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

BIOCALCE FONDO UNIVERSALE
Date of first edition: 6/1/2021
Safety Data Sheet dated 23/12/2022
version 6

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

1.1. Product identifier

Mixture identification:

Trade name: BIOCALCE FONDO UNIVERSALE

Trade code: 001043002 -5

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

Recommended use: DZKK_004

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

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

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)

Eye Dam. 1	Causes serious eye damage.
DECL10	This titanium dioxide-containing product is not classified as carcinogen by inhalation because it does not meet the criteria stated in Note 10, Annex VI of Regulation (EC) 1272/2008. Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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

Hazard pictograms and Signal Word



Danger

Hazard statements

H318	Causes serious eye damage.

Precautionary statements

P102	Keep out of reach of children.
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.

Special Provisions:

EUH208 Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Contains

Calcium dihydroxide

Dir. 2004/42/EC (VOC directive)

Primers

EU limit value for this product (cat. A/g): 30 g/l

This product contains max 10.27 g/l VOC.

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 >= 0.1%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: BIOCALCE FONDO UNIVERSALE

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

Qty	Name	Ident. Numb.	Classification	Registration Number
5-9,9 %	Titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	
2,5-4,9 %	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
< 1 %		CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
< 0,0015 %	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS:55965-84-9 Index:613-167-00-5	Acute Tox. 2, H330 Acute Tox. 2, H310 Acute Tox. 3, H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, EUH071 Specific Concentration Limits: C ≥ 0.6%: Skin Corr. 1C H314 0.06% ≤ C < 0.6%: Skin Irrit. 2 H315 C ≥ 0.6%: Eye Dam. 1 H318 0.06% ≤ C < 0.6%: Eye Irrit. 2 H319 C ≥ 0.0015%: Skin Sens. 1A H317	

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.

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:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

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.

Remove persons to safety.

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.

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	Behaviour	Notes
	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	POLAND		10.000					
	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	BELGIUM		10.000					
	NATIONAL	CROATIA		10.000					
	NATIONAL	NETHERLANDS		10.000					
	NATIONAL	PORTUGAL		10.000					
	NATIONAL	SPAIN		10.000					
Titanium dioxide	NATIONAL	AUSTRALIA		10					
	NATIONAL	BELGIUM		10.000					
	NATIONAL	CANADA		10.000					Ontario
	NATIONAL	CANADA		10.000					Quebeq
	NATIONAL	DENMARK		6.000		12.000			Long term and short term: total dust
	NATIONAL	FRANCE		11.000					Inhalable aerosol
	NATIONAL	GERMANY		0.300		2.400			DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density;
	NATIONAL	IRELAND		10.000					Inhalable fraction
	NATIONAL	IRELAND		8.000					Respirable fraction
	NATIONAL	LATVIA		10.000					
	NATIONAL	NEW ZEALAND		10000.000					The value for inhalable dust containing no asbestos and less than 1% free silica
	NATIONAL	CHINA		8.000					Inhalable fraction
	NATIONAL	POLAND		10.000		30.000			

