

Safety Data Sheet

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

BIOCALCE SILICATO FONDO

Date of first edition: 10/29/2021

Safety Data Sheet dated 1/27/2022

version 6

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

1.1. Product identifier

Mixture identification:

Trade name: BIOCALCE SILICATO FONDO

Trade code: 001042004-6

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

Recommended use: Mineral levelling products for substrates

Uses advised against: Data 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)

0 The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Special Provisions:

EUH208 Contains octhlinone (ISO); 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

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.

EUH210 Safety data sheet available on request.

Dir. 2004/42/EC (VOC directive)

Primers

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

This product contains max 11.86 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 $\geq 0.1\%$.

Other Hazards: Crystalline silica in breathable fraction present in the product does not contribute to the hazard classification according to the criteria laid down by the EC Regulation 1272/2008 (CLP) by virtue of the physical state of the product itself (liquid) as it is marketed and reasonably be expected to be used. (Position IMA-Europe, Classification of mixtures in liquid form containing crystalline silica (May 2020)). The liquid mixture, due to hardening or exposure to heat, can lose its liquid content (water and other liquid components) and appear in a solid state; in case of handling of the solid mixture for disposal (non-compliant product) it is necessary to apply the appropriate preventive measures referred to in section 13.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: BIOCALCE SILICATO FONDO

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

Qty	Name	Ident. Numb.	Classification	Registration Number
2,5-4,9 %	Potassium silicate	CAS:1312-76-1 EC:215-199-1	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	01-2119456888-17
1-2,4 %	Quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
< 0,0015 %	octhilinone (ISO); 2-octyl-2H-isothiazol-3-one	CAS:26530-20-1 EC:247-761-7 Index:613-112-00-5	Acute Tox. 2, H330 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Corrosive to the respiratory tract., M-Chronic:100, M-Acute:100 Specific Concentration Limits: C $\geq 0.0015\%$: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral: 125mg/kg bw ATE - Dermal: 311mg/kg bw	
< 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 $\geq 0.6\%$: Skin Corr. 1C H314 0.06% $\leq$ C < 0.6%: Skin Irrit. 2 H315 C $\geq 0.6\%$: Eye Dam. 1 H318 0.06% $\leq$ C < 0.6%: Eye Irrit. 2 H319 C $\geq 0.0015\%$: Skin Sens. 1A H317	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

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

N.A.

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

N.A.

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.

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/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Notes
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

Quartz	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, 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	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%.

Mica	NATIONAL	CHINA	0.500		Inhalable fraction. Free SiO ₂ < 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	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

Titanium dioxide	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	ITALY	3.000		
	NATIONAL	CHILE	2.630		
	NATIONAL	CROATIA	10.000		Total dust
	NATIONAL	CROATIA	0.800		Respirable dust
	NATIONAL	ARGENTINA	3.000		
	NATIONAL	MALAYSIA	3.000		
	NATIONAL	MEXICO	3.000		Respirable fraction
	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		(R) - Pneumoconiosis
	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	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	JAPAN	0.300		JSOH; Nanoparticle, as Ti
	NATIONAL	LATVIA	10.000		
	NATIONAL	NEW ZEALAND	10.000		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,	10.000		

Quartz		REPUBLIC OF			
	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	ITALY	10.000		
	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	ESTONIA	5.000		
	NATIONAL	GREECE	10.000		
	NATIONAL	GREECE	5.000		
	NATIONAL	INDONESIA	10.000		
	NATIONAL	LITHUANIA	5.000		
	NATIONAL	MALAYSIA	10.000		
	NATIONAL	MEXICO	10.000		
	NATIONAL	NORWAY	5.000		
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	RUSSIAN FEDERATION	10.000		
	NATIONAL	SLOVAKIA	5.000		
	NATIONAL	SLOVENIA	6.000		
	NATIONAL	SOUTH AFRICA	10.000		Inhalable particulate
	NATIONAL	SOUTH AFRICA	5.000		Respirable particulate
	NATIONAL	TAIWAN, PROVINCE OF CHINA	10.000		
	ACGIH	NNN	10		A4 - LRT irr
	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

Cellulose	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
	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	FRANCE	10.000		Inhalable aerosol
	NATIONAL	IRELAND	10.000	20.000	Long term and short term: inhalable fraction

