Product Safty Data Sheet

(Prepared in accordance with Annex II of the REACH regulation (EG) Nr. 1907/2006)

Date of print: Revised on: 17.11.2014

1: Identification of the substance / preparation and of the company / undertaking	
1.1: Identification of the substance or preparation	
Substance name	**Calcium carbonate**
Synonyms	Limestone, Marble, Calcite, Aragonite, Chalk Please note that this list may not be exhaustive.
Chemical Name and Formula	**Calcium carbonate – $CaCO_3$**
Tradename	**Calcium carbonate grey**
CAS Nr.	1317-65-3
EINECS Nr.	215-279-6
Molecular Mass	100,08 g/mol
1.2: Material use	
Drinking water preparation	pH-adjustment, hardening
1.3: Company identification	
Name	AquaCare GmbH & Co. KG
Address	Am Wiesenbusch 11, 45966 Gladbeck
Phone	+ 49 (0) 2043 – 375 758 - 0
Fax	+ 49 (0) 2043 – 375 758 - 90
1.4: Emergency Telefone	
European emergency N°	**112**
2: Hazard identification	
2.1: Indication of hazard	
	Not applicable according guideline 67/548/EEC
2.2: Human health	
Risk phrases	No classification
Warning phrase	While handling with calcium carbonate (crushing, transport) mineral dust can be generated. Applied must be the ordinance on hazardous substances and the BGI 5047 „mineral dust“.
3: Composition /information on ingredients	
3.1: Composition	
Linestone is a natural appearing sedimentary rock and contains mainly calcium carbonate.	
3.1.1: Chemical characterization	
Chemical notation	Calcium carbonate
Additional advice	The chemical characterisation is for natural calcium carbonate (limestone) as well as lime stone powder

4: First aid measures	
4.1: Eyes	
	Rinse the eyes with opened eyelid in flowing water In case of a long term eyes irritation see the oculist.
4.2: Inhalation	
	Fresh air supply; in case of discomfort see the doctor
4.3: Ingestion	
	Wash mouth with water and drink copious quantities of water. Do not induce vomiting.
4.4: Skin	
	Wash with water and soap.
4.5: General advice	
	No special activity necessary.
5: Fire-fighting measures	
5.1: Flammability	
	The substance isn´t flammable and doesn´t burn.
5.2: Extingushing media	
	The substance doesn´t burn. Use powder foam or CO_2- fire drencher for familiar surroundings.
5.3: Combustion products	
	Calcium carbonate decomposes into Calcium oxide (CaO) and Carbon dioxide (CO_2) at a temperature for more than 900 °C.
6: Accidental release measures	
6.1: Personal precautions	
	Keep dust levels to a minimum and ensure that sufficient ventilation or suitable respiratory protective equipment is used (section 8).
6.2: Environmental precautions	
	No measures to be taken
6.3: Methods for cleaning up	
	Pick up the product mechanically in a dry way. Use vacuum suction unit or shovel into bags.
7: Handling and storage	
7.1: Handling	
7.1.1: Precautions for safe handling	Minimise dust generation. Avoid dust development. Enclose dust sources use exhaust ventilation (dust collector at handling points). Filling equipment should be enclosed. Make sure an adequate air ventilation or a adequate inhalation protection (see section 8).
7.2: Storage	
7.2.1: Precautions for safe storage	Store under dry conditions. Minimise contact with moisture. Bulk storage should be in purpose – designed silos. Keep away from acids.
8: Exposure controls / personal protection	
8.1: Exposure limit values	
8.1.1: CAS N° / EINECS N°	13017-65-3 / 215-279-6
8.1.2: Chemical name	Calcium carbonate

