Safety Data Sheet

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

KERACEM ECO

Date of first edition: 4/9/2021

Safety Data Sheet dated 8/25/2021

version 8

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

1.1. Product identifier

Mixture identification:

Trade name: KERACEM ECO

Trade code: SK0035 .080

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

Recommended use: Cement Adhesive

Uses advised against: Data not available.

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL PTY LTD

88 Sutton Street, North Melbourne VIC 3051

Tel. +61 3 9448 8588

sales@kerakoll.com.au

1.4. Emergency telephone number

Kerakoll AU +61 3 9448 8588

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.
Skin Sens. 1B	May cause an allergic skin reaction.
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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Precautionary statements

P260	Do not breathe dust.
P280	Wear protective gloves and eye protection.
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

Portland Cement (Cr VI < 0,0002%)

Flue dust, portland cement

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

None

2.3. Other hazards

When mixtures containing cement react with water, for instance when making concrete or mortar, or when the cement becomes wet, a strong alkaline solution is produced (high pH caused by the formation of calcium, sodium and potassium hydroxides).

Cement and mixtures containing cement may irritate the eyes, the mucous system, the throat and the respiratory system and cause coughing. Frequent inhalation of cement dust or mixtures containing cement over a long period of time increases the risk of developing lung diseases.

In case of prolonged contact with the skin, both cement and mixtures containing cement, including pastes, may cause skin sensitisation due to the presence of trace amounts of chromium VI salts. Where necessary, such an effect can be minimized by incorporating a special reducing agent to maintain the water-soluble chromium VI content to concentration rates below 0.0002% (2 ppm) on the total dry weight of cement.

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: KERACEM ECO

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

Qty	Name	Ident. Numb.	Classification	Registration Number
50-75 %	Portland Cement (Cr VI < 0,0002%)	CAS:65997-15-1 EC:266-043-4	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1B, H317; STOT SE 3, H335	
2,5-4,9 %	Flue dust, portland cement	CAS:68475-76-3 EC:270-659-9	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335	01-2119486767-17
< 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.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley 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 opthalmologist 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 (CO_2).

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, inhaltion 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.

Contamined 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

The product must be stored in waterproof, dry, clean conditions and protected from contamination. Do not use aluminum containers due to incompatibility of the materials.

The product contains cement with an addition of a Chromium reducing agent (VI) and its effectiveness decreases with time. Consequently, packagings of the material indicate information about the production date, storing conditions and the appropriate storage period for the mantaining of the activity of the reducing agent and for mantaining the soluble Chromium (VI) amount under 2ppm over the total dry weight referred to cement (EN 196-10).

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
Portland Cement (Cr VI < 0,0002%)	NATIONAL	AUSTRALIA		10.000				This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
	NATIONAL	AUSTRIA		5.000				Inhalable aerosol
	NATIONAL	BELGIUM		10.000				Respirable fraction
	NATIONAL	CANADA		1.000				Canada Ontario. The value is for particulate matter containing no asbestos an <1 % crystalline silica. Respirable fraction
	NATIONAL	CANADA		10.000				Canada Québec. Total
	NATIONAL	CANADA		5.000				Canada Québec. Respirable
	NATIONAL	KOREA, REPUBLIC OF		10.000				
	NATIONAL	CROATIA		10.000				
	NATIONAL	FINLAND		5.000				Inhalable fraction
	NATIONAL	FINLAND		1.000				Respirable fraction
	NATIONAL	GERMANY		5.000				DFG
	NATIONAL	HUNGARY		10.000				Inhalable
	NATIONAL	IRELAND		1.000				Respirable fraction
	NATIONAL	ITALY		10.000				Come particelle non altrimenti specificate PNOC
	NATIONAL	ITALY		5.000				MAK
	NATIONAL	ITALY		1.000				TWA
	NATIONAL	JAPAN		1.000				Respirable dust
	NATIONAL	JAPAN		4.000				Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler.
	NATIONAL	LATVIA		6.000				
	NATIONAL	NEW ZEALAND		10.000				The value for inhalable dust containing no asbestos and less than 1% free silica.
	NATIONAL	NETHERLANDS		1.000				Respirable dust
	NATIONAL	POLAND		2.000				Respirable fraction
	NATIONAL	PORTUGAL		10.000				
	NATIONAL	PORTUGAL		1.000				
	NATIONAL	SINGAPORE		10.000				
	NATIONAL	SPAIN		4.000				Respirable fraction
	NATIONAL	SWITZERLAND		5.000				Inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA		15.000				OSHA; Total dust
	NATIONAL	UNITED STATES OF AMERICA		10.000				NIOSH; Total dust