	NATIONAL	IRELAND	4.000		Respirable fraction
	NATIONAL	LATVIA	2.000		
	NATIONAL	NEW ZEALAND	10.000		The value for inhalable dust containing no asbestos and less than 1% free silica
	NATIONAL	CHINA	10.000		
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	SPAIN	10.000		Inhalable aerosol
	NATIONAL	SWITZERLAND	3.000		Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	10.000		NIOSH; Total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000		NIOSH; Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA; Total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000		OSHA; Respirable dust
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000	20.000	Long term and short term: inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	5.000		Respirable aerosol
	NATIONAL	ITALY	10.000		
	NATIONAL	ARGENTINA	10.000		
	NATIONAL	ESTONIA	10.000		
	NATIONAL	INDONESIA	10.000		
	NATIONAL	MALAYSIA	10.000		
	NATIONAL	MEXICO	10.000		
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	CHILE	8.800		
	NATIONAL	RUSSIAN FEDERATION		10.000	
	NATIONAL	CROATIA	10.000	20.000	Long term and short term: total dust
	NATIONAL	CROATIA	4.000		Respirable dust
	NATIONAL	SOUTH AFRICA	10.000	20.000	Long term and short term: inhalable particulate
	NATIONAL	SOUTH AFRICA	5.000		Respirable particulate
	ACGIH	NNN	10		URT irr
naphtha (petroleum), hydrodesulphurized	NATIONAL	LATVIA	200.000	300.000	

heavy. Low boiling
point hydrogen
treated naphtha

2-(2-
butoxyethoxy)
ethanol; diethylene
glycol monobutyl
ether

NATIONAL	POLAND	300.000		900.000		
NATIONAL	SPAIN	290.000	50.000	580.000	100.000	
EU	NNN	67.5	10	101.2	15	Indicative Occupational Exposure Limit Value (IOELV)
NATIONAL	BELGIUM	67.500	10.000	101.200	15.000	
NATIONAL	DENMARK	100.000		200.000		
NATIONAL	FINLAND	68.000	10.000			
NATIONAL	FRANCE	67.500	10.000	101.200	15.000	Italic type: Indicative statutory limit values
NATIONAL	GERMANY	67.000	10.000	100.000	15.000	AGS; Long term and short term: inhalable aerosol and vapour
NATIONAL	GERMANY	67.000	10.000	100.500	15.000	DFG; MAK value applies for the sum of the concentrations of diethylene glycol monobutyl ethe and its acetate in the air; Long term and short term: Inhalable fraction and vapour
NATIONAL	HUNGARY	67.500		101.200		
NATIONAL	IRELAND	67.500	10.000	101.200	15.000	
NATIONAL	LATVIA	67.500	10.000	101.200	15.000	
NATIONAL	POLAND	67.000		100.000		
NATIONAL	ROMANIA	67.500	10.000	101.200	15.000	
NATIONAL	SPAIN	67.500	10.000	101.200	15.000	
NATIONAL	SWEDEN	68.000	10.000	101.000	15.000	
NATIONAL	SWITZERLA ND	67.000	10.000	101.200	15.000	
NATIONAL	NETHERLA NDS	50.000		100.000		
NATIONAL	TURKEY	67.500	10.000	101.200	15.000	
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	67.500	10.000	101.200	15.000	
NATIONAL	ITALY	67.500	10.000	101.200	15.000	
NATIONAL	BULGARIA	67.500	10.000	101.200	15.000	
NATIONAL	CROATIA	67.500	10.000	101.200	15.000	
NATIONAL	GREECE	67.500	10.000	101.200	15.000	
NATIONAL	ICELAND	67.500	10.000	101.200	15.000	
NATIONAL	SLOVAKIA	67.500	10.000	101.200	15.000	
NATIONAL	CZECHIA	70.000		100.000		
NATIONAL	KOREA, REPUBLIC OF		10.000			
NATIONAL	NORWAY	68.000	10.000			
NATIONAL	RUSSIAN FEDERATIO N			10.000		
NATIONAL	UNITED STATES OF AMERICA	67.500	10.000			Ihalable fraction and vapour

