SECTION 1: Identification of the substance and of the company/undertaking

1.1 Identification of the substance or preparation

Substance name:	**Ground limestone**
Synonyms:	Limestone filler, ground calcium carbonate, limestone fertiliser, calcite Please note that this list may not be exhaustive.
Chemical name and formula:	**Calcium carbonate - $CaCO_3$**
Trade name:	**nekafill® / nekafor®**
CAS No.:	1317-65-3
EC No.:	215-279-6
Molecular weight:	100.08 g/mole
REACH Registration number:	The product is exempted from compulsory registration according to Annex V No 7 of regulation (EC) No 1907/2006.
REACH EU Only Representative:	Not applicable

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

1.2.1	Identified uses:	**Uses of the substance:** Concrete additive, mortar, rendering, neutralisation, pH-adjustment, fertiliser, flue gas treatment, water hardening (lakes), asphalt additive. Please note that this list may not be exhaustive.
1.2.2	Uses advised against:	There are no uses advised against.

1.3 Details of the supplier of the safety data sheet

Name:	**Kalkfabrik Netstal AG**
Address:	**CH-8754 Netstal, Switzerland**
Phone:	+41 55 646 91 11
Fax:	+41 55 646 92 66
E-mail of competent person responsible for SDS:	info@kfn.ch

1.4 Emergency telephone number

European emergency No.:	**112**
For inquiries inside Switzerland:	**145** (24 h/d) Tox Info Suisse
For inquiries outside Switzerland:	**+49 6131 19240** (24 h/d) Poisons Centre ("Giftinformationszentrum") Mainz
Emergency telephone at the company:	+41 55 646 91 11
Available outside office hours:	No

SECTION 2: Hazards identification

2.1 Classification of the substance or preparation

2.1.1	Classification according to Regulation (EC) 1272/2008:	The product is not classified according to regulation (EC) No 1272/2008

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) 1272/2008

Signal word:	Not applicable
Hazard pictogram:	Not applicable
Hazard statements:	Not applicable
Precautionary statements:	Not applicable

2.3 Other hazards:

No direct hazard for humans and environment.
During handling of limestone (comminution, transport), mineral dust may be generated.
According to SUVA, the general dust limit has to be complied with (sec. 8.1).
Calcium carbonate does not meet the criteria for PBT or vPvB substances.
Other hazards are unknown.

SECTION 3: Composition/Information on ingredients

3.1 Substance

Main constituent:

CAS number	EC number	REACH Registration No	Identification name	Weight % content (or range)	Classification according to Regulation (EC) No 1272/2008 [CLP]
1317-65-3	215-279-6	Not appliable	Calcium carbonate	80 - 96 %	Not applicable

Limestone is a natural occurring sediment rock consisting mainly of calcium carbonate.

There are no side elements relevant for labelling and classification.

There are no substances of very high concern (SVHC, published in Article 59 acc. to regulation (EC) No 1907/2006) contained in a concentration of more than 0.1 mass-%.

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice:	No special measures. Presently, no known delayed effects.
Following inhalation:	Fresh air supply. Move source of dust or move person to fresh air. Obtain medical attention in case of physical complaints.
Following skin contact:	Wash with of water and soap.
Following eye contact:	Rinse open eyes under running water. Contact medical specialist in case of long-term eye irritation.
Following ingestion:	No usual way of absorption. Clean mouth with water and drink afterwards plenty of water. Obtain medical attention in case of major complaints.

4.2 Most important symptoms and effects, both acute and delayed: Presently, there is no concern for delayed effects. If appliable, delayed symptoms and effects are described in Sec. 11, or in Sec. 4.1 (absorption ways).

4.3 Indication of any immediate medical attention and special treatment needed: Follow the advice given in section 4.1.

SECTION 5: Fire fighting measures

5.1 Extinguishing media

5.1.1 Suitable extinguishing media: The product is not combustible or flammable. Use extinguishing media appropriate for surrounding fire.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture: Calcium carbonate is not explosive and not flammable. It is not oxidizing.

5.3 Advice for fire-fighters: No special measures necessary. Do not drain extinguishing water into the sewage.
Calcium carbonate is decomposed to calcium oxide (CaO) and carbon dioxide (CO_2) when heated to 900 °C.

SECTION 6: Accidental release measures

6.1 Personal precautions protective equipment and emergency procedures

Avoid dust generation. Ensure that sufficient ventilation or appropriate suitable respiratory protective equipment is used (section 8).

6.2 Environmental precautions: No special measures necessary.

6.3 Methods and material for containment and cleaning up: Pick up the product mechanically in a dry or way.
Use vacuum suction unit, or shovel into bags.
Do not sweep drily.