8.1.3: Occupational exposure standard (OES)	Germany: 3 mg/m^3 (A), 10 mg/ m^3 (E).	
8.2: Exposure controls		
8.2.1: Occupational exposure controls	Handling systems should preferably be enclosed or suitable ventilation installed to maintain atmospheric dust below the OES, if not wear suitable protective equipment.	
8.2.1.1: Respiratory protection		Use approved dust respirators to EN 149 category FFP2 or air stream-helmet for heavy exposure.
8.2.1.2: Hand protection		Use approved nitrile impregnated cotton gloves having CE marks.
8.2.1.3: Eye protection		Tight fitting goggles with side shields or wide vision full goggles. Do not wear contact lenses when handling this product.
8.2.1.4: Skin protection	Clothing fully covering skin, full length pants, long sleeved overalls, with close fittings at openings. Footwear resistant to dust penetration.	
8.2.1.5: General safty and hygiene measure	Wear clean, dry personal protective equipment. If heavily exposed daily, employees must shower.	
8.2.2: Environmental exposure controls	Ventilation systems should be filtered before discharge to atmosphere.	
9: Physical and chemical properties		
9.1: General Information		
9.1.1: Appearance	White or off white (beige) solid material of varying sizes: Lump, granular of fine powder.	
9.1.2: Odour	Slight earth odor.	
9.2: Important health, safty and environmental information		
pH	7 – 9 in saturated $CaCO_3$ solution at 25°C	
Solubility in water	13 – 16 mg/l at 20°C	
9.3: Other information		
Melting point	Not applicable, but > 900 °C (Decompostion in CaO and CO_2)	
Boiling point	Not applicable	
Specific gravity	2,74 g/cm^3 at 20°C	
Bulk density	0,9 – 1,5 kg/m^3 at 20°C	
Vapour pressure	Not volatile	
Partition coefficient	Not applicable	
Flash point	Not applicable	
Flammability	Not flammable	
Explosive properties	Not flammable	
10: Stability and reactivity		
10.1: Conditions to avoid		
	When heated above 900 °C calcium carbonate decomposes to produce calcium oxide und carbon dioxide.	
10.2: Materials to avoid		
	Calcium carbonate reacts with acid to form calcium salts and carbon dioxide.	
11: Toxicological information		
11.1: Acute effect		
Eye contact	Not applicable.	
Inhalation	Inhalation of dust causes discomfort to the upper respiratory tract.	
Ingestion	LD50 (oral) > 6450 mg/kg (rat). Large amounts may cause irritation to the gastrointestinal tract.	

Skin contact	Not applicable.
11.2: Long term exposure	
Eye contact	Not applicable.
Inhalation	Prolonged and repeated inhalation of dust may cause serious damage to skin in combination with moisture.
Skin contact	Not applicable.
12: Ecological information	
12.1: Ecotoxicity	
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	Calcium carbonate is used as a fertilizer.
12.1.8: General effect	No toxic effects. Calcium carbonate is a natural occurring substance.
12.2: Mobility	
	Calcium carbonate is hardly soluble and shows a low mobility in most soils.
12.3: Persistence and degradability	
	Calcium carbonate is a natural product (limestone is a natural occuring of the lithosphere).
12.4: Bioaccumulative potential	
	Calcium carbonate occures in all ecosystems
13: Disposal considerations	
	Disposal should be in accordance with local and national legislation.
14: Transport information	
14.1: Transport consideration	
14.1.1: Klassifizierung	Not subject to identification.
14.1.2: ADR (Straße)	Not subject to identification.
14.1.3: RID (Bahn)	Not subject to identification.
14.1.4: IMDG / GGVSee (See)	Not subject to identification.
14.1.5: IATA-DGR / ICTAO-TI(Luft)	Not subject to identification.
14.2: Special precaution	
	Avoid any release of dust during transportation, by using tight tanks for powder.
15: Regulatory information	
15.1: Labelling according to EEC-directives	
15.1.1: Symbol and classification of the substance	Not applicable.
15.1.2: Restriction of marketing and employment	Not applicable.
15.1.3: National regulations	Not applicable.
16: Other information	
16.1: Risk phrases	
	Not applicable.
16.2: Safety phrases	
	Not applicable.
16.3: Further information	

	This safety data sheet supplements the technical use instructions without replacing them. The information contained therein is based on the state of our knowledge regarding the product, at the mentioned date. They are provided in good faith. It does not exempt the user from knowing and applying all texts regulation his activity. It will be his sole responsibility to take all necessary precautions when using the product.
16.4: Guidance and references	
	Data sheet prepared in accordance with: Annex II of the REACH Regulation (EC) No. 1907/2006. References: 1. Council Directive 90/269/EEC 2. Booklet L64 - Safety Signs and Signals. The Health and Safety (Safety Signs and Signals) Regulations 1996 - Guidance on Regulations (HSE) - ISBN 0 7176 0870 0 3. IUCLID Datensatz –2000 4. The Merck Index (Ed. Merck & Co, Rahway, USA).
16.5: Revision	
	The present version is a renewed version, in order to be in accordance with the Annex II of the REACH - Regulation (EC) No. 1907/2006 reworked version. Version: November 2007.
Ende of the safety data sheet	