Barium sulfate	NATIONAL	PORTUGAL	10.000				
	ACGIH	NNN	10				(IFV) - Hematologic, liver and kidney eff
	EU	NNN	67.5	10	101.2	15	
	NATIONAL	AUSTRALIA	10.000				
	NATIONAL	BELGIUM	5.000				Without asbestos fibers and <1% crystalline silica
	NATIONAL	CANADA	5.000				Ontario; This value is for particulate matter containing no asbestos and <1% crystalline silica
	NATIONAL	CANADA	10.000				Quebec
	NATIONAL	GERMANY	0.300		2.400		DFG; Multiplied by the density of the material; Long term and short term: respirable fraction
	NATIONAL	GERMANY	4.000				DFG; Inhalable fraction
	NATIONAL	IRELAND	2.000				Respirable fraction
	NATIONAL	LATVIA	6.000				
	NATIONAL	NEW ZEALAND	10.000				
	NATIONAL	CHINA	10.000				
	NATIONAL	CHINA	5.000				Inhalable fraction; barite
	NATIONAL	SINGAPORE	10.000				
	NATIONAL	SPAIN	10.000				Inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	10.000				NIOSH; total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000				NIOSH; respirable fraction
	NATIONAL	UNITED STATES OF AMERICA	15.000				OSHA; inhalable fraction
	NATIONAL	UNITED STATES OF AMERICA	5.000				OSHA; respirable aerosol
Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	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
	ACGIH	NNN	5				(I, E) - Pneumoconiosis
	NATIONAL	AUSTRIA	1000.000		4000.000		Long term and short term: INHALABLE FRACTION
	NATIONAL	DENMARK	1000.000		2000.000		
	NATIONAL	GERMANY	1000.000		8000.000		AGS; Long term and short term: inhalable aerosol
	NATIONAL	GERMANY	200.000		400.000		DFG; Long term and short term: inhalable aerosol

2-methoxy-1-methylethyl acetate	NATIONAL	SWITZERLAND	1000.000				
	NATIONAL	RUSSIAN FEDERATION		10.000			
	NATIONAL	SLOVAKIA	100.000				
	NATIONAL	AUSTRALIA	274.000	50.000	548.000	100.000	
	NATIONAL	AUSTRIA	275.000	50.000	550.000	100.000	
	NATIONAL	BELGIUM	275.000	50.000	550.000	100.000	
	NATIONAL	CANADA	270.000	50.000			Ontario
	NATIONAL	DENMARK	275.000	50.000	550.000	100.000	
	NATIONAL	FINLAND	270.000	50.000	550.000	100.000	
	NATIONAL	FRANCE	275.000	50.000	550.000	100.000	
	NATIONAL	GERMANY	270.000	50.000	270.000	100.000	AGS
	NATIONAL	GERMANY	270.000	50.000	270.000	100.000	DFG
	NATIONAL	HUNGARY	270.000		550.000		
	NATIONAL	IRELAND	275.000	50.000	550.000	100.000	
	NATIONAL	ISRAEL	270.000	50.000			
	NATIONAL	ITALY	275.000	50.000	550.000	100.000	
	NATIONAL	LATVIA	275.000	50.000	550.000	100.000	
	NATIONAL	ROMANIA	275.000	50.000	550.000	100.000	
	NATIONAL	SPAIN	275.000	50.000	550.000	100.000	
	NATIONAL	SWEDEN	275.000	50.000	550.000	100.000	
	NATIONAL	SWITZERLAND	275.000	50.000	275.000	50.000	
	NATIONAL	NETHERLANDS	275.000				
	NATIONAL	TURKEY	275.000	50.000	550.000	100.000	
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	274.000	50.000	548.000	100.000	
	NATIONAL	BULGARIA	275.000	50.000	550.000	100.000	
	NATIONAL	CZECHIA	270.000		550.000		
	NATIONAL	CROATIA	275.000	50.000	550.000	100.000	
	NATIONAL	ESTONIA	275.000	50.000	550.000	100.000	
	NATIONAL	ICELAND	275.000	50.000	550.000	100.000	
	NATIONAL	LITHUANIA	250.000	50.000	400.000	75.000	
	NATIONAL	NORWAY	270.000	5.000			
	NATIONAL	POLAND	260.000		520.000		
	NATIONAL	PORTUGAL	275.000	50.000	550.000	100.000	
	NATIONAL	RUSSIAN FEDERATION				10.000	
	NATIONAL	SLOVAKIA	275.000	50.000	550.000	100.000	
	NATIONAL	SLOVENIA	275.000	50.000	550.000	100.000	
	NATIONAL	UNITED STATES OF AMERICA		50.000			
sodium hydroxide; caustic soda	EU	NNN	275	50	550	100	Skin
	NATIONAL	AUSTRALIA C			2		