	NATIONAL	ROMANIA	10.000	15.000	
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	SPAIN	10.000		Inhalable aerosol
	NATIONAL	SWEDEN	5.000		Inhalable aerosol
	NATIONAL	SWITZERLAND	3.000		Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA; total 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	ARGENTINA	10.000		
	NATIONAL	AUSTRIA	5.000	10.000	
	NATIONAL	BULGARIA	10.000		
	NATIONAL	CROATIA	10.000		total dust
	NATIONAL	CROATIA	4.000		respirable dust
	NATIONAL	GREECE	10.000		
	NATIONAL	GREECE	50.000		
	NATIONAL	GREECE	5.000		
	NATIONAL	INDONESIA	10.000		
	NATIONAL	LITHUANIA	5.000		
	NATIONAL	NORWAY	5.000		
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	RUSSIAN FEDERATION	10.000		
	NATIONAL	SLOVAKIA	5.000		
	NATIONAL	SLOVENIA	6.000		
	NATIONAL	SOUTH SUDAN	10.000		Inhalable fraction
	NATIONAL	SOUTH SUDAN	5.000		Respirable fraction
	NATIONAL	TAIWAN, PROVINCE OF CHINA	10.000		
	ACGIH	NNN	10.000		A4 - LRT irr
Quartz	NATIONAL	AUSTRALIA	0.050		Respirable fraction
	NATIONAL	AUSTRIA	0.050		MAK value, Respirable fraction
	NATIONAL	BELGIUM	0.100		Respirable dust , Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work
	NATIONAL	CANADA	0.100		Canada Ontario; Respirable aerosol
	NATIONAL	CANADA	0.100		Canada Quebec, Respirable fraction
	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		0.100			Respirable fraction
	NATIONAL	IRELAND		0.100			Respirable fraction
	NATIONAL	SPAIN		0.050			Respirable fraction
	NATIONAL	SWEDEN		0.100			Respirable fraction
	NATIONAL	SWITZERLAND		0.150			Respirable aerosol
	NATIONAL	NETHERLANDS		0.075			Respirable fraction
	NATIONAL	ITALY		0.100			Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008
	NATIONAL	UNITED STATES OF AMERICA		0.050			NIOSH
	NATIONAL	UNITED STATES OF AMERICA		0.050			Respirable fraction, mppcf × 35.3 = million particles per cubic meter = particles per c.c.
	NATIONAL	INDIA		10.000			
	NATIONAL	NORWAY		0.300			Total dust
	NATIONAL	NORWAY		0.100			Respirable fraction
	NATIONAL	POLAND		0.100			Respirable fraction
	NATIONAL	PORTUGAL		0.050			Respirable fraction
	NATIONAL	SLOVENIA		0.050	0.400		
Calcium dihydroxide	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 STATES OF AMERICA		5.000			NIOSH
	NATIONAL	UNITED STATES OF		15.000			OSHA; inhalable aerosol

		AMERICA					
	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
Mica	NATIONAL	AUSTRALIA	2.500				
	NATIONAL	AUSTRIA	10.000				Inhalable aerosol
	NATIONAL	BELGIUM	3.000				
	NATIONAL	CANADA	3.000				Ontario: respirable aerosol
	NATIONAL	CANADA	3.000				Quebec
	NATIONAL	DENMARK	0.300	0.300			Long term and short term: fibres per cm^3
	NATIONAL	IRELAND	10.000				Inhalable fraction
	NATIONAL	IRELAND	0.800				respirable fraction
	NATIONAL	LATVIA	4.000				and phlogopite, muscovite

NATIONAL	NEW ZEALAND	3.000		respirable dust
NATIONAL	CHINA	2.000		Inhalable fraction
NATIONAL	CHINA	1.500		Respirable fraction
NATIONAL	SINGAPORE	3.000		respirable dust
NATIONAL	KOREA, REPUBLIC OF	3.000		
NATIONAL	SWITZERLAND	3.000		Respirable aerosol
NATIONAL	UNITED STATES OF AMERICA	3.000		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	0.800		Respirable aerosol
NATIONAL	CHILE	2.630		
NATIONAL	CROATIA	10.000		Total dust
NATIONAL	CROATIA	0.800		Respirable dust
NATIONAL	ARGENTINA	3.000		
NATIONAL	SPAIN	3.000		Respirable fraction
NATIONAL	SOUTH AFRICA	10.000		Inhalable particulate
NATIONAL	SOUTH AFRICA	1.000		Respirable particulate
NATIONAL	TAIWAN, PROVINCE OF CHINA	3.000		
ACGIH	NNN	3.000		(R) - Pneumoconiosis
NATIONAL	AUSTRALIA	0.050		Respirable fraction
NATIONAL	AUSTRIA	0.050		respirable fraction
NATIONAL	BELGIUM	0.100		Respirable dust , Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work
NATIONAL	CANADA	0.100		Canada Ontario. Respirable aerosol
NATIONAL	CANADA	0.100		Canada Quebec, respirable fraction
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	0.100		Respirable aerosol
NATIONAL	IRELAND	0.100		Respirable fraction
NATIONAL	SPAIN	0.050		Respirable fraction
NATIONAL	SWEDEN	0.100		Respirable aerosol
NATIONAL	SWITZERLAND	0.150		Respirable aerosol
NATIONAL	NETHERLANDS	0.075		Respirable dust
NATIONAL	ITALY	0.100		Polvere di silice cristallina respirabile (frazione inalabile). D.Lgs 81/2008
NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH

