

Limestone

IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

IDENTIFICATION OF THE SUBSTANCE OR PREPARATION.

Limestone : Limestone powders, grits and aggregates

Chemical Description : Natural Calcium Carbonate

Substance	Calcium Carbonate CaCO ₃
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CAS Number	1317-65-3
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EINECS Number	215-279-6
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USE OF THE SUBSTANCE

Powders and granules are typically used as inert filler material in applications such as glass, rubber, chemical, ceramic, pharmaceutical and animal feeds. Various aggregates are available.

HAZARDS IDENTIFICATION

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

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Composition

Limestone : Calcium Carbonate CaCO₃ > 98%. Product is obtained from natural minerals; purity level may vary according to their origins.

FIRST AID MEASURES

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.

After contact with eyes:

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

After skin contact:

Wash skin with plenty of soap and water.

After significant accidental ingestion:

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

FIRE—FIGHTING MEASURES

Limestone is not a fire-related hazards

Flashpoint and method:

Limestone is a non-combustible and non explosive and does not facilitate or support the combustion of other materials.

Extinguishing:

Carbon dioxide, dry powder, foam or water.

Fire fighting equipment:

No need for specialist protective equipment for fire fighters.

Combustion products:

Above 825°C Carbon Dioxide (CO₂) evolution.

ACCIDENTAL RELEASE MEASURES

Personal protective measures:

Wear protective equipment as described under *EXPOSURE CONTROLS AND PERSONAL PROTECTION* header and follow the advice for safe handling and use under the *HANDLING AND STORAGE* header. Emergency procedures are not required.

Environment protection measures:

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

Methods for cleaning up:

Recover the spillage in a dry state if possible. Try to minimize airborne dispersion. Sweep and shovel material into suitable containers for disposal or use industrial Hoover system.

HANDLING AND STORAGE

Carrying limestone bags may cause sprains and strains to the back, arms, shoulders and legs. Handle with care and use appropriate control measures.

Keep the height of fall low. Start the mixing smoothly. Do not compress empty bags except when contained in another clean bag.

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

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

Respiratory protection:

Should be used when handling granular or powder material. Suitable respiratory protection should be worn to ensure that personal exposure is less than the workplace exposure limit.

Hand protection :

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

Eye protection :

Protection is recommended. Wear approved glasses or safety goggles according to EN 166 to prevent contact with eyes.

Skin protection :

Long sleeved protective clothing is recommended when working with powders or grits.

PHYSICAL AND CHEMICAL PROPERTIES

GENERAL AND PHYSICAL DATA

Physical form	Powder/Grit		
Colour	Grey white/White		
Odour	None	Substance	Calcium Carbonate CaCO ₃
pH (saturated solution)	8.5—9.5	CAS Number	
Boiling range/point	Not applicable	EINECS Number	
Melting point	1339°C		
Decomposition temp	Above 825°C	Acute Toxicity	Not classified as harmful if
Flammability	Non-flammable	Local Effects	Mild irritation of eyes
Explosive Properties	Stable under normal conditions	Chronic Toxicity— Carcogenic	No known effects
Vapour pressure	Negligible vapour pressure		
Relative density	2.6—2.8 g/cm ³		
Solubility in water	0.014 g/l (20°C) 0.018 g/l (75°C)		

STABILITY AND REACTIVITY

Stable under normal conditions.

Conditions to avoid

No specific recommendations.

Materials to avoid

Acids. Reacts to form Carbon Dioxide (CO₂)

Hazardous Decomposition Products

Carbon Dioxide—Oxygen displacement

ECOLOGICAL INFORMATION

Ecotoxicity

Limestone is a natural mineral of the earth and in a dissolved state, the substances are natural and indispensable components of natural waters. Therefore, unfavorable effects to the environment may be excluded.

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

Mobility

Limestone is not volatile but might become airborne during handling operations.

Persistence and degradability

Calcium carbonate cannot biodegrade.

DISPOSAL CONSIDERATIONS

Product disposal

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

Packaging

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

TRANSPORT INFORMATION

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

REGULATORY INFORMATION

Classification and labelling of limestone according to 199/45/EC

Not classified as hazardous for supply in the accordance of EU directives.

National legislation/requirements

- Health and Safety at Work Act 1974
- HSE Guidance Note EH40 (Workplace Exposure Limits)
- COSHH regulations 2002
- Environmental Protection Act 1990
- Manual Handling Operations Regulations
- Exempt from REACH regulations