potassium hydroxide; caustic potash	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	SWITZERLA ND		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
	NATIONAL	AUSTRALIA	C		2.000	
	NATIONAL	AUSTRIA		2.000		Inhalable fraction
	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
	NATIONAL	NEW ZEALAND	C		2.000	
	NATIONAL	CHINA	C		2.000	
	NATIONAL	POLAND		0.500	1.000	
	NATIONAL	SINGAPORE			2.000	
	NATIONAL	KOREA, REPUBLIC OF	C		2.000	
	NATIONAL	SPAIN		2.000		
	NATIONAL	SWEDEN		1.000	2.000	
	NATIONAL	SWITZERLAND		2.000		Inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	C		2.000	NIOSH
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND			2.000	
	NATIONAL	ITALY	C		2.000	
	NATIONAL	ARGENTINA	C		2.000	
	NATIONAL	BULGARIA		2.000		
	NATIONAL	CZECHIA		1.000	2.000	
	NATIONAL	CHILE	C		2.000	
	NATIONAL	CROATIA			2.000	
	NATIONAL	ESTONIA		2.000		
	NATIONAL	GREECE		2.000	2.000	
	NATIONAL	INDONESIA			2.000	
	NATIONAL	ICELAND			2.000	
	NATIONAL	MALAYSIA	C		2.000	
	NATIONAL	MEXICO	C		2.000	
	NATIONAL	NORWAY	C		2.000	
	NATIONAL	PORTUGAL	C		2.000	
	NATIONAL	SOUTH AFRICA			2.000	
	ACGIH	NNN	C		2	URT, eye, and skin irr
sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen	NATIONAL	RUSSIAN FEDERATION			5.000	
Diiron trioxide	NATIONAL	AUSTRALIA		5.000		
	NATIONAL	AUSTRIA		5.000	10.000	long term and short term: respirable aerosol
	NATIONAL	BELGIUM		5.000	2.000	
	NATIONAL	CANADA		5.000		Ontario; respirable aerosol
	NATIONAL	CANADA		5.000		Québec

NATIONAL	DENMARK	3.500	7.000	
NATIONAL	FINLAND	5.000		Calculated as Fe; fume
NATIONAL	HUNGARY	6.000		Respirable aerosol
NATIONAL	IRELAND	5.000	10.000	
NATIONAL	NEW ZEALAND	5.000		
NATIONAL	POLAND	5.000	10.000	
NATIONAL	ROMANIA	5.000	10.000	
NATIONAL	SINGAPORE	5.000		
NATIONAL	KOREA, REPUBLIC OF	5.000		
NATIONAL	SPAIN	5.000		
NATIONAL	SWEDEN	3.500		
NATIONAL	SWITZERLAND	3.000		Respirable aerosol
NATIONAL	UNITED STATES OF AMERICA	5.000		NIOSH; AS Fe, total particulate
NATIONAL	UNITED STATES OF AMERICA	10.000		OSHA
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	5.000	10.000	
NATIONAL	ITALY	5.000		
NATIONAL	ARGENTINA	5.000		
NATIONAL	BULGARIA	5.000		
NATIONAL	CROATIA	5.000		
NATIONAL	ESTONIA	3.500		
NATIONAL	FRANCE	5.000		
NATIONAL	GERMANY	1.250		
NATIONAL	GREECE	10.000	10.000	
NATIONAL	INDONESIA	5.000		
NATIONAL	ICELAND	3.500		
NATIONAL	LITHUANIA	3.500		
NATIONAL	MALAYSIA	5.000	2.000	
NATIONAL	MEXICO	5.000		Respirable fraction
NATIONAL	NORWAY	3.000		
NATIONAL	PORTUGAL	5.000		
NATIONAL	RUSSIAN FEDERATION	6.000		
NATIONAL	SLOVAKIA	1.500		
NATIONAL	SLOVENIA	6.000		
NATIONAL	SOUTH AFRICA	5.000		Respirable particulate
NATIONAL	SOUTH AFRICA	10.000		Inhalable particulate
NATIONAL	TAIWAN, PROVINCE OF CHINA	10.000		
NATIONAL	HUNGARY	6.000		