6.4 Reference to other sections: For more information on exposure controls/personal protection or disposal considerations, please check section 8 and 13 of this safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for a save handling

7.1.1	Protective measures:	Keep dust levels to a minimum. Minimize dust generation. Use exhaust ventilation. Wear protective equipment (sec. 8). Do not wear contact lenses. Wear goggles. When handling bags usual precautions should be paid to the risks outlined in Swiss Labour Law ArGV 3, Art. 25.
7.1.2	Advice on general occupational hygiene:	Avoid dust generation. Ensure appropriate workplace ventilation.
7.2	**Conditions for safe storage, including any incompatibilities:**	Store in dry conditions. Keep away from acids.
7.3	**Specific end use(s):**	Presently no information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limit values

Occupational exposure standard (OES)
(Different national legislation)

Switzerland 3 mg/m^3 (A)
10 mg/m^3 (E); method NIOSH
[General dust limit, MAK/SUVA Grenzwerte am Arbeitsplatz]
A = alveolar dust fraction, E = inhalable dust fraction

8.2 Exposure controls:

8.2.1	Appropriate engineering controls:	Handling systems should preferably be enclosed or suitable ventilation installed to maintain atmospheric dust below the general dust limit. Otherwise wear appropriate protective equipment.
8.2.2	Individual protection measures, such as personal protective equipment	
8.2.2.1	Eye/face protection:	Do not wear contact lenses. Wear tight fitting goggles with side shields, or wide vision full goggles. It is also advisable to have individual pocket eyewash.
8.2.2.2	Skin protection:	Clothing fully covering skin, full length pants, long sleeved overalls, with close fittings at openings. Do not inhale dust.
8.2.2.3	Respiratory protection:	Use approved dust respirators to EN 149 category FFP2, or air stream-helmet for heavy exposure.
8.2.2.4	Thermal hazards:	If used appropriately, there are no thermal hazards.
8.2.3	Environmental exposure controls:	All ventilation systems should be filtered before discharge to atmosphere.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	***Grey to brownish powder***
Odour:	***Slightly earthy odour***
Odour threshold:	***Not applicable***
pH-value:	***7 - 9*** saturated solution of $CaCO_3$ at 25 °C
Melting point:	***> 900 °C*** decomposition into CaO and CO_2
Boiling point:	***Not applicable***
Flash point:	***Not applicable***
Evaporation rate:	***Not applicable***
Flammability:	***Not flammable***
Explosive limits:	***Non explosive***
Vapour pressure:	***Not volatile***
Vapour density:	***Not applicable***
Relative density:	***2.74*** *g/cm^3*
Solubility in water:	***ca. 16*** *mg/l*
Partition coefficient:	***Not applicable*** (inorganic substance)

	Auto ignition temperature:	***No relative self-ignition temperature***
	Decomposition temperature:	**Ca. 900** °C
	Viscosity:	***Not applicable***
	Oxidizing properties:	***Not applicable***
9.2	**Other information:**	According to the present state of knowledge, the substance does not fulfil the definition of nanomaterials acc. to recommendation 2011/696/EU.

SECTION 10: Stability and reactivity

10.1	**Reactivity:**	Calcium carbonate is decomposed to calcium oxide (CaO) and carbon dioxide (CO_2) when heated to 900 °C.
10.2	**Chemical stability:**	Under normal conditions of use and storage, calcium carbonate is stable. Calcium carbonate reacts with acids to form calcium salts releasing carbon dioxide.
10.3	**Possibility of hazardous reactions:**	Calcium carbonate reacts with acids to form calcium salts releasing carbon dioxide.
10.4	**Conditions to avoid:**	Keep away from acids.
10.5	**Incompatible materials:**	Calcium carbonate reacts with acids to form salts releasing carbon dioxide. $CaCO_3 + 2\ H^+ \rightarrow Ca^2 + CO_2 + H_2O$.
10.6	**Hazardous decomposition products:**	Calcium carbonate is decomposed to calcium oxide (CaO) and carbon dioxide (CO_2) when heated to 900 °C.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

After long-term exposition, high dust loads might lead to the impression of a chronic inflammation of the respiratory tract.

