

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

BIOCALCE MURATURA

Date of first edition: 6/4/2021

Safety Data Sheet dated 8/4/2021

version 7

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

1.1. Product identifier

Mixture identification:

Trade name: BIOCALCE MURATURA

Trade code: BC SK0262 .042

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

Recommended use: Repair mortar

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2 Causes skin irritation.

Eye Dam. 1 Causes serious eye damage.

STOT SE 3 May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words



Danger

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Precautionary statements

P260 Do not breathe dust.

P280 Wear protective gloves and eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with applicable regulations.

Contains

Natural Hydraulic Lime

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: BIOCALCE MURATURA

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
20-24,9 %	Natural Hydraulic Lime	CAS:85117-09-5 EC:285-561-1	Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335	
< 0,1 %	Calcium dihydroxide	CAS:1305-62-0 EC:215-137-3	Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335	01-2119475151-45
< 0,01 %	Quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation
Eye damages
Skin Irritation
Erythema

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.
Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
Quartz	NATIONAL	AUSTRALIA		0.100				Respirable fraction
	NATIONAL	AUSTRIA		0.150				Respirable aerosol
	NATIONAL	BELGIUM		0.100				
	NATIONAL	CANADA		0.100				Canada Ontario; Respirable aerosol
	NATIONAL	CANADA		0.100				Canada Quebec
	NATIONAL	DENMARK		0.300		0.600		Inhalable aerosol

Limestone	NATIONAL	DENMARK	0.100	0.200	Respirable aerosol
	NATIONAL	FINLAND	0.050		Respirable fraction
	NATIONAL	FRANCE	0.100		Respirable aerosol
	NATIONAL	HUNGARY	0.150		Respirable aerosol
	NATIONAL	IRELAND	0.100		Respirable fraction
	NATIONAL	NEW ZEALAND	0.200		Respirable aerosol
	NATIONAL	CHINA	1.000		Inhalable fraction. 10% <= free SiO2 <= 50%.
	NATIONAL	CHINA	0.700		Inhalable fraction. 50% < free SiO2 <= 80%.
	NATIONAL	CHINA	0.500		Inhalable fraction. Free SiO2 < 80%.
	NATIONAL	SINGAPORE	0.100		Respirable aerosol.
	NATIONAL	SPAIN	0.100		Respirable fraction
	NATIONAL	SWEDEN	0.100		Respirable aerosol
	NATIONAL	SWITZERLAND	0.150		Respirable aerosol
	NATIONAL	NETHERLANDS	0.075		Respirable dust
	NATIONAL	ITALY	0.050		Silice cristallina
	NATIONAL	ITALY	0.025		A2
	NATIONAL	ITALY	10.000		Come particelle non altrimenti specificate PNOC
	NATIONAL	KOREA, REPUBLIC OF	0.050		
	NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH
	NATIONAL	ARGENTINA	0.050		
	NATIONAL	CHILE	0.080		
	NATIONAL	CROATIA	0.100		
	NATIONAL	ESTONIA	0.100		
	NATIONAL	INDIA	10.000		
	NATIONAL	LITHUANIA	0.100		
	NATIONAL	MALAYSIA	0.100		
	NATIONAL	MEXICO	0.025		Respirable fraction
	NATIONAL	NORWAY	0.300		Total dust
	NATIONAL	NORWAY	0.100		Respirable dust
	NATIONAL	PORTUGAL	0.025		Respirable fraction
	NATIONAL	SLOVENIA	0.050	0.400	
	NATIONAL	SOUTH AFRICA	0.100		
	ACGIH	NNN	0.025		(R), A2 - Pulm fibrosis, lung cancer
	NATIONAL	BELGIUM	10.000		
	NATIONAL	HUNGARY	10.000		Inhalable aerosol
	NATIONAL	CHINA	8.000		Inhalable fraction
	NATIONAL	CHINA	4.000		Inhalable aerosol
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	JAPAN	2.000		Respirable dust
	NATIONAL	JAPAN	8.000		Total dust: Total dust

				comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler
	NATIONAL	SPAIN	10.000	Inhalable aerosol
	NATIONAL	SWITZERLAND	3.000	Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000	OSHA: Total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000	OSHA: Respirable dust
	NATIONAL	UNITED STATES OF AMERICA	10.000	NIOSH: total dust, calcium carbonate
	NATIONAL	UNITED STATES OF AMERICA	5.000	NIOSH: Respirable aerosol, calcium carbonate
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000	Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000	Respirable aerosol
	NATIONAL	ITALY	10.000	Come particelle non altrimenti specificate PNOC
	NATIONAL	CROATIA	10.000	
	NATIONAL	FRANCE	10.000	
	NATIONAL	NETHERLANDS	10.000	
	NATIONAL	PORTUGAL	10.000	
Calcium carbonate	NATIONAL	AUSTRALIA	10.000	This value is for inhalable dust containing no asbestos and <1 % crystalline silica.
	NATIONAL	CANADA	10.000	
	NATIONAL	FRANCE	10.000	inhalable aerosol
	NATIONAL	HUNGARY	10.000	inhalable aerosol
	NATIONAL	IRELAND	10.000	Inhalable fraction
	NATIONAL	IRELAND	4.000	Respirable fraction
	NATIONAL	LATVIA	6.000	
	NATIONAL	NEW ZEALAND	10.000	The value for inhalable dust containing no asbestos and less than 1% free silica.
	NATIONAL	POLAND	10.000	
	NATIONAL	SINGAPORE	10.000	(limestone, marble)
	NATIONAL	SWITZERLAND	3.000	respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000	total dust
	NATIONAL	UNITED STATES OF	5.000	respirable dust

Calcium dihydroxide	AMERICA				
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		respirable aerosol
	NATIONAL	ITALY	10.000		
	NATIONAL	BELGIUM	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	CROATIA	10.000		
	NATIONAL	NETHERLANDS	10.000		
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	SPAIN	10.000		
	NATIONAL	CHILE	5.000		respirable fraction
	NATIONAL	AUSTRALIA	5.000		
	NATIONAL	AUSTRIA	1.000		Inhalable fraction
	NATIONAL	AUSTRIA C		4.000	Inhalable fraction
	NATIONAL	BELGIUM	5.000		
	NATIONAL	CANADA	5.000		Ontario
	NATIONAL	CANADA	5.000		Quebec
	NATIONAL	DENMARK	5.000	10.000	
	NATIONAL	FINLAND	1.000	4.000	
	NATIONAL	FRANCE	1.000	4.000	Italics type: Indicative statutory limit values; long term and short term: respirable fraction
	NATIONAL	GERMANY	1.000	2.000	ASG; Long term and short term: inhalable fraction
	NATIONAL	GERMANY	1.000	2.000	DFG; Long term and short term: inhalable aerosol
	NATIONAL	HUNGARY	5.000		
	NATIONAL	IRELAND	5.000		
	NATIONAL	LATVIA	1.000	4.000	Long term and short term: respirable fraction
	NATIONAL	NEW ZEALAND	5.000		
	NATIONAL	ROMANIA	1.000	4.000	Long term and short term: respirable fraction
	NATIONAL	SINGAPORE	5.000		
	NATIONAL	SPAIN	5.000		
	NATIONAL	SWEDEN	1.000	4.000	Long term and short term: respirable fraction
	NATIONAL	SWITZERLAND	5.000		Inhalable aerosol
	NATIONAL	TURKEY	5.000		
	NATIONAL	UNITED	5.000		NIOSH