Carbon black	ACGIH	NNN	5		(R), A4 - Pneumoconiosis
	NATIONAL	AUSTRALIA	3.000		
	NATIONAL	BELGIUM	3.000		
	NATIONAL	CANADA	3.000		Ontario; Inhalable fraction
	NATIONAL	CANADA	3.500		Québec
	NATIONAL	DENMARK	3.500	7.000	
	NATIONAL	FINLAND	3.500	7.000	
	NATIONAL	FRANCE	3.500		
	NATIONAL	IRELAND	3.500	7.000	
	NATIONAL	ISRAEL	3.500		Inhalable fraction
	NATIONAL	JAPAN	1.000		JSOH; respirable dust
	NATIONAL	JAPAN	4.000		JSOH; total dust
	NATIONAL	NEW ZEALAND	3.000		
	NATIONAL	CHINA	4.000		Inhalable fraction
	NATIONAL	SINGAPORE	3.500		
	NATIONAL	KOREA, REPUBLIC OF	3.500		
	NATIONAL	SPAIN	3.500		
	NATIONAL	SWEDEN	3.000		
	NATIONAL	UNITED STATES OF AMERICA	3.500		NIOSH; in presence of PAHs: limit PAHs to 0,1 mg/m³ TWA (detected as cyclohexane soluble extract)
	NATIONAL	UNITED STATES OF AMERICA	3.500		OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	3.500	7.000	
	NATIONAL	ITALY	3.000		
	NATIONAL	ARGENTINA	3.500		
	NATIONAL	CHILE	3.100		
	NATIONAL	CROATIA	3.500	7.000	
	NATIONAL	GREECE	3.500	7.000	
	NATIONAL	INDONESIA	3.500		
	NATIONAL	ICELAND	3.500		
	NATIONAL	MALAYSIA	3.500		
	NATIONAL	MEXICO	3.000		
	NATIONAL	NORWAY	3.500		
	NATIONAL	PORTUGAL	3.000		
	NATIONAL	SOUTH AFRICA	3.500	7.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	3.500		
White mineral oil (petroleum)	ACGIH	NNN	3		(I), A3 - Bronchitis
	NATIONAL	GERMANY	5.000	20.000	AGS; long term and short term: respirable fraction
	NATIONAL	GERMANY	5.000	20.000	DFG; long term and short term: respirable fraction
	NATIONAL	ROMANIA	5.000	10.000	

	NATIONAL	SWITZERLAND	5.000				Inhalable fraction
3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate	NATIONAL	GERMANY	0.058	0.005	0.116	0.010	AGS; long term and short term: inhalable fraction and vapour
	NATIONAL	GERMANY	0.058	0.005	0.116	0.010	DFG
	NATIONAL	SWITZERLAND	0.120	0.010	0.240	0.020	
zinc oxide	NATIONAL	SLOVENIA	0.120	0.010	0.240	0.020	
	NATIONAL	AUSTRALIA	10.000				This value is for inhalable dust containing no asbestos and < 1% crystalline silica
	NATIONAL	AUSTRALIA	10.000		5.000		Long term and short term: Fume
	NATIONAL	BELGIUM	10.000				
	NATIONAL	CANADA	2.000		10.000		Ontario; Long term and short term: respirable aerosol
	NATIONAL	CANADA	10.000				Quebec
	NATIONAL	FRANCE	10.000				
	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	0.500				
	NATIONAL	NEW ZEALAND	10.000		10.000		
	NATIONAL	CHINA	3.000		5.000		
	NATIONAL	SINGAPORE	10.000				
	NATIONAL	SPAIN	10.000				
	NATIONAL	SWEDEN	5.000				
	NATIONAL	SWITZERLAND	3.000		3.000		Long term and short term: respirable fraction
	NATIONAL	UNITED STATES OF AMERICA	15.000		5.000		Total dust
	NATIONAL	ITALY	2.000		10.000		
	NATIONAL	ARGENTINA	5.000		10.000		Long term and short term: fume
	NATIONAL	ARGENTINA	10.000				Dust
	NATIONAL	AUSTRIA	5.000				
	NATIONAL	BULGARIA	5.000		10.000		
	NATIONAL	CZECHIA	2.000		5.000		
	NATIONAL	CHILE	10.000		4.400		
	NATIONAL	KOREA, REPUBLIC OF	5.000		10.000		
	NATIONAL	CROATIA	2.000		10.000		Long term: respirable dust
	NATIONAL	DENMARK	4.000				
	NATIONAL	ESTONIA	5.000				
	NATIONAL	FINLAND	2.000		10.000		
	NATIONAL	GREECE	5.000		10.000		
	NATIONAL	INDONESIA	2.000		10.000		
	NATIONAL	IRELAND	2.000		10.000		Long term: respirable fraction
	NATIONAL	LITHUANIA	5.000				

