

PRODUCT NAME: Calcium Carbonate & Calcium Magnesium Carbonate

Safety Data Sheet No: 5025EC

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1. Identification of the Substances and Details of the Company

Product Description: Limestone and Dolomite

Date Prepared:

Suppliers Name and Address:

Date Reviewed: July 2013

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2. Hazards Identification

Statement of Hazards: The products contain no substances classified as being hazardous to health according to EC directive 1999/45/EC.).

3. Composition/Information on Ingredients

PRODUCT IDENTIFICATION:

Chemical Name: Calcium Carbonate CaCO_3
Calcium Magnesium Carbonate $\text{CaMg}(\text{CO}_3)_2$

HMIS Rating: Health – 2, Flammability - 0, Reactivity - 0, Protective Equipment – See Section 8

EXPOSURE LIMITS

| <u>CHEMICAL IDENTITY</u> | <u>CAS No.</u> | |
|-----------------------------|----------------|--|
| Calcium Carbonate | 1317-65-3 | The products contain no components classified as dangerous according to EC directive 1999/45/EC. |
| Calcium Magnesium Carbonate | 16389-88-1 | The products contain no components classified as dangerous according to EC directive 1999/45/EC. |

4. First Aid Measures

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

- Skin:** Wash skin with plenty of soap and water.
- Inhalation:** Remove from exposure into fresh air. Dust in throat and nasal passages should clear spontaneously. In case of serious exposure seek medical advice.
- 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.
- 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.

- Flash Point (*Method Used*):** Not Applicable. Not Combustible.
- Auto ignition Temperature:** Not Applicable
- Sensitivity to Mechanical Impact:** None
- Fire Fighting Extinguishing Media:** Carbon dioxide, dry powder, foam, or water.
- Fire Fighting Equipment:** No need for specialist protective equipment for fire fighters.
- Fire and Explosion Hazards:** None
- Hazardous Decomposition Products:** Above 825oC Carbon dioxide (CO2) evolution.
- Emergency Response Guidebook Information:** No ERG # indicated.

6. Accidental Release Measures

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- Personal Protection:** 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.
- 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.
- Environmental Precautions:** 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).

7. Handling and Storage

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Normal precautions for the handling of chemicals should be observed.

Precautions:

Storage Information:

Good personal hygiene practices can reduce potential exposure. Wash with soap and water following any contact with this product, as well as before breaks and meals. Shower and change clothing at end of work shift. If clothing becomes contaminated, remove and launder or dry-clean before reuse.

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

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

Skin Protection:

The use of gloves is recommended for handling aggregates, granules and powders.

Long-sleeved protective clothing is recommended when working with powders and granules.

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.

Additional Information:

Eye protection is recommended. Wear approved glasses or Safety goggles according to EN 166 to prevent contact with eyes.

9. Physical and Chemical Properties

General information

| | Limestone | Dolomite |
|---------------|---------------------------|---------------------------|
| Physical form | Powder/granules/chippings | Powder/granules/chippings |

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| | | |
|---------------------------|--|--|
| Colour | Grey white/white | Buff brown |
| Odour | None | None |
| pH (saturated solution) | 8.5 – 9.5 | 8.5 – 9.5 |
| Boiling Range/Point | Not applicable | Not applicable |
| Melting Point | 1339oC | 1339oC |
| Decomposition Temperature | above 825 oC | above 825 oC |
| 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 oC) 0.018 g/l (75 oC) | 0.014 g/l (20 oC) 0.018 g/l (75 oC) |

10. Stability and Reactivity

Stability: Stable under normal conditions

Conditions to Avoid: Materials to avoid - Acids. Reacts to form Carbon dioxide (CO₂).

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

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

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environment may be excluded.

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

| | |
|---|--|
| Mobility: | Limestone or dolomite are not volatile but might become airborne during handling operations. |
| Persistence and degradability: | Calcium carbonate or Calcium magnesium carbonate cannot biodegrade. |
| Bioaccumulative potential/Results of PBT assessment/Other adverse effects: | No data currently available. |

13. Disposal Considerations

Waste Disposal Method: Disposal must be arranged in accordance with local and national regulations.

14. Transport information

Not classified as hazardous for transport

| | |
|------------------------------------|-----------------|
| Road Transport ADR/RID: | Not restricted |
| Inland Navigation AND/ADNR: | Not restricted |
| Maritime Transport IMDG: | Not restricted |
| Air Transport ICAO/IATA: | Not restricted. |

15. Regulatory Information

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

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

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Manual Handling Operations Regulations

16. Other Information

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 | ACOIN edition 92 listed under CAS No. 1317-65-3 (Limestone) and CAS No. 16389-88-1 (Dolomite) |
| MITI Number | 1-122-122 |

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