	NATIONAL	UNITED STATES OF AMERICA	5.000	NIOSH; Respirable fraction
	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	CHILE	8.800	
	NATIONAL	INDONESIA	1.000	
	NATIONAL	MALAYSIA	10.000	
	NATIONAL	MEXICO	1.000	
	ACGIH	NNN	1	(E,R), A4 - Pulm func, resp symptoms, asthma
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 AMERICA	5.000	respirable dust
	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,	10.000	

		REPUBLIC OF			
	NATIONAL	CROATIA	10.000		
	NATIONAL	NETHERLANDS	10.000		
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	SPAIN	10.000		
	NATIONAL	CHILE	5.000		respirable fraction
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
	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
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
	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

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
Flue dust, portland cement	68475-76-3	282.000 µg/l	Freshwater	
		282.000 µg/l	Intermittent releases (freshwater)	
		28.000 µg/l	Marine water	
		6.000 mg/kg	Microorganisms in sewage treatments	
		88.000 µg/kg	Marine water sediments	
		875.000 µg/kg	Freshwater sediments	

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
Flue dust, portland cement	68475-76-3		840.000 µg/m³	840.000 µg/m³	Human Inhalation	Long Term, local effects
			4.000 mg/m³		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: Grey
Odour: Odourless
Odour threshold: N.A.
pH: =11.00 (OECD 122)
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: 1.07 g/cm3 (EN 1097-03)
Solubility in water: 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 = 0 % ; 0 g/l

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

The product is stable as long as it is properly stored (see Section 7).

Wet product is alkaline and incompatible with acids, with ammonium salts, with aluminium or other base metals. When in contact with hydrofluoric acid, mixtures contaning cement dissolve to produce corrosive silicon tetrafluoride gas. Mixtures containing cement react with water to form silicates and calcium hydroxide. Silicates in cement react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

Intact packaging and compliance with the appropriate storage conditions as indicated in Subsection 7.2 (adequate tightly closed and sealed containers, dry and cool place, no ventilation) are the essential conditions to keep the effectiveness of the reducing agent unaltered throughout the shelf life declared on bag.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Acids, ammonium salts, aluminium or other base metals. Uncontrolled use of aluminium dust in wet cement-containing products is to be avoided because it causes the production of hydrogen.

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	The product is classified: Skin Sens. 1B(H317)
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:

Flue dust, portland cement	a) acute toxicity	LD50 Oral Rat > 1848.00000 mg/kg
		LC50 Inhalation Dust Rat > 6.04000 mg/l 4h
		LD50 Skin Rat >= 2000.00000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Negative
	c) serious eye	Eye Irritant Yes