octhilinone (ISO); 2-octyl-2H-isothiazol-3-one	NATIONAL	MALAYSIA	5.000	10.000	
	NATIONAL	NORWAY	5.000		
	NATIONAL	POLAND	5.000	10.000	
	NATIONAL	PORTUGAL	2.000	10.000	
	NATIONAL	ROMANIA	5.000	10.000	
	NATIONAL	RUSSIAN FEDERATIO N	0.500	1.500	
	NATIONAL	SOUTH AFRICA	5.000	10.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	5.000		
	NATIONAL	HUNGARY	5.000	20.000	
	ACGIH	NNN	2	10	(R) - Metal fume fever
	NATIONAL	AUSTRIA	0.050	0.050	Long term and short term: inhalable aerosol
	NATIONAL	GERMANY	0.050	0.100	AGS; Long term and short term: inhalable aerosol
	NATIONAL	GERMANY	0.050	0.100	DFG: Long term and short term: inhalable aerosol
	NATIONAL	SWITZERLA ND	0.050	0.100	Long term and short term: inhalable aerosol
Kaolin	NATIONAL	SLOVENIA	0.050	0.100	Long term and short term: inhalable fraction
	NATIONAL	AUSTRALIA	10.000		This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
	NATIONAL	BELGIUM	2.000		
	NATIONAL	CANADA	2.000		Canada Ontario. Respirable aerosol. The value for this particulate matter containing no asbestos and<1 percent crystalline silica.
	NATIONAL	CANADA	5.000		Canada Québec
	NATIONAL	DENMARK	2.000	4.000	Respirable aerosol
	NATIONAL	FINLAND	2.000		Respirable fraction
	NATIONAL	FRANCE	10.000		Respirable aerosol
	NATIONAL	IRELAND	2.000		
	NATIONAL	NEW ZEALAND	10.000		Inhalable aerosol
	NATIONAL	NEW ZEALAND	2.000		Respirable aerosol
	NATIONAL	SWITZERLA ND	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: Respirable dust
	NATIONAL	UNITED STATES OF AMERICA	5.000		NIOSH: Respirable fraction

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	2.000				Respirable aerosol
	ACGIH	NNN	2				(E,R), A4 - Pneumoconiosis
	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
formaldehyde	NATIONAL	KOREA, REPUBLIC OF	0.100				
	NATIONAL	NETHERLANDS	0.200				
	NATIONAL	AUSTRALIA	1.200	1.000	2.500	2.000	
	NATIONAL	AUSTRIA	0.370	0.300			
	NATIONAL	AUSTRIA C			0.600	0.740	
	NATIONAL	BELGIUM			0.380	0.300	
	NATIONAL	CANADA				1.000	
	NATIONAL	CANADA C				1.500	
	NATIONAL	CANADA C			3.000	2.000	
	NATIONAL	DENMARK	0.400	0.300	0.400	0.300	
	NATIONAL	FINLAND	0.370	0.300			
	NATIONAL	FINLAND C			1.200	1.000	
	NATIONAL	FRANCE		0.500		1.000	
	NATIONAL	GERMANY	0.370	0.300	0.740	0.600	ASG
	NATIONAL	GERMANY	0.370	0.300	0.740	0.600	DFG; Short term: a momentary value of 1 ml/m ³ (1,2 mg/m ³) should not be exceeded.
	NATIONAL	HUNGARY	0.600		0.600		
	NATIONAL	IRELAND	2.500	2.000	2.500	2.000	
	NATIONAL	ISRAEL	0.240	0.200	0.370	0.300	
	NATIONAL	JAPAN		0.100			MHLW
	NATIONAL	JAPAN	0.120	0.100			JSOH
	NATIONAL	JAPAN C	0.240	0.200			JSOH
	NATIONAL	LATVIA	0.500				
	NATIONAL	NEW ZEALAND		0.330			Short term: 12 hour shift
	NATIONAL	NEW ZEALAND C				1.000	
	NATIONAL	NEW ZEALAND C		0.500			12 hour shift
	NATIONAL	CHINA C			0.500		
	NATIONAL	POLAND	0.500		1.000		
	NATIONAL	ROMANIA	1.200	1.000	3.000	2.000	
	NATIONAL	SINGAPORE			0.370	0.300	
	NATIONAL	KOREA, REPUBLIC OF	0.750	0.500	1.500	1.000	