Quartz		STATES OF AMERICA			
	NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA; inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	5.000		OSHA; respirable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	5.000		Inhalable fraction
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	1.000		Respirable fraction
	NATIONAL	ITALY	1.000	4.000	
	NATIONAL	ARGENTINA	5.000		
	NATIONAL	KOREA, REPUBLIC OF	5.000		
	NATIONAL	INDONESIA	5.000		
	NATIONAL	MALAYSIA	5.000		
	NATIONAL	MEXICO	5.000		
	NATIONAL	PORTUGAL	5.000		
	NATIONAL	SOUTH AFRICA	5.000		
	NATIONAL	TAIWAN, PROVINCE OF CHINA	5.000		
	NATIONAL	BULGARIA	1.000	4.000	
	NATIONAL	CZECHIA	1.000	4.000	
	NATIONAL	CROATIA	1.000	4.000	Long term and short term: respirable dust
	NATIONAL	ESTONIA	1.000	4.000	
	NATIONAL	ICELAND	1.000	4.000	
	NATIONAL	LITHUANIA	1.000	4.000	
	NATIONAL	NORWAY	1.000	4.000	
	NATIONAL	NETHERLANDS	1.000	4.000	
	NATIONAL	SLOVAKIA	1.000	4.000	
	NATIONAL	SLOVENIA	1.000	4.000	
	NATIONAL	RUSSIAN FEDERATION		2.000	
	NATIONAL	POLAND	2.000	6.000	Long term and short term: inhalable fraction
	NATIONAL	POLAND	1.000	4.000	Long term and short term: respirable fraction
	ACGIH	NNN	5		Eye, URT and skin irr
	EU	NNN	1	4	Respirable fraction
	NATIONAL	AUSTRALIA	0.100		Respirable fraction
	NATIONAL	AUSTRIA	0.150		respirable aerosol

	NATIONAL	BELGIUM	0.100		
	NATIONAL	CANADA	0.100		Canada Ontario. Respirable aerosol
	NATIONAL	CANADA	0.100		Canada Quebec
	NATIONAL	DENMARK	0.300	0.600	Inhalable aerosol
	NATIONAL	DENMARK	0.100	0.200	Respirable aerosol
	NATIONAL	FINLAND	0.050		Respirable fraction
	NATIONAL	FRANCE	0.100		Respirable aerosol
	NATIONAL	HUNGARY	0.150		Respirable aerosol
	NATIONAL	IRELAND	0.100		Respirable fraction
	NATIONAL	NEW ZEALAND	0.200		Respirable aerosol
	NATIONAL	CHINA	1.000		Inhalable fraction. 10% <= free SiO2 <= 50%.
	NATIONAL	CHINA	0.700		Inhalable fraction. 50% < free SiO2 <= 80%.
	NATIONAL	CHINA	0.500		Inhalable fraction. Free SiO2 < 80%.
	NATIONAL	SINGAPORE	0.100		Respirable aerosol.
	NATIONAL	SPAIN	0.100		Respirable fraction
	NATIONAL	SWEDEN	0.100		Respirable aerosol
	NATIONAL	SWITZERLAND	0.150		Respirable aerosol
	NATIONAL	NETHERLANDS	0.075		Respirable dust
	NATIONAL	ITALY	0.050		Silice cristallina
	NATIONAL	ITALY	0.025		A2
	NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH
	NATIONAL	KOREA, REPUBLIC OF	0.050		
	NATIONAL	ARGENTINA	0.050		
	NATIONAL	CHILE	0.080		
	NATIONAL	CROATIA	0.100		
	NATIONAL	ESTONIA	0.100		
	NATIONAL	INDIA	10.000		
	NATIONAL	LITHUANIA	0.100		
	NATIONAL	MALAYSIA	0.100		
	NATIONAL	MEXICO	0.025		Respirable fraction
	NATIONAL	NORWAY	0.300		Total dust
	NATIONAL	NORWAY	0.100		Respirable dust
	NATIONAL	PORTUGAL	0.025		
	NATIONAL	SLOVENIA	0.050	0.400	
	NATIONAL	SOUTH AFRICA	0.100		
	ACGIH	NNN	0.025		(R), A2 - Pulm fibrosis, lung cancer
	EU	NNN	0.100		(R), A2 - Pulm fibrosis, lung cancer
Starch	NATIONAL	AUSTRALIA	10.000		This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
	NATIONAL	BELGIUM	10.000		

