydroxide is used for disinfection of sewage sludges.

12.1.5 Chronic toxicity to aquatic organisms

NOEC (14d) for marine water invertebrates: 32 mg/l

12.1.6 Toxicity to soil dwelling organisms

EC10/LC10 or NOEC for soil macroorganisms: 2000 mg/kg soil dw
EC10/LC10 or NOEC for soil microorganisms: 12000 mg/kg soil dw

12.1.7 Toxicity to terrestrial plants

NOEC (21d) for terrestrial plants: 1080 mg/kg

12.1.8 General effect

Acute pH-effect: Although this product is useful to correct water acidity, an excess of more than 1 g/l may be harmful to aquatic life. pH-value of > 12 will rapidly decrease as result of dilution and carbonation.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

Carbonation occurs when the product reacts with water and air. The product will carbonate and harden, after which it is minimally soluble as calcium carbonate. The product has low mobility in soils.

12.5 Results of PBT and vPvB assessment

No further relevant information available.

12.6 Other adverse effects

No other adverse effects identified.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Disposal of calcium dihydroxide should be in accordance with local and national legislation, including but not limited to, EWC code 20 01 15* alkalines. Processing, use or contamination of this product may change the waste management options due to its high pH.

Dispose of container and unused contents in accordance with applicable member state and local requirements. Waste mixture should not be disposed of by release to sewers. EWC code 17 09 03*, other construction and demolition wastes (including mixed wastes) containing hazardous substances.

The used packing is only meant for packing this product; it should not be reused for other purposes. After usage, empty the packing completely before disposal according to local and national guidance.

Section 14: Transport information

UN-Number: n/a

UN proper shipping name: n/a

Transport hazard classes: n/a

Packing group: n/a

Environmental hazards: n/a

Specific precautions for user: n/a

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: n/a

Calcium dihydroxide is not classified as hazardous for transport (ADR (Road), RID (Rail), IMDG / GGVSea (Sea).

Section 15: Regulatory information

Authorisations: Not required

Restrictions on use: None

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

National regulations: Water endangering class 1 (Germany)

Section 16: Other Information

The provided data is based on our latest knowledge but do not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

This SDS includes the relevant information needed to produce a COSHH; we cannot supply COSHH statements as this is a site-specific assessment which includes handing methods and identification of other relevant hazards on site.

For any further information please contact the manufacturer on 01208 79779: 7.30am to 5pm, Monday to Friday.

16.1 Document Control

Datasheet version and issue date is listed on the first page of this document. More modern versions of this document will supersede this SDS, with no exclusions.