2-amino-2-methylpropanol	NATIONAL	SPAIN	0.370	0.300	0.740	0.600	
	NATIONAL	SWEDEN	0.370	0.300	0.740	0.600	
	NATIONAL	SWITZERLAND	0.370	0.300	0.740	0.600	
	NATIONAL	NETHERLANDS	0.150			0.500	
	NATIONAL	UNITED STATES OF AMERICA		0.016			NIOSH
	NATIONAL	UNITED STATES OF AMERICA				0.100	NIOSH
	NATIONAL	UNITED STATES OF AMERICA		0.750		2.000	OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	2.500	2.000	2.500	2.000	
	NATIONAL	ITALY	0.600	0.500	0.600	0.500	
	NATIONAL	BULGARIA	1.000		2.000		
	NATIONAL	CZECHIA	0.500		1.000		
	NATIONAL	CROATIA	2.500	2.000	2.500	2.000	
	NATIONAL	ESTONIA	0.600	0.500	1.200	1.000	
	NATIONAL	GREECE	2.500	2.000	2.500	2.000	
	NATIONAL	INDONESIA				0.300	
	NATIONAL	LITHUANIA			0.600	0.500	
	NATIONAL	SLOVAKIA	0.370	0.300	0.740	0.600	
	NATIONAL	SLOVENIA	0.620	0.500			
	NATIONAL	RUSSIAN FEDERATION	0.500				
	NATIONAL	SOUTH AFRICA	2.500	2.000	1.200	1.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	1.200	1.000			
	ACGIH	NNN		0.1		0.3	DSEN, RSEN, A1 - URT and eye irr, URT cancer
	EU	NNN	0.37	0.3	0.74	0.6	Dermal sensitisation
	NATIONAL	GERMANY	3.700	1.000	7.400	2.000	AGS; Long term and short term: inhalable fraction and vapour
	NATIONAL	GERMANY	3.700	1.000	7.400	2.000	DFG; Long term and short term: inhalable fraction and vapour
	NATIONAL	SWITZERLAND	8.700	2.400	17.400	4.800	
	NATIONAL	SLOVENIA	3.700	1.000	17.400	4.800	
glyoxal...%; ethandial...%	NATIONAL	BELGIUM	0.1				Inhalable fraction and vapour
	NATIONAL	CANADA	0.100				Ontario: inhalable aerosol and vapour
	NATIONAL	DENMARK	0.500	0.200	0.500	0.200	

NATIONAL	FINLAND	0.020	
NATIONAL	SPAIN	0.100	
NATIONAL	ITALY	0.100	
NATIONAL	ARGENTINA	0.100	
NATIONAL	MEXICO	0.100	
NATIONAL	UNITED STATES OF AMERICA	0.100	
NATIONAL	PORTUGAL	0.100	
ACGIH	NNN	0.1	(IFV), DSEN, A4 - URT irr, larynx metaplasia

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
Potassium silicate	1312-76-1	7.500 mg/l	Freshwater	
		7.500 mg/l	Intermittent releases (freshwater)	
		1.000 mg/l	Marine water	
		348.000 mg/l	Secondary poisoning	
octhilonone (ISO); 2-octyl-2H-isothiazol-3-one	26530-20-1	2.200 µg/l	Freshwater	
		1.220 µg/l	Intermittent releases (freshwater)	
		220.000 ng/L	Marine water	
		122.000 ng/L	Intermittent releases (marine water)	
		47.500 µg/kg	Freshwater sediments	
		47.500 µg/kg	Marine water sediments	
		8.200 µg/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	Freshwater	
		3.390 µg/l	Intermittent releases (freshwater)	
		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
Potassium silicate	1312-76-1		5.610 mg/m³	1.380 mg/m³	Human Inhalation	Long Term, systemic effects
			1.490 mg/kg	740.000 µg/kg	Human Dermal	Long Term, systemic effects
				740.000 µg/kg	Human Oral	Long Term, systemic effects
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-	55965-84-9		20.000 µg/m³	20.000 µg/m³	Human Inhalation	Long Term, local effects

one (3:1)

40.000 µg/m ³	20.000 µg/m ³	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:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

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

Color: White

Odour: Light

Odour threshold: N.A.

pH: =11.50 (OECD 122)

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 100 °C (212 °F)

Flash point: Not Applicable

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

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.48 g/cm³ (ISO 2811)

Solubility in water: Miscible

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 = 0.80 % ; 11.86 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	Not classified
	Based on available data, the classification criteria are not met
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:

Potassium silicate	a) acute toxicity	LD50 Oral Rat > 5000.00 mg/kg LC50 Inhalation Vapour Rat > 2.06 mg/l 4h LD50 Skin Rat > 5000.00 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Negative 24h	Mouse oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat > 159.00 mg/kg	
Quartz	a) acute toxicity	LD50 Oral > 2000.00000 mg/kg	
octhilinone (ISO); 2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 125 mg/kg bw ATE - Dermal : 311 mg/kg bw LD50 Oral Rat = 500.00 mg/kg LC50 Inhalation Rat = 0.78 mg/l 4h LD50 Skin Rat = 311.00000 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 Guineapig Positive	