NATIONAL	CANADA	10.000		Ontario
NATIONAL	CANADA	10.000		Quebec
NATIONAL	IRELAND	10.000		Inhalable fraction
NATIONAL	IRELAND	4.000		Respirable fraction
NATIONAL	NEW ZEALAND	10.000		The value for inhalable dust containing no asbestos and less than 1% free silica
NATIONAL	SINGAPORE	10.000		
NATIONAL	KOREA, REPUBLIC OF	10.000		
NATIONAL	SPAIN	10.000		Inhalable aerosol
NATIONAL	SWITZERLAND	3.000		Respirable dust
NATIONAL	UNITED STATES OF AMERICA	10.000		NIOSH; total dust
NATIONAL	UNITED STATES OF AMERICA	5.000		NIOSH; respirable dust
NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA; inhalable aerosol
NATIONAL	UNITED STATES OF AMERICA	5.000		OSHA; respirable aerosol
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		Inhalable aerosol
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		Respirable aerosol
NATIONAL	ITALY	10.000		
NATIONAL	ARGENTINA	10.000		
NATIONAL	GREECE	10.000		
NATIONAL	INDONESIA	10.000		
NATIONAL	MALAYSIA	10.000		
NATIONAL	MEXICO	10.000		
NATIONAL	PORTUGAL	10.000		
NATIONAL	RUSSIAN FEDERATION		10.000	
NATIONAL	SOUTH AFRICA	10.000		Inhalable particulate
NATIONAL	SOUTH AFRICA	5.000		Respirable particulate
ACGIH	NNN	10		A4 - Dermatitis

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
Natural Hydraulic Lime	85117-09-5	574.000 µg/l	Freshwater	
		574.000 µg/l	Intermittent releases	

			(freshwater)
		374.000 µg/l	Marine water
		374.000 µg/l	Intermittent releases (marine water)
		3.511 mg/l	Microorganisms in sewage treatments
		1262.000 mg/kg	Soil
Calcium dihydroxide	1305-62-0	490.000 µg/l	Freshwater
		490.000 µg/l	Intermittent releases (freshwater)
		320.000 µg/l	Marine water
		3.000 mg/l	Microorganisms in sewage treatments
		1080.000 mg/kg	Soil

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
Natural Hydraulic Lime	85117-09-5		1.000 mg/m ³	1.000 mg/m ³	Human Dermal	Long Term, systemic effects
			4.000 mg/m ³	4.000 mg/m ³	Human Dermal	Short Term, systemic effects
Calcium dihydroxide	1305-62-0		1.000 mg/m ³	1.000 mg/m ³	Human Inhalation	Long Term, local effects
			4.000 mg/m ³	4.000 mg/m ³	Human Inhalation	Short Term, local effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Solid

Color: N.A.

Odour: N.A.

Odour threshold: N.A.

pH: =12.70

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: Not Applicable

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.49 g/cm³

Solubility in water: Slightly soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: N.A.
Volatile Organic compounds - VOCs = N.A.

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.
Conductivity: N.A.
Evaporation rate: N.A. No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Natural Hydraulic Lime	a) acute toxicity	LD50 Oral Rat > 2000.00 mg/kg LC50 Inhalation Dust Rat > 6.04 mg/l 4h LD50 Skin Rabbit > 2500.00 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	Mouse
	g) reproductive toxicity	No Observed Adverse Effect Level Oral >= 400.00 mg/kg	Mouse

Calcium dihydroxide	a) acute toxicity	LD50 Oral Rat > 2000.00000 mg/kg LC50 Inhalation Dust Rat > 6.04000 mg/l 4h LD50 Skin Rabbit > 2500.00000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	
	f) carcinogenicity	Carcinogenicity Oral Rat = 517.00000 mg/kg	NOAEL
Quartz	a) acute toxicity	LD50 Oral > 2000.00000 mg/kg	

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Natural Hydraulic Lime	CAS: 85117-09-5 - EINECS: 285-561-1	a) Aquatic acute toxicity : LC50 Fish rainbow trout = 50.60 mg/L 96h „OECD Guideline 203 (Fish, Acute Toxicity Test)
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 49.10 mg/L 48h OECD 202
		b) Aquatic chronic toxicity : NOEC Crangon septemspinosa = 32.00 mg/L - 14days
		d) Terrestrial toxicity : NOEC Worm Eisenia fetida = 2000.00 mg/kg
		e) Plant toxicity : EC10 = 1080.00 mg/kg
Calcium dihydroxide	CAS: 1305-62-0 - EINECS: 215-137-3	a) Aquatic acute toxicity : LC50 Fish rainbow trout = 50.60000 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 49.10000 mg/L 48h
		b) Aquatic chronic toxicity : NOEC Crangon septemspinosa = 32.00000 mg/L 48h - 14days
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 184.57000 mg/L 72h „OECD Guideline 201 (Alga, Growth Inhibition Test)
		a) Aquatic acute toxicity : EC50 Sludge activated sludge = 300.40000 mg/L 3h „OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
		d) Terrestrial toxicity : NOEC Worm Eisenia fetida = 2000.00000 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests)
		d) Terrestrial toxicity : EC10 soil microorganisms = 4000.00000 mg/kg „Guideline: BBA VI, 1-1 (1990) under consideration of OECD 216 (2000) and OECD 217 (2000).