	Toxicity endpoints	Outcome of the effects assessment
a.	**Acute toxicity:**	Calcium carbonate is not acutely toxic.
b.	**Skin corrosion/irritation:**	Not applicable. No data available.
c.	**Serious eye damage/irritation:**	Not applicable. No data available.
d.	**Respiratory or skin sensitisation:**	Not applicable. No evidence available.
e.	**Germ cell mutagenicity:**	Not applicable. No data available.
f.	**Carcinogenicity:**	Not applicable. No data available.
g.	**Reproductive toxicity:**	Not applicable. No data available.
h.	**STOT-single exposure:**	Not applicable. No data available.
i.	**STOT-repeated exposure:**	Not applicable. No data available.
j.	**Aspiration hazard:**	Not applicable. No data available.

SECTION 12: Ecological information

12.1 Toxicity

12.1.1	Acute/prolonged toxicity to fish:	Not applicable.
12.1.2	Acute/prolonged toxicity to aquatic invertebrates:	Not applicable.
12.1.3	Acute/prolonged toxicity to aquatic plants:	Not applicable.
12.1.4	Toxicity to micro-organisms, e.g. bacteria:	Not applicable.
12.1.5	Chronic toxicity to aquatic organisms:	Not applicable.
12.1.6	Toxicity to soil dwelling organisms:	Not applicable.
12.1.7	Toxicity to terrestrial plants:	Not applicable. Calcium carbonate is used as a fertiliser.
12.1.8	General effect:	No toxic effect. Calcium carbonate is a natural occurring material.
12.1.9	Further information	None known.

12.2	**Persistence and degradability:**	Not relevant for inorganic substances. Calcium carbonate is a natural product (limestone is a naturally occurring rock).
12.3	**Bioaaccumulative potential:**	Not relevant for inorganic substances. Calcium carbonate is a substance occurring in any ecosystem.
12.4	**Mobility in soils:**	Calcium carbonate is only sparely soluble, and so presents a low mobility in most ground. Moreover, it is used as a fertiliser.
12.5	**Results of PBT and vPvB assessment:**	Not relevant for inorganic substances.
12.6	**Other adverse effects:**	No effects are identified.

SECTION 13: Disposal considerations

13.1	**Waste treatment methods:**	Disposal of calcium carbonate as well as containers/packing which have been used for transport or storage has to be in accordance with national and regional legislation. Unconsumed residual substance: Pick up the product mechanically in a dry way. Store product in labelled containers and re-use it, if possible. Moist product and product sludges: prevent spillage into sewage or water bodies. After usage, empty the packing completely and recycle it. Disposal of completely emptied packing according to VeVA / European Waste Catalogue (e.g. 15 01 02 plastic packing)
	VeVA code / Code according to European Waste Catalogue:	01 04 08 (waste gravel and crushed rocks) The product does not contain hazardous substances. Because of multiple applications and disposal considerations by the user, different VeVA codes could be applicable under certain circumstances.

SECTION 14: Transport information

Calcium carbonate is not classified as hazardous for transport according to ADR /RID (road and rail), IMDG/GGVSea (Sea) , ADN (inland waterways) as well as ICAO/IATA (air).

14.1	**UN Number:**	Not regulated.
14.2	**UN proper shipping name:**	Not regulated.
14.3	**Transport hazard class(es):**	Not regulated.
14.4	**Packing group:**	Not regulated.
14.5	**Environmental hazards:**	None known. Calcium carbonate is a natural product (limestone is a naturally occurring rock).
14.6	**Special precautions for use:**	Avoid any release of dust during transportation, by using tight tanks for powders.
14.7	**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**	Not relevant.

SECTION 15: Regulatory information

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

Authorisations acc. to REACH: None.
Restrictions on use acc. to REACH: None.
Calcium carbonate is not a substance according to directive96/82/EC (“SEVESO”), not an ozone depleting substance and not a persistent organic pollutant.
National regulations:
Not relevant

15.2	**Chemical safety assessment**	Not relevant.

SECTION 16: Other information

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	**Hazard statements**	Not applicable
16.2	**Precautionary Statements**	Not applicable
16.3	**Abbreviations**	MAK: Maximum concentration in the workplace. NIOSH: National Institute for Occupational Safety and Health PBT: Persistent, bioaccumulative, toxic chemical. vPvB: Very persistent, very bioaccumulative chemical.
16.4	**Key literature references**	Not relevant
16.5	**Revision**	The following sections have been revised: 1. Identification of the substance and of the company/undertaking 7. Handling and storage 12. Ecological information 14. Transport information
16.6	**Disclaimer**	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. Ground limestone is an inert material, consequently an inert dust, according to SUVA (explanations to exposure limits). The limit for inert dust (“Allgemeiner Staubgrenzwert”, chapt. 8.1) must be kept. On this Safety Data Sheet, we list all relevant properties of the substance, even though it is not a dangerous substance in itself.
	Annex with Exposure Scenarios:	Not applicable

End of the safety data sheet.