

SAFETY DATA (MSDS)



Longfloor Binder / CEM1 50/50 Bulk Mix

(Prepared in accordance with Annex II of the REACH Regulation EC 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010)

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

Substance Name	Longfloor Binder / CEMI 50/50 Bulk Mix
Synonyms	Longfloor
Chemical Name and Formula	50% Longfloor Binder Calcium Carbonate – CaCO_3 >95% & selected substances 50% Portland Cement Clinker to BS EN197-1 – CEMI 52.5N
Trade Name	Longfloor Binder / CEMI 50/50 Bulk Mix
CAS N°	1317-65-3, 126-30-7 & 65997-15-1
EINECS N°	215-279-6, 204-781-0 & 266-43-4
Reach Registration Number	01-2119480 (additive only, Limestone and cement clinker are REACH exempt.)
Declaration of Performance	CEMI No. 0086-CPR523352

1.2 Use of the substance

Longfloor binder is used in industrial installations to manufacture / formulate a flowing mortar type mixture used in building and construction work as a screed material. This product has pre blended Longfloor binder with an EN197-1 common cement to facilitate ease of production in volumetric vehicles for example. It is then blended with a 0-4mm sand complying with BS EN 12620 and water to produce the flowing mortar.

1.3 Company identification

Name	Longcliffe Quarries Ltd
Address:	Brassington Matlock Derbyshire DE4 4HN
Phone:	+44 (0)1629 540284

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Name Lafarge Caudon Ltd.
Address: Bardon Hall
Copt Oak, Markfield
Leicestershire
LE67 9PJ

E-mail of competent person responsible for SDS in the MS or in the EU:
sales@longcliffe.co.uk

1.4 Emergency telephone

UK/European Emergency N° 999/112
Longcliffe Transport Emergency Contact N° +44 (0)1629 540284
Refer to Hospital Accident and Emergency Department

2. Hazards identification

2.1 Classification of the Substance

When the Longfloor / CEMI bulk mix is mixed with water or the material becomes damp, a strong alkaline solution is produced

2.1.1 Classification according to Regulation (EC) 1272/2008

According to Regulation (EC) No 1272/2008 [CLP]

Eye Dam./Irrit. 1
Skin – Irritant
May cause respiratory irritation

2.1.2 Classification according to Directive 67/548/EEC

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards: Risk of serious damage to eyes.

Frequent inhalation over a prolonged period of time increases the risk of lung disease

Skin – may have an irritating effect on moist skin.

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2.2 Label elements

Globally Harmonized System, EU (GHS)



Pictogram:

Signal Word: Danger

Hazard Statement: H314 Causes serious skin damage.

H318 Causes serious eye damage.

Precautionary Statements (Prevention): P280 Wear gloves/eye/face protection.

Precautionary Statements (Response): P302 +305 + P332 +P333 P351 + P338 IF IN EYES OR ON SKIN: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician.

2.2.1 Labelling according to Regulation (EC) 1272/2008

Signal word:	No signal word
Hazard pictogram:	No pictogram
Hazard statements:	None
Precautionary statements:	None

2.2.2 Labelling according to Directive 67/548/EEC



Hazard symbol(s) Xi Irritant.

R-phrases) R37/38 Irritating to respiratory system and skin

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact

S-phrases) S39 Wear eye/face protection. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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Indication of danger:	None
Risk phrases:	Not Applicable
Safety phrases:	S22: Do not breathe dust S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S36: Wear suitable protective clothing S37: Wear suitable gloves S39: Wear eye/face protection

2.3 Other hazards

None.

3. Composition / information on ingredients

3.1 Longfloor Composition

Main constituent	Name: Calcium Carbonate CAS: 1317-65-3 EINECS: 215-279-6
Impurities	No impurities relevant for classification and labelling
Additive (> than 1% by weight)	EC Number 204-781-0 CAS: 126-30-7

Longfloor also contains other complex non-hazardous compounds which are all less than 1% by weight

3.1.2 CEMI Composition

Common cement types according to EN197-1 standard. The principle constituents of these cements are calcium silicates, aluminates, ferro-aluminates and sulphates. Small amounts of alkalis, lime, magnesia and chlorides are also present along with trace amounts of chromium compounds.

Main constituent	Name: Portland Cement Clinker EINACS: 266-043-4 CAS: 65997-15-1
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4. First-aid measures

4.1 General advice

Following Eye Contact	Do not rub eyes. Remove any contact lenses and flush eye(s) immediately by thoroughly rinsing with clean water. In case of irritation seek medical advice.
Following Inhalation	Bring to fresh air, dust in throat and nasal passages should clear. In case of serious exposure seek medical advice.
Following Ingestion	Wash out mouth with clean water. In case of discomfort, seek medical advice.
Following Skin Contact	Wash off with plenty of water.

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5. Fire-fighting measures

5.1 Suitable extinguishing media

The product is not flammable and not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. E.g. Carbon dioxide, dry powder, foam, or water.

5.2 Fire-fighting equipment

No need for specialist protective equipment for fire fighters.

5.3 Combustion products

Above 825°C Carbon dioxide (CO₂) evolution.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For Non-emergency personnel

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 Environmental precautions

Avoid release into sewerage system and into drainage systems or bodies of water (e.g. streams)

6.3 Methods and material for containment and cleaning up

Recover the spillage in a dry state if possible

Avoid dust formation.

