

Limestone & Dolomite

 Issue Number: 20
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1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Identification of the substance or preparation

This datasheet applies to the following products:

1.1.1 *Limestone*: Limestone Aggregates, Granules and Powders

Tradenames: Superlon, Longcal and Longcliffe

Chemical Description: Natural Calcium Carbonate

1.1.2 *Dolomite*: Magnesium Limestone Aggregates, Granules and Powders

Tradenames: Golconda

Chemical Description: Natural Calcium Magnesium Carbonate

1.2 Use of the substance/preparation

Powders and granules typically used as inert filler material in applications such as plastics and rubber and building products. Also used in soil stabilization, animal and pet feeds, and glass manufacture. Aggregates used in concrete, construction and landscaping.

1.3 Company identification

Longcliffe Quarries Ltd

Brassington, Matlock, Derbyshire, DE4 4BZ

Telephone : +44 (0)1629 540284 Fax :+44 (0)1629 540569

E-mail: sales@longcliffe.co.uk

1.4 Emergency telephone

Emergency telephone number available during office hours: 01629 540284

Emergency telephone number available outside office hours: No

2. HAZARDS IDENTIFICATION

The products contain no substances classified as being hazardous to health according to EC directive 1999/45/EC.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical composition

Limestone: Calcium Carbonate CaCO_3 > 98%. Product is obtained from natural minerals; purity level may vary according to their origins.

Dolomite: Calcium Magnesium Carbonate $\text{CaMg}(\text{CO}_3)_2$ > 98%. Product is obtained from natural minerals; purity level may vary according to their origins.

Both materials may contain trace quantities of other minerals, metal salts, halides.

3.1.1 Limestone Composition

Substance	Calcium Carbonate CaCO_3
Trivial Name	Limestone
CAS Number	1317-65-3
EINECS Number	215-279-6

3.1.2 Dolomite Composition

Substance	Calcium Magnesium Carbonate $\text{CaMg}(\text{CO}_3)_2$
Trivial Name	Dolomite
CAS Number	16389-88-1
EINECS Number	240-440-2

3.2 Components presenting a health hazard

The products contain no components classified as dangerous according to EC directive 1999/45/EC.

4. FIRST AID MEASURES

When contacting a physician, take this safety datasheet with you.

4.1 After significant accidental inhalation

Remove from exposure into fresh air. Dust in throat and nasal passages should clear

spontaneously. In case of serious exposure seek medical advice.

4.2 After contact with eyes

Do not rub eyes. Remove any contact lenses and open the eyelid(s) widely to flush eye(s) immediately by thoroughly rinsing with clean water. In case of irritation seek medical advice.

4.3 After skin contact

Wash skin with plenty of soap and water.

4.4 After significant accidental ingestion

Wash out mouth with clean water. In case of discomfort, seek medical advice.

5. FIRE - FIGHTING MEASURES

Limestone and Dolomite pose no fire-related hazards.

5.1 Flashpoint and method

Limestone and Dolomite are non-combustible and non explosive and do not facilitate nor support the combustion of other materials.

5.2 Extinguishing media

Carbon dioxide, dry powder, foam, or water.

5.3 Fire fighting equipment

No need for specialist protective equipment for fire fighters.

5.4 Combustion products

Above 825°C Carbon dioxide (CO₂) evolution.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal protective measures

Wear protective equipment as described under Heading 8 and follow the advice for safe handling and use given under Heading 7. Emergency procedures are not required.

6.2 Environment protection measures

No special precautions required but avoid whenever possible washing Limestone or Dolomite powders down sewage and drainage systems or into bodies of water (e.g. streams).

6.3 Methods for cleaning up

Recover the spillage in a dry state if possible. Try to minimise airborne dispersion. Sweep and shovel material into suitable containers for disposal before disposal as described under Heading 13.

7. HANDLING AND STORAGE

Normal precautions for the handling of chemicals should be observed.

7.1 Handling

Follow the recommendations as given under Heading 8. Carrying limestone or dolomite bags may cause sprains and strains to the back, arms, shoulders and legs. Handle with care and use appropriate control measures.

For limestone or dolomite powders used in open ended mixers:

- Keep the height of the fall low. Start the mixing smoothly. Do not compress empty bags (dust expulsion) except when contained in another clean bag.
- To clean up limestone or dolomite powder, see heading 6.3.

7.2 Storage

Store in a dry, well ventilated area. Keep containers tightly closed. Do not store near acids. Bagged product should be stacked in a stable manner.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values

Workplace exposure Limits (WEL). 8hr Time Weighted Average (TWA) values:

Dust, total inhalable :

WEL 10mg/m³ 8h TWA

Dust, respirable :

WEL 4mg/m³ 8h TWA

8.2 Exposure controls

8.2.1 Occupational exposure controls

(a) *Respiratory protection:* Dust masks should be used when handling powder or granular material. Suitable respiratory protection should be worn to

ensure that personal exposure is less than the WEL.