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 13: Sensitising; HP 5: Specific Target Organ Toxicity (STOT)/Aspiration Toxicity; HP 4: Irritant — skin irritation and eye damage

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID) :

N.A.

Air (IATA) :

N.A.

Sea (IMDG) :

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None

Restrictions related to the substances contained: None

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

Class 1: slightly hazardous for water.

SVHC Substances:

No data available

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.

Code	Hazard class and hazard category	Description
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/1	On basis of test data (pH)
3.8/3	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic
 COD: Chemical Oxygen Demand
 COV: Volatile Organic Compound
 CSA: Chemical Safety Assessment
 CSR: Chemical Safety Report
 DMEL: Derived Minimal Effect Level
 DNEL: Derived No Effect Level.
 DPD: Dangerous Preparations Directive
 DSD: Dangerous Substances Directive
 EC50: Half Maximal Effective Concentration
 ECHA: European Chemicals Agency
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 ES: Exposure Scenario
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IARC: International Agency for Research on Cancer
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 IC50: half maximal inhibitory concentration
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 IMDG: International Maritime Code for Dangerous Goods.
 INCI: International Nomenclature of Cosmetic Ingredients.
 IRCCS: Scientific Institute for Research, Hospitalization and Health Care
 KAFH: Keep Away From Heat
 KSt: Explosion coefficient.
 LC50: Lethal concentration, for 50 percent of test population.
 LD50: Lethal dose, for 50 percent of test population.
 LDLo: Leathal Dose Low
 N.A.: Not Applicable
 N/A: Not Applicable
 N/D: Not defined/ Not available
 NA: Not available
 NIOSH: National Institute for Occupational Safety and Health
 NOAEL: No Observed Adverse Effect Level
 OSHA: Occupational Safety and Health Administration.
 PBT: Persistent, Bioaccumulative and Toxic
 PGK: Packaging Instruction
 PNEC: Predicted No Effect Concentration.
 PSG: Passengers
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 STEL: Short Term Exposure limit.
 STOT: Specific Target Organ Toxicity.
 TLV: Threshold Limiting Value.
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
 vPvB: Very Persistent, Very Bioaccumulative.
 WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION



Exposure Scenario

Calcium dihydroxide

Exposure Scenario, 24/06/2021

Substance identity	
	Calcium dihydroxide
CAS No.	1305-62-0
EINECS No.	215-137-3
Registration number	01-2119475151-45

Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC9b, PC15)

1. ES 1		Widespread use by professional workers; Various products (PC9a, PC9b, PC15)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	24/06/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b) - Non-metal surface treatment products (PC15)		
Environment Contributing Scenario			
CS1	ERC8c - ERC8f		
Worker Contributing Scenario			
CS2 Material transfers	PROC8a		
CS3 Hand application - finger paints, pastels, adhesives - Rolling, Brushing	PROC10		
CS4 Mixing operations - Manual	PROC19		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)			
Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)		
<i>Product (article) characteristics</i>			
Physical form of product: Solid, medium dustiness			
Vapour pressure: < 1E-05 Pa			
1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)		
<i>Product (article) characteristics</i>			
Physical form of product: Solid, medium dustiness			
<i>Amount used, frequency and duration of use/exposure</i>			
Duration: Exposure duration <= 480 min			
<i>Technical and organisational conditions and measures</i>			
Technical and organisational measures			
Ensure operatives are trained to minimise exposures. Avoid direct eye contact with product, also via contamination on hands. Do not ingest. Local exhaust ventilation		Inhalation - minimum efficiency of: 72 %	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>			

