

Safety Data Sheet

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

KERAKOVER ACRILEX FLEX

Date of first edition: 10/7/2020

Safety Data Sheet dated 12/22/2021

version 7

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

1.1. Product identifier

Mixture identification:

Trade name: KERAKOVER ACRILEX FLEX

Trade code: 001029007-06

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

Recommended use: Mineral Paint coatings and Coverings

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)

Skin Sens. 1A May cause an allergic skin reaction.

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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

Pictograms and Signal Words



Warning

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with applicable regulations.

Contains

2-methylisothiazol-3(2H)-one
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one
octhiline (ISO); 2-octyl-2H-isothiazol-3-one
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Dir. 2004/42/EC (VOC directive)

Exterior walls of mineral substrate
EU limit value for this product (cat. A/c): 40 g/l
This product contains max 11.12 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: 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.
Contains:biocidal product. Contains: C(M)IT/MIT (3:1).The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments. It is recommended to avoid possible exposure to the skin. Protective gloves and work clothes are recommended. Minimize the uncontrolled release of product into the environment. When washing work equipment, water must not be dispersed in the soil or on surface water.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: KERAKOVER ACRILEX FLEX

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

Qty	Name	Ident. Numb.	Classification	Registration Number
< 1 %	Quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
< 0,2 %	(Z)-9-octadecen-1-ol ethoxylated	CAS:9004-98-2 EC:500-016-2	Skin Irrit. 2, H315; Aquatic Acute 1, H400, M-Acute:1	01-2120139360-66
< 0,1 %	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Chronic 2, H411, M-Acute:1 Specific Concentration Limits: C ≥ 0.05%: Skin Sens. 1 H317	01-2120761540-60
< 0,01 %	2-methylisothiazol-3(2H)-one	CAS:2682-20-4 EC:220-239-6 Index:613-326-00-9	Acute Tox. 2, H330 Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:10, EUH071 Specific Concentration Limits: C ≥ 0.0015%: Skin Sens. 1A H317	01-2120764690-50
< 0,01 %	Pyrrithione zinc	CAS:13463-41-7 EC:236-671-3 Index:613-333-00-7	Acute Tox. 2, H330 Acute Tox. 3, H301 STOT RE 1, H372 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Repr. 1B,	

			H360, M-Chronic:10, M-Acute:1000
			Acute Toxicity Estimate: ATE - Oral: 221mg/kg bw
< 0,01 %	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 ≥ 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 ≥ 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.
- Remove contaminated clothing immediately and dispose off safely.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

- None in particular.

5.2. Special hazards arising from the substance or mixture

- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.

5.3. Advice for firefighters

- Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
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.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/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
	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	SWITZERLA		3.000				respirable aerosol

Quartz		ND			
	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 SiO ₂ ≤ 50%.
	NATIONAL	CHINA	0.700		Inhalable fraction. 50% < free SiO ₂ ≤ 80%.
	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	NETHERLAND	0.075		Respirable dust

Titanium dioxide	NDS				
	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	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, REPUBLIC OF	10.000		
	NATIONAL	SPAIN	10.000		Inhalable aerosol

Talc (Mg ₃ H ₂ (SiO ₃) ₄)	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	2.500		
	NATIONAL	AUSTRIA	2.000		Respirable aerosol
	NATIONAL	BELGIUM	2.000		Asbestos free; respirable fraction
	NATIONAL	CANADA	2.000		Ontario; Respirable aerosol; The value for this particulate matter containing no asbestos and <1 percent crystalline silica
	NATIONAL	CANADA	2.000		Ontario; fibres per cm ³ ; Should not exceed 2 mg/m ³ respirable particulate mass

NATIONAL	CANADA	3.000		Quebec
NATIONAL	CHINA	3.000		Inhalable fraction
NATIONAL	CHINA	1.000		Respirable fraction
NATIONAL	DENMARK	0.300	0.600	Long term and short term: respirable aerosol
NATIONAL	FINLAND	0.500	2.000	Long term and short term: inhalable fraction; Particles
NATIONAL	FINLAND		1.000	Respirable fraction; Particles
NATIONAL	HUNGARY	2.000		Respirable aerosol
NATIONAL	IRELAND	10.000		Inhalable fraction
NATIONAL	IRELAND	0.800		Respirable Fraction
NATIONAL	ISRAEL	2.000		Respirable fraction
NATIONAL	ISRAEL	4.000		Inhalable fraction
NATIONAL	JAPAN	0.500		JSOH; Respirable dust; Particles
NATIONAL	JAPAN	2.000		JSOH; Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler; Particles
NATIONAL	KOREA, REPUBLIC OF	2.000		
NATIONAL	LATVIA	4.000		
NATIONAL	NETHERLA NDS	0.250		Respirable aerosol
NATIONAL	NEW ZEALAND	2.000		Containing no asbestos; asbestos containing talc: use asbestos standards
NATIONAL	SINGAPORE	2.000		
NATIONAL	SPAIN	2.000		Respirable aerosol
NATIONAL	SWEDEN	2.000		Inhalable aerosol
NATIONAL	SWEDEN	1.000		Respirable aerosol
NATIONAL	SWITZERLA ND	2.000		Respirable aerosol
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	1.000		Respirable aerosol
NATIONAL	UNITED STATES OF AMERICA	2.000		NIOSH; Containing no asbestos
NATIONAL	ITALY	2.000		Senza fibre; 0.1fibre/cc
NATIONAL	ITALY	2.000		Respirable fraction
NATIONAL	CHILE	1.750		Respirable fraction
NATIONAL	CROATIA	1.000		Respirable fraction
NATIONAL	GREECE	10.000		εισρν
NATIONAL	GREECE	2.000		αvanv
NATIONAL	INDONESIA