	damage/irritation	
	d) respiratory or skin sensitisation	Skin Sensitization Positive
	f) carcinogenicity	Genotoxicity Rat Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 16.00000 mg/kg
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 >= 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
Flue dust, portland cement	CAS: 68475-76-3 - EINECS: 270-659-9	a) Aquatic acute toxicity : NOEC Fish zebrafish = 11.10000 mg/L 96h ECHA
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 100.00000 mg/L 48h OECD 202
		b) Aquatic chronic toxicity : NOELR Daphnia Daphnia magna = 50.00000 mg/L 48h OECD 211
		b) Aquatic chronic toxicity : EL10 Daphnia Daphnia magna = 68.20000 mg/L 48h OECD 211 - 21 days
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 28.20000 mg/L 72h OECD 20
		a) Aquatic acute toxicity : EC50 Sludge activated sludge = 596.00000 mg/L OECD Guideline No. 209
		b) Aquatic chronic toxicity : EC50 = 9931.00000 mg/kg ,,PARCOM (1994): MAFF/ERT Harmonised Protocol: A sediment Bioassay using an Amphipod, Corophium sp. Draft 1994. - sediment
		d) Terrestrial toxicity : EC50 Worm Eisenia fetida = 1000.00000 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests)

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 >= 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 8: Corrosive; HP 4: Irritant — skin irritation and eye damage; HP 5: Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

---

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

ADR-Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

N.A.

14.3. Transport hazard class(es)

N.A.

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

N.A.

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

N.A.

IMDG-EMS: N/A

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID) :

ADR-Label: N.A. N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA) :

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A

N.A.

Sea (IMDG) :

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisioning: N/A

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

EN 196-10 – "Methods of Testing Cement - Part 10: Determination of the water-soluble chromium (VI) content of cement"

According to Annex XVII, Point 47, under Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as amended by Regulation No. 552/2009, cement and mixtures containing cement shall not be placed on the market or used if they contain, after mixing with water, more than 0.0002% (2 ppm) of soluble chromium (VI) of the total dry weight of

the cement. Compliance with this threshold limit is ensured through the introduction of a reducing agent into the preparation, the effectiveness of which is guaranteed for a certain period of time (shelf life), and the maintenance of the appropriate storage conditions (see Subsection 7.2 and Section 10).

Cement is a mixture and, as such, is not subject to REACH registration, which is mandatory for substances. Cement clinker is a substance, but it is exempt from registration pursuant to article 2.7 (b) and Annex V.10 of REACH.

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. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 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: 75

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

N.A.

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

No Substance Listed

German Water Hazard Class.

NWG: Not hazardous for water

SVHC Substances:

No data available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
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	Calculation method
3.4.2/1B	Calculation method
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:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION

Exposure Scenario

Flue dust, portland cement

Exposure Scenario, 08/06/2021

Substance identity	
	Flue dust, portland cement
CAS No.	68475-76-3
EINECS No.	270-659-9
Registration number	01-2119486767-17

Table of contents

1. ES 1 Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15)

1.1 TITLE SECTION

Exposure Scenario name	Road and construction applications - Professional use of floor care products - Tackifier
Date - Version	25/03/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	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 - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance	PROC5 - PROC8a - PROC8b - PROC10 - PROC11 - PROC19 - PROC26 - PROC28

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 - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)

Process Categories	Mixing or blending in batch processes - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Non industrial spraying - Manual activities involving hand contact - Handling of solid inorganic substances at ambient temperature - Manual maintenance (cleaning and repair) of machinery (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)

Product (article) characteristics

Physical form of product:

Solid, very high dustiness
Solid in solution
pasty

Concentration of substance in product:

Covers percentage substance in the product up to 5 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration <= 480 min

Frequency:

Use frequency = 8 h/event

Technical and organisational conditions and measures

Technical and organisational measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.
Ensure operatives are trained to minimise exposures.
For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8.
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

Covers indoor and outdoor use
Professional use
Temperature: Covers use at ambient temperatures. 23°C
Body parts exposed:
Assumes that potential dermal contact is limited to hands and forearms.

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

Additional Good Practice Advice:

Ensure regular inspection, cleaning and maintenance of equipment and machines. Ensure procedures and training for emergency decontamination and disposal are in place. Ensure control measures are regularly inspected and maintained.

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	< 1 mg/m³	MEASE	<= 0.83

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.