Personal protection Wear suitable gloves tested to EN374. Use suitable eye protection. Wear suitable face shield.	
<i>Other conditions affecting worker exposure</i>	
Covers indoor and outdoor use Professional use Temperature: Covers use at ambient temperatures. Body parts exposed: Assumes that potential dermal contact is limited to upper part of the body.	
<i>Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.</i>	
Additional Good Practice Advice: Ensure control measures are regularly inspected and maintained. Open doors and windows. Prevent leaks and prevent soil / water pollution caused by leaks.	
1.2. CS3: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives - Rolling, Brushing (PROC10)	
Process Categories	Roller application or brushing (PROC10)
<i>Product (article) characteristics</i>	
Physical form of product: Solid, medium dustiness	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Exposure duration <= 480 min	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Ensure operatives are trained to minimise exposures. Avoid direct eye contact with product, also via contamination on hands. Do not ingest.	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374. Use suitable eye protection. Wear suitable face shield.	
<i>Other conditions affecting worker exposure</i>	
Covers indoor and outdoor use Professional use Temperature: Covers use at ambient temperatures.	
<i>Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.</i>	
Additional Good Practice Advice: Ensure control measures are regularly inspected and maintained. Prevent leaks and prevent soil / water pollution caused by leaks.	
1.2. CS4: Worker Contributing Scenario: Mixing operations - Manual (PROC19)	
Process Categories	Manual activities involving hand contact (PROC19)
<i>Product (article) characteristics</i>	
Physical form of product: Solid, medium dustiness	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Exposure duration <= 240 min	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Ensure operatives are trained to minimise exposures. Avoid direct eye contact with product, also via contamination on hands. Do not ingest.	

Local exhaust ventilation
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use suitable eye protection.
Wear suitable face shield.

Other conditions affecting worker exposure

Outdoor use
Professional use

Temperature: Covers use at ambient temperatures.

Body parts exposed:

Assumes that potential dermal contact is limited to upper part of the body.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure control measures are regularly inspected and maintained. Open doors and windows. Prevent leaks and prevent soil / water pollution caused by leaks.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
soil	N/A	N/A	= 0.65

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	< 1 mg/m ³	MEASE	N/A

1.3. CS3: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives - Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	< 1 mg/m ³	MEASE	N/A

Additional information on exposure estimation:

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.

1.3. CS4: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	< 1 mg/m ³	MEASE	N/A

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least

equivalent levels.



Exposure Scenario

Lime (chemical), hydraulic

Exposure Scenario, 08/06/2021

Substance identity	
	Lime (chemical), hydraulic
CAS No.	85117-09-5
EINECS No.	285-561-1

Table of contents

1. **ES 1** Service life - workers; Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)

1. ES 1		Service life - workers; Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)	
1.1 TITLE SECTION			
Exposure Scenario name	Road and construction applications - Professional use of floor care products - Tackifier		
Date - Version	20/05/2021 - 1.0		
Life Cycle Stage	Service life - workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15)		
Article Category(ies)	Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a)		
Environment Contributing Scenario			
CS1 Low environmental release		ERC2	
Worker Contributing Scenario			
CS2 Mixing operations - Surfaces - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers		PROC8b - PROC9 - PROC26	
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario: Low environmental release (ERC2)			
Environmental release categories	Formulation into mixture (ERC2)		
Product (article) characteristics			
Physical form of product: Solid, very high dustiness			
Vapour pressure: < 1E-05 Pa			
1.2. CS2: Worker Contributing Scenario: Mixing operations - Surfaces - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers (PROC8b, PROC9, PROC26)			
Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Handling of solid inorganic substances at ambient temperature (PROC8b, PROC9, PROC26)		
Product (article) characteristics			
Physical form of product: Solid, very high dustiness			
Amount used, frequency and duration of use/exposure			
Duration: Exposure duration <= 240 min			
Frequency: Use frequency = 8 h/event			
Technical and organisational conditions and measures			
Technical and organisational measures Provide a basic standard of general ventilation (1 to 3 air changes per hour). Do not ingest.			
Conditions and measures related to personal protection, hygiene and health evaluation			
Personal protection Wear suitable gloves tested to EN374. Use eye protection according to EN 166.			

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Covers use at ambient temperatures. 23°C

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Mixing operations - Surfaces - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers (PROC8b, PROC9, PROC26)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	< 1 mg/m ³	MEASE	N/A

Additional information on exposure estimation:

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.