	NATIONAL	CROATIA		0.100			
	NATIONAL	ESTONIA		0.100			
	NATIONAL	LITHUANIA		0.100			
	NATIONAL	NORWAY		0.300			Total dust
	NATIONAL	NORWAY		0.100			Respirable dust
	NATIONAL	POLAND		0.100			Respirable fraction
	NATIONAL	PORTUGAL		0.050			
	NATIONAL	SLOVENIA		0.050	0.400		
	EU	NNN		0.100			Polvere di silice cristallina respirabile, frazione inalabile. (R), A2 - Pulm fibrosis, lung cancer. Directive 2017/2398
	NATIONAL	INDIA		10.000			
sodium hydroxide; caustic soda	NATIONAL	AUSTRALIA	C			2	
	NATIONAL	AUSTRIA		2.000		4.000	Long term and short term: inhalable aerosol
	NATIONAL	BELGIUM		2.000			
	NATIONAL	CANADA	C			2.000	Ontario
	NATIONAL	CANADA	C			2.000	Quebec
	NATIONAL	DENMARK		2.000		2.000	
	NATIONAL	FINLAND	C			2.000	
	NATIONAL	FRANCE		2.000			
	NATIONAL	HUNGARY		2.000		2.000	
	NATIONAL	IRELAND				2.000	
	NATIONAL	JAPAN	C	2.000			JSOH; Reference value to the maximal exposure concentration of the substance during a working day
	NATIONAL	LATVIA		0.500			
	NATIONAL	NEW ZEALAND	C			2.000	
	NATIONAL	CHINA	C			2.000	
	NATIONAL	POLAND		0.500		1.000	
	NATIONAL	ROMANIA		1.000		3.000	
	NATIONAL	SINGAPORE				2.000	
	NATIONAL	KOREA, REPUBLIC OF	C			2.000	
	NATIONAL	SPAIN		2.000			
	NATIONAL	SWEDEN		1.000		1.000	Long term and short term: inhalable fraction
	NATIONAL	SWITZERLAND		2.000		2.000	long term and short term: inhalable fraction
	NATIONAL	UNITED STATES OF AMERICA	C			2.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA	C	2.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND				2.000	
	NATIONAL	BULGARIA		2.000			
	NATIONAL	CZECHIA		1.000		2.000	

	NATIONAL	ESTONIA		1.000	2.000	
	NATIONAL	GREECE		2.000	2.000	
	NATIONAL	SLOVAKIA		2.000		
	NATIONAL	SLOVENIA		2.000		
	NATIONAL	TAIWAN, PROVINCE OF CHINA		2.000		
	ACGIH	NNN	C		2	URT, eye, and skin irr
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	NATIONAL	AUSTRIA		0.050		
	NATIONAL	GERMANY		0.200	0.400	DFG; Long term and short term: inhalable fraction
	NATIONAL	SWITZERLAND		0.200	0.400	Inhalable fraction
	NATIONAL	KOREA, REPUBLIC OF		0.100		
	NATIONAL	NETHERLANDS		0.200		

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
Titanium dioxide	13463-67-7	0.184 mg/l	Fresh Water		
		0.018 mg/l	Marine water		
		1.000 mg/kg	Intermittent releases (fresh water)		
		100.000 mg/kg	Intermittent releases (marine water)		
		100.000 mg/kg	Microorganisms in sewage treatments		
Calcium dihydroxide	1305-62-0	490.000 µg/l	Fresh Water		
		490.000 µg/l	Intermittent releases (fresh water)		
		320.000 µg/l	Marine water		
		3.000 mg/l	Microorganisms in sewage treatments		
		1080.000 mg/kg	Soil		
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	3.390 µg/l	Fresh Water		
		3.390 µg/l	Intermittent releases (fresh water)		
		3.390 µg/l	Marine water		

3.390 µg/l	Intermittent releases (marine water)
230.000 µg/l	Microorganisms in sewage treatments
27.000 µg/l	Freshwater sediments
27.000 µg/l	Marine water sediments
10.000 µg/l	Soil

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency Remark
Titanium dioxide	13463-67-7		10.000 mg/m³		Human Inhalation	Long Term, local effects
Calcium dihydroxide	1305-62-0		1.000 mg/m³	1.000 mg/m³	Human Inhalation	Long Term, local effects
			4.000 mg/m³	4.000 mg/m³	Human Inhalation	Short Term, local effects
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9		20.000 µg/m³	20.000 µg/m³	Human Inhalation	Long Term, local effects
			40.000 µg/m³	20.000 µg/m³	Human Inhalation	Short Term, local effects
				90.000 µg/kg	Human Oral	Long Term, systemic effects
				110.000 µg/kg	Human Oral	Short Term, systemic effects

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

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

Protection for hands:

Nitrile rubber .

