

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

HYDRATED LIME (CALCIUM HYDROXIDE)

Version 6.0

Print Date 2012/08/28

Revision date / valid from 2012/08/28

MSDS code: MLIM100

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : HYDRATED LIME (CALCIUM HYDROXIDE)
 Substance name : Calcium dihydroxide
 CAS-No. : 1305-62-0
 EC-No. : 215-137-3

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.
 Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK & Ireland
 Albion House, Rawdon Park
 GB LS19 7XX Leeds Yeadon
 Telephone : +44 (0) 113 3879 200
 Telefax : +44 (0) 113 3879 280
 E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
 +44 (0) 1865 407333 (N.C.E.C. Culham)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Skin irritation	Category 2	---	H315
Serious eye damage	Category 1	---	H318

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Specific target organ toxicity - single exposure	Category 3	---	H335
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For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Irritant (Xi)	R37/38, R41

For the full text of the R-phrases mentioned in this Section, see Section 16.

Most important adverse effects

Human Health	:	See section 11 for toxicological information.
Physical and chemical hazards	:	See section 9 for physicochemical information.
Potential environmental effects	:	See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols	:	 
Signal word	:	Danger
Hazard statements	:	H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation.
Precautionary statements	:	
General	:	P102 Keep out of reach of children.
Prevention	:	P261 Avoid breathing dust. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response	:	P305 IF IN EYES: P351 Rinse cautiously with water for several minutes. P310 Immediately call a POISON CENTER or doctor/ physician. P302 + P352 IF ON SKIN: Wash with plenty of soap and

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	P304 + P340	water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Disposal	: P501	Dispose of contents/ container in accordance with the local regulations.

Hazardous components which must be listed on the label:

- Calcium dihydroxide

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.
Harmful effects to aquatic organisms due to pH-shift.

Section 3: Composition/information on ingredients

3.1. Substances

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
Calcium dihydroxide				
CAS-No. : 1305-62-0	<= 100	Skin Irrit.2	H315	Xi; R37/38-R41
EC-No. : 215-137-3		Eye Dam.1	H318	
Registration : 01-2119475151-45-xxxx		STOT SE3	H335	

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First aid measures

4.1. Description of first aid measures

General advice	: Take off all contaminated clothing immediately.
If inhaled	: Move to fresh air. If unconscious place in recovery position and seek medical advice.
In case of skin contact	: Wash off immediately with plenty of water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Remove contact lenses. Consult a physician.

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If swallowed : Clean mouth with water and drink afterwards plenty of water.
Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms : See Section 11 for more detailed information on health effects and symptoms.

Effects : See Section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : The product itself does not burn.

5.3. Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment.
Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : For personal protection see section 8.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Use mechanical handling equipment. Avoid dust formation. This material and its container must be disposed of as hazardous waste.

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6.4. Reference to other sections

See Section 1 for emergency contact information.
 See Section 8 for information on personal protective equipment.
 See Section 13 for waste treatment information.

Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures : Take off all contaminated clothing immediately. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep tightly closed in a dry and cool place. Product is hygroscopic. Keep away from acids.

7.3. Specific end use(s)

Specific use(s) : No information available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Predicted No Effect Concentration (PNEC)

Water : 0.49 mg/l

Soil : 1080 mg/l

8.2. Exposure controls

Appropriate engineering controls

Provide for good ventilation. Avoid dusting. Use mechanical ventilation at dusting.

Personal protective equipment

Respiratory protection

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
 Recommended Filter type:
 Particle filter:P1

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Hand protection

Advice : Protective gloves should be replaced at first signs of wear.
Choose right chemical protection as:

Material : Nitrile rubber
Break through time : > 480 min

Eye protection

Advice : Safety glasses

Skin and body protection

Advice : Wear suitable protective clothing.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	: powder
Colour	: white
Odour	: odourless
Odour Threshold	: no data available
pH	: 12 - 13 saturated aqueous solution
Melting point/range	: > 450 °C
Boiling point	: no data available
Flash point	: no data available
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapor density	: no data available

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Density	:	2.4 g/cm ³
Water solubility	:	ca. 1.85 g/l
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	no data available
Explosivity	:	no data available
Oxidizing properties	:	not oxidising

9.2. Other information

No further information available.

Section 10: Stability and reactivity

10.1. Reactivity

Advice : Stable under recommended storage conditions.

10.2. Chemical stability

Advice : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Reacts exothermic with acids.

10.4. Conditions to avoid

Conditions to avoid : Product is hygroscopic.

10.5. Incompatible materials

Materials to avoid : Keep away from strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products : No information available.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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Oral

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Inhalation

Inhalation may cause pain and cough.

Irritation

Skin

Result : Skin contact may cause irritation. Prolonged and repeated exposure may cause pain and redness.

Eyes

Result : May cause strong pain.
Risk for permanent damage.

Component:	Calcium dihydroxide	CAS-No.
		1305-62-0

Acute toxicity

Oral

LD50 Oral : > 2000 mg/kg (rat) (OECD Test Guideline 425)

Dermal

LD50 Dermal : > 2500 mg/kg (rabbit) (OECD Test Guideline 402)

Section 12: Ecological information

12.1. Toxicity

Component:	Calcium dihydroxide	CAS-No.
		1305-62-0

Acute toxicity

Fish

LC50 : 50.6 mg/l (Freshwater fish; 96 h)

LC50 : 457 mg/l (Sea fish; 96 h)

HYDRATED LIME (CALCIUM HYDROXIDE)**Toxicity to daphnia and other aquatic invertebrates**

EC50	:	49.1 mg/l (Freshwater invertebrates; 48 h)
LC50	:	158 mg/l (Freshwater invertebrates; 96 h)

12.2. Persistence and degradability**Persistence and degradability****Biodegradability**

Result	:	The methods for determining biodegradability are not applicable to inorganic substances.
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12.3. Bioaccumulative potential**Bioaccumulation**

Result	:	No information available.
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12.4. Mobility in soil**Mobility**

Result	:	Because the product is practically insoluble in water the separation will be made by filtration or sedimentation.
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12.5. Results of PBT and vPvB assessment**Results of PBT and vPvB assessment**

Result	:	This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
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12.6. Other adverse effects**Additional ecological information**

Result	:	Harmful effects to aquatic organisms due to pH-shift. Do not flush into surface water or sanitary sewer system.
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Section 13: Disposal considerations

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13.1. Waste treatment methods

- Product : Eliminate waste in conditions authorized by the regulations. Store waste in containers provided for this purpose. Do not dump in drains, water sheets or the ground.
- Contaminated packaging : In accordance with local and national regulations. Dispose of as unused product.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

Section 15: Regulatory information

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

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15.2. Chemical Safety Assessment

no data available

Section 16: Other information

Full text of R-phrases referred to under sections 2 and 3.

R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.

Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

|| Indicates updated section.

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text