Avoid inhalation and contact with skin.

Sweep and shovel material into suitable containers for disposal before disposal as described under Heading 13.

6.4 Reference to other sections

For more information on exposure controls/personal protection or disposal considerations, please check section 8 and 13 and the Appendix of this safety data sheet.

7. Handling and storage

7.1 Bulk storage to be in a purpose built silo or supplied on one tonne bulk bags.

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

For 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 powder, see heading 6.3.

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7.2 Conditions for safe storage, including any incompatibilities

Bulk material should be stored in silos that are waterproof, dry with internal condensation minimised, clean and protected from the environment.

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.

7.3 Specific end use(s)

Material should be used within six months of delivery date.

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 Appropriate engineering controls

Local mechanical exhaust ventilation.

8.2.2 Individual protection measures, such as personal protective equipment

8.2.2.1 Eye/face protection. Protection is recommended. Wear approved glasses or safety goggles according to EN 166 to prevent contact with eyes.

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

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

8.2.2.4 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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Longfloor / CEMI 50/50 Bulk
Physical form	Powder/granules/chippings
Colour	Grey white/white
Odour	Odourless
pH (saturated solution)	11-13.5
Boiling Range/Point	Above 250°C
Melting Point	Above 825°C
Decomposition Temperature	Above 825°C

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Flash Point (PMCC)	Not applicable
Auto-flammability	Not auto-flammable
Flammability	Non-flammable
Explosive Properties	Stable under normal conditions
Vapour Pressure	Negligible vapour pressure at ambient conditions
Relative Density	2.7 – 3.0 g/cm ³
Solubility in Water	0.1 g/l (20°C)

10. Stability and reactivity

10.1 Reactivity

Acids. Limestone (calcium carbonate) reacts to form carbon dioxide (CO₂).

When mixed with water, will harden into a stable mass that is not reactive to normal environments

10.2 Chemical Stability

Under normal conditions of use and storage, Longfloor Bulk Mix is stable.

10.3 Possibility of hazardous reactions

Limestone (calcium carbonate) reacts with acids and acidic salts to generate gaseous carbon dioxide with effervescence (bubbling). The reaction with concentrated solutions of acids is rapid and exothermic. The effervescence can create extensive foaming. Ignites on contact with fluorine. Uncontrolled use of aluminium powder should be avoided when the product is wet as hydrogen is produced.

10.4 Incompatible Materials

Incompatible with acids, alum, ammonium salts, fluorine, magnesium, aluminium

10.5 Hazardous Decomposition Products

Carbon Dioxide (CO₂) – oxygen displacement.

11. Toxicological information

Acute Toxicity: LD50/oral/rat = >5000mg/kg. May irritate the throat and respiratory tract.

Local Effects: Mild irritation of eyes

Chronic Toxicity –Carcogenic Mutagenic: No known effects

Dermal Toxicity: Limit test, rabbit, 24 hours contact – no lethality

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12. Ecological information

12.1 Toxicity

Limestone is a natural mineral 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 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 Persistence and Degradability

Calcium carbonate & cement cannot be biodegrade.

12.3 Bio accumulative potential

Calcium carbonate & cement is not a candidate for bioaccumulation in aquatic species.

12.4 Mobility

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

12.5 Results of PBT and vPvB assessment

Not relevant for inorganic substances According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfil the criteria for PBT (Persistent/bio accumulative/toxic) and vPvB (very persistent/very bio accumulative). Self-classification.

12.6 Other adverse effects

No other adverse effects are identified

13. Disposal considerations

Dispose of substance in suitable containers in accordance with local, regional, national or international regulations. Do not dispose in waterways.

14. Transport information

Calcium carbonate and cement is not classified as hazardous for transport ADR (Road), RID (Rail), IMDG/GGVSea (Sea), ICAO/IATA (Air).

14.1 UN No	Not applicable
14.2 UN Proper Shipping Name	Not applicable
14.3 Transport Hazard classes	Not applicable
14.4 Packing Group	Not applicable

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14.5 Environmental hazards Not applicable

14.6 Special precautions for user Not applicable

14.7 Transport in bulk Not applicable

15. Regulatory information

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

Authorisations:	Not required
Restrictions on use:	None
Other EU Regulations:	Calcium carbonate is not a SEVESO substance, not an ozone-depleting substance and not a persistent organic pollutant.
National regulations:	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

16. Other information

This safety data sheet is fully revised according to the CLP and REACH regulations. This safety data sheet supersedes all previous issues. Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship.

16.1 Abbreviations

EC50:	median effective concentration
LC50:	median lethal concentration
LD50:	median lethal dose
NOEC:	no observable effect concentration
OEL:	occupational exposure limit
PBT:	persistent, bio accumulative, toxic chemical
PNEC:	predicted no-effect concentration
SCOEL:	Scientific Committee on occupational exposure limits
STEL:	short-term exposure limit
TWA:	time weighted average
vPvB:	very persistent, very bio accumulative chemical

16.2 Revision

This safety data sheet is fully revised according to the CLP and REACH regulations (EC) and this version supersedes all previous issues.

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Disclaimer

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex II), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.

APPEND IX: Exposure Scenarios

Available on request from the supplier