

PRODUCT SAFETY DATA SHEET

HYDRATED LIME

Section 1

Identification of the Substance and Company

1.1 Product Name:- Hydrated Lime.

Other Names:- Calcium Hydroxide, Slaked Lime.

1.2 Address/Tel:-Lhoist UK Limited Hindlow, Buxton Derbyshire SK17 0EL

Tel: 00 44 (0)1298 768666

1.3 In an emergency:- Dial 999

For specialist advice (transport emergency)

Tel: 00 44 (0)1298 768664

Section 2

Composition/Information on Ingredients

Calcium Hydroxide Ca (OH) 2> 95%. Small quantities of calcium carbonate, silica and oxides of magnesium, aluminium and iron and other trace elements.

Hazardous Ingredient - calcium hydroxide.

R38, R41.See detail under section 15.

CAS No:- 1305-62-0 **EINECS No:-** 215-137-3

Section 3

Hazard Identification

Irritating to skin and eyes. Can cause burns in the presence of moisture. Risk of serious damage to eyes. It is advisable to ensure that eyewash facilities are available when hydrated lime is handled.

Section 4 First Aid Measures

4.1 Emergency first aid procedures

Skin – An irritant, may cause burns in presence of moisture. Wash affected area immediately with plenty of water for at least 20 minutes. Remove contaminated clothing.

Eyes – Irrigate **immediately** with water for at least 20 minutes. Causes painful irritation and may cause serious eye damage.

SEEK MEDICAL ATTENTION, SPEED IS ESSENTIAL.

Inhalation – Irrigate noses and throat with water for at least 20minutes. Irritating to the respiratory tract in high concentrations. Remove from exposure and keep warm and at rest. It is advisable to seek medical attention.

Ingestion – Unlikely to cause any reactions. Larger doses may irritate gastrointestinal tract. Do not induce vomiting. Wash mouth with water and drink copious quantities of water.

Seek medical advice if necessary.

Further medical treatment

No known delayed effects. Prolonged or repeated contact with skin may result in severe irritation or dermatitis.

Prolonged or repeated inhalation of high dust concentrations may cause ulceration and perforation of the nasal septum and pneumonitis.

Section 5

Fire Fighting Measures

Hydrated Lime is non-combustible and inhibits the spread of flame. No special fire fighting equipment is required. No extinguishing media or explosion hazard is identified.

Section 6

Accidental Release Measures

Steps to be taken in the event of spillage or release.

Contain the spillage. Keep the material dry if possible. Use vacuum suction unit, or shovel into bags. (Use protective clothing – see section 8) Cover area if possible to avoid unnecessary dust hazard. Avoid contamination of watercourses and drains.

Any spillage into watercourses must be alerted to the Environment Agency or other regulatory body.

Section 7

Handling Ventilation and Storage

7.1 Handling

Keep dust levels to a minimum. Avoid contact with skin and eyes. Avoid inhalation of high concentrations of dust. Use barrier cream if necessary.

7.2 Ventilation Requirements

Ventilation equipment should be used in buildings to ensure dust levels are kept below OES.

7.3 Storage

Store in a cool dry place free from draughts. Minimise contact with air and moisture. Bulk storage should be in purpose - designed silos.

Product in bags should be stored in dry, draught free buildings.

Section 8

Exposure Control/Personal Protection

- 8.1 Occupational exposure standard: 5 mg/m³ (8 hr TWA).
- 8.2 Handling systems should preferably be enclosed or suitable ventilation installed to maintain atmospheric dust below OES. All ventilation systems should be filtered before discharge to atmosphere.
- 8.3 If the atmospheric dust levels exceed the occupational exposure standard, wear suitable personal protective equipment.

Use approved dust respirators to EN 149 category FFP2, or air stream-helmet for heavy exposure.

Long sleeved overalls, close fitting at openings.

PSD1

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Website: www.lhoist.co.uk





Boots that resist dust penetration.

Rubber, leather, or fabric/composite gloves provide suitable hand protection.

Wide vision full goggles to BS 2092 grade 1 impact, with anti-mist for eye protection.

Section 9

Physical and Chemicals Properties

Form - Fine dry Powder
Colour - White or off white
Odour - Faint "Earthy" odour

pH – 12.4 (Aqueous solution approx. 2g/litre)

Solubility – 1.8 g/litre at 10⁰ C (in water)

Vapour Pressure – 0 at 20^o C Relative Density – 2.3

Melting (Decomposition) point – 580° C

Section 10 Stability and Reactivity

10.1 Stable up to 580 degrees C.(See section 10.3)

10.2 Materials to avoid:

Reacts vigorously with strong acids. Attacks aluminium, lead and brass in the presence of moisture.

10.3 Hazardous decomposition products:

Decomposes with loss of water at approximately 580 degrees C to form calcium oxide (Quicklime).

Section 11

Toxicological Information

Short term effects of over exposure:-

Skin Contact – Irritating to skin in the presence of moisture.

Eye Contact – Can be a very painful irritant. Risk of severe and permanent damage to eyes.

Inhalation – Irritant to the respiratory tract in high concentrations of dust.

Ingestion – May cause irritation of the gastrointestinal tract.

Long Term effects of over exposure:-

Prolonged and repeated skin contact may cause dermatitis.

Section 12

Ecological Information

Ecotoxicity

The product is considered to be non toxic. LC50 aquatic toxicity values are > 100 mg/l. High concentrations (>100mg/l) may have a sterilising effect in sewage works. Product is extensively used in treatment of acid wastes and sewage sludge's.

Mobility

Sparingly soluble in water as hydroxide to form alkaline solution. Low mobility in most ground conditions.

Persistence and degradation

Non bio-degradable – reacts with atmospheric and dissolved carbon dioxide to form calcium carbonate (Chalk).

Bioaccumulative Potential

The product has no potential to accumulate in the food chain.

Section 13

Disposal Considerations

Hydrated lime can normally be disposed of only at licensed waste facilities. Contaminated packaging can be incinerated. Disposal should be in accordance with current local and national legislation.

Section 14

Transport Considerations

Not classified as hazardous for transport.

IMDG (Sea) Not Classified ADR (Road) Not Classified RID (Rail) Not Classified IATA (Air) Not Classified

Section 15

Regulatory Information

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. Statutory Instrument 2002 No. 1689.

Classification for Supply:- Irritant. Classification for Conveyance:- None.

Risk Phrases

R38 - Irritating to skin.

R 41 - Risk of serious damage to eyes.

Safety Phrases

S2 - Keep out of the reach of children.

S22 - Do not breathe dust.

 ${\bf S26}$ - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 – Wear suitable gloves.

S39 - Wear eye/face protection.

Occupational Exposure Limits 2002 - HSE Guidance Note EH40/02. OES 5 $\rm mg/m^3$ (8 hour TWA).

Data sheet prepared in accordance with Directive 2001/58/EC.

Section 16

Other Information

Revised February 08 supersedes April 04.

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