Respiratory protection:

N.A.

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: Liquid

Colour: Whitish

Odour: Light

Odour threshold: N.A.

pH: =11.40 (OECD 122)

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.
Flash point: > 93°C
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.56 g/cm3 (ISO 2811)
Solubility in water: N.A.
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 = 0.66 % ; 10.27 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

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	Not classified
	Based on available data, the classification criteria are not met
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	Not classified
	Based on available data, the classification criteria are not met
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:

Titanium dioxide	a) acute toxicity	LD50 Oral Rat > 5000.00 mg/kg

		LC50 Inhalation > 6.82 mg/l	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	
	i) STOT-repeated exposure	No Observed Adverse Effect Level 1000.00	
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
	a) acute toxicity	LD50 Oral > 2000.00000 mg/kg	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	a) acute toxicity	LD50 Oral Rat = 69.00 mg/kg	
		LD50 Skin Rabbit = 141.00 mg/kg	
		LC50 Inhalation Rat = 0.33 mg/l 4h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	
	f) carcinogenicity	Genotoxicity Negative	
		Carcinogenicity Skin Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 22.70000 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
Titanium dioxide	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas (Cavedano americano) > 1000.00 mg/L 96h
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata (alghe cloroficee) > 100.00 mg/L 72h
		a) Aquatic acute toxicity : NOEC Algae = 5600.00 mg/L

		a) Aquatic acute toxicity : EC50 Daphnia |Daphnia magna (Pulce d'acqua grande) > 100.00 mg/L 48h
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).
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS: 55965-84-9 - INDEX: 613-167-00-5	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 0.19000 mg/L 96h EPA OPP 72-1 (Fish Acute Toxicity Test)
		b) Aquatic chronic toxicity : NOEC Fish Danio rerio = 0.02000 mg/L ,,OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 35days
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 0.16000 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test)
		b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 0.10000 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days
		a) Aquatic acute toxicity : EC50 Algae Skeletonema costatum = 0.00 mg/L 96h ,,OECD Guideline 201 (Alga, Growth Inhibition Test)
		a) Aquatic acute toxicity : EC50 Sludge activated sludge = 4.50000 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
		d) Terrestrial toxicity : LC50 Worm Eisenia fetida = 613.00000 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days
		e) Plant toxicity : NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000.00000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days

12.2. Persistence and degradability

Component	Persitence/Degradability:
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Non-readily biodegradable

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes:
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Bioaccumulative	BCF - Bioconcentrantion factor	54.000	≤ 54

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

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. Disposal through discharge into wastewater is not permitted

A waste code according to the European List of Wastes (LoW) 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 4: Irritant — skin irritation and eye damage

SECTION 14: Transport information

14.1. UN number or ID number

N/A

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Shipping Name: N/A

IMDG-Shipping Name: N/A

14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 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 Provisions: N/A

Sea (IMDG):

IMDG-Stowage and handling: N/A

IMDG-Segregation: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisions: 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. 2020/217 (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: 3

Restrictions related to the substances contained: 75

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

N.A.

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Non-hazardous to waters

SVHC Substances:

No data available

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 0.66 %

Volatile Organic compounds - VOCs = 10.27 g/L

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.
H351	Suspected of causing cancer if inhaled.
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
3.6/2	Carc. 2	Carcinogenicity, Category 2
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
3.3/1	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:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL 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)

Product (article) characteristics

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)

Product (article) characteristics

Physical form of product:

Solid, medium dustiness

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration <= 480 min

Technical and organisational conditions and measures

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 %

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

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.

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.

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

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Solid, medium dustiness

Amount used, frequency and duration of use/exposure

Duration:
Exposure duration <= 480 min

Technical and organisational conditions and measures

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.

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

Covers indoor and outdoor use
Professional use
Temperature: Covers use at ambient temperatures.

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. 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)

Product (article) characteristics

Physical form of product:
Solid, medium dustiness

Amount used, frequency and duration of use/exposure

Duration:
Exposure duration <= 240 min

Technical and organisational conditions and measures

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/m³	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/m³	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/m³	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.