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 $\geq 0.1\%$

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
Potassium silicate	CAS: 1312-76-1 - EINECS: 215-199-1	a) Aquatic acute toxicity : LC50 Fish <i>Leuciscus idus</i> > 146.00 mg/L 96h DIN 38412 a) Aquatic acute toxicity : EC50 <i>Daphnia magna</i> > 146.00 mg/L 24h OECD 202 a) Aquatic acute toxicity : EC50 <i>Scenedesmus subspicatus</i> = 207.00 mg/L 72h OECD guideline 201 c) Bacteria toxicity : EC0 <i>Pseudomonas putida</i> > 1000.00 mg/L OECD 209 - 18hr
octhilonone (ISO); 2-octyl-2H-isothiazol-3-one	CAS: 26530-20-1 - EINECS: 247-761-7 - INDEX: 613-112-00-5	a) Aquatic acute toxicity : LC50 Fish freshwater fish = 0.12200 mg/L dossier ECHA b) Aquatic chronic toxicity : EC10 Fish = 0.02200 mg/L dossier ECHA a) Aquatic acute toxicity : EC50 freshwater invertebrates = 0.18100 mg/L dossier ECHA b) Aquatic chronic toxicity : EC10 freshwater invertebrates = 0.03500 mg/L dossier ECHA LC50 <i>Algae</i> freshwater algae = 0.15000 mg/L
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 <i>Oncorhynchus mykiss</i> = 0.19000 mg/L 96h EPA OPP 72-1 (Fish Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Fish <i>Danio rerio</i> = 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	Persistence/Degradability:
octhiline (ISO); 2-octyl-2H-isothiazol-3-one	Non-readily biodegradable
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
octhiline (ISO); 2-octyl-2H-isothiazol-3-one	Bioaccumulative	BCF - Bioconcentration factor	19.210	L/kg ww
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Bioaccumulative	BCF - Bioconcentration factor	54.000	≤ 54

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. 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):

The liquid mixture, due to hardening or exposure to heat, loses its original technical characteristics and appears in a solid state upon disposal; in this case, employees must comply with the requirements of national legislation about safety in the workplace.

In particular, employees must take appropriate technical measures when handling the product, such as proceed with local ventilation and use airtight containers to limit dust dispersion; they must as well wear a respirator with P3 filter.

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-Technical name: N/A

IMDG-Technical 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 Provisioning: N/A

Sea (IMDG) :

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisioning: 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: 28, 40, 55, 70, 72, 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.

Class 1: slightly hazardous for water.

SVHC Substances:

No data available

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 0.80 %

Volatile Organic compounds - VOCs = 11.86 g/L

REGULATION (EU) No 528/2012

Nomenclature IUPAC: 1,2-benzisothiazol-3(2H)-one

Nomenclature BPR: BIT

CAS number: 2634-33-5

Product-type 6: Preservatives for products during storage

Assessment status: Initial application for approval in progress. Competent authority evaluation

; Nomenclature IUPAC: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

Nomenclature BPR: C(M)IT/MIT (3:1)

CAS number: 55965-84-9

Product-type 6: Preservatives for products during storage

Assessment status: Approved

Commission Implementing Regulation (EU) 2016/131 ; Nomenclature IUPAC: octhilinone (ISO); 2-octyl-2H-isothiazol-3-one

Nomenclature BPR: OIT

CAS number: 26530-20-1

Product-type 6: Preservatives for products during storage

Assessment status: Initial application for approval in progress. Competent authority evaluation

Product-type 7: Film preservatives

Assessment status: Initial application for approval in progress. Competent authority evaluation

Product-type 8: Film preservatives

Assessment status: Approved

; Nomenclature IUPAC: Bis [1-hydroxy-2(1H)-pyridinethionato-O,S](T-4)-zinc

Nomenclature BPR: Pyrithione zinc

CAS number:13463-41-7

Product-type 6: Preservatives for products during storage

Assessment status: Initial application for approval in progress. Competent authority evaluation

Product-type 7: Film preservatives

Assessment status: Initial application for approval in progress. Competent authority evaluation

; Nomenclature IUPAC: 3-iodo-2-propynyl butylcarbamate

Nomenclature BPR: IPBC

CAS number: 55406-53-6

Product-type 6: Preservatives for products during storage

Assessment status: Approved

Product-type 7: Film preservatives

Assessment status: Initial application for approval in progress. Competent authority evaluation

Product-type 8: Film preservatives

Assessment status: Approved

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.
H319	Causes serious eye irritation.
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
3.3/2	Eye Irrit. 2	Eye irritation, 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

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
- 15. REGULATORY INFORMATION