(b) *Hand protection:* The use of gloves is recommended for handling aggregates, granules and powders.

(c) *Eye protection:* Protection is recommended. Wear approved glasses or safety goggles according to EN 166 to prevent contact with eyes.

(d) *Skin protection:* Long-sleeved protective clothing is recommended when working with powders and granules.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

	Limestone	Dolomite
Physical form	Powder/granules/chippings	Powder/granules/chippings
Colour	Grey white/white	Buff brown
Odour	None	None

9.1 Physical data

	Limestone	Dolomite
pH (saturated solution)	8.5 – 9.5	8.5 – 9.5
Boiling Range/Point	Not applicable	Not applicable
Melting Point	1339°C	1339°C
Decomposition Temperature	above 825 °C	above 825 °C
Flash Point (PMCC)	Not applicable	Not applicable
Auto-flammability	Not auto-flammable	Not auto-flammable
Flammability	Non-flammable	Non-flammable
Explosive Properties	Stable under normal conditions	Stable under normal conditions
Vapour Pressure	Negligible vapour pressure at ambient conditions	Negligible vapour pressure at ambient conditions
Relative Density	2.6 – 2.8 g/cm ³	2.6 – 2.8 g/cm ³
Solubility in Water	0.014 g/l (20 °C) 0.018 g/l (75 °C)	0.014 g/l (20 °C) 0.018 g/l (75 °C)

10. STABILITY AND REACTIVITY

Stable under normal conditions.

10.1 Conditions to avoid

No specific recommendations.

10.2 Materials to avoid

Acids. Reacts to form Carbon dioxide (CO₂).

10.3 Hazardous Decomposition Products

Carbon Dioxide (CO₂) – oxygen displacement

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	LD50/oral/rat = >5000mg/kg. Not classified as harmful if swallowed
Local Effects	Mild irritation of eyes
Chronic Toxicity – Carcogenic Mutagenic	No none effects

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Limestone or dolomite are natural minerals of the earth and in a dissolved state, the substance(s) are natural and indispensable components of natural waters. Therefore, unfavourable effects to the environment may be excluded.

Concentrated suspensions of limestone or dolomite in natural waters may have an unfavourable effect on water organisms (disturbance of the microflora and fauna in the sediment and the subsequent existence of higher water organisms).

12.2 Mobility

Limestone or dolomite are not volatile but might become airborne during handling operations.

12.3 Persistence and degradability

Calcium carbonate or Calcium magnesium carbonate cannot biodegrade.

12.4 Bioaccumulative potential/Results of PBT assessment/Other adverse effects

No data currently available.

13. DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Dispose of in accordance with all applicable local and national regulations.

13.2 Packaging

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

See Heading 8 for general handling precautions.

Classification	Not classified as hazardous for transport
Road (ADR)	Not restricted
Rail (RID)	Not restricted
Sea (IMDG)	Not restricted
Air (ICO/IATA)	Not restricted

15. REGULATORY INFORMATION

15.1 Classification and labelling of limestone according to 1999/45/EC

Not classified as hazardous for supply in the meaning of EU Directives.

R-phrases(s): None S-phrases(s): None

15.2 National legislation/requirements

- Health and Safety at Work etc Act 1974
- HSE Guidance Note EH40 (Workplace Exposure Limits)
- COSHH regulations 2002
- Environmental protection act 1990
- Manual Handling Operations Regulations

16. OTHER INFORMATION

16.1 Reference listings

TSCA Listing	TSCA Inventory listed under CAS No. 1317-65-3 (Limestone) and CAS No. 16389-88-1 (Dolomite)
FDA List Number	Calcium carbonate/Limestone and Calcium magnesium carbonate/Dolomite are GRAS
DSL/NDSL Listing	Limestone and Dolomite are exempt from the PDSL (naturally occurring substance)
AICS Listing	ACQIN edition 92 listed under CAS No. 1317-65-3 (Limestone) and CAS No. 16389-88-1 (Dolomite)
MITI Number	I-122-122

16.2 Abbreviations

- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transport Association
- ADR/RID: Agreement on the transport of dangerous goods by road/Regulations on the international transport of dangerous goods by rail
- LD50 Lethal Dose where 50% of the test animals dies.

16.3 Disclaimer

The information provided by this Safety Data Sheet is, to the best of the Company's knowledge and belief, correct. The contents of the document are designed to give guidance on the safe storage, transportation, handling, use, processing, disposal and release of the material specified. It may not necessarily be valid for the material if it is used in conjunction with any other materials not specified in the text. In such cases, or where doubts occur, further information should be sought from the relevant sources.

Safety Data Sheet prepared according to Annex II of the REACH Regulation (EC) 1907/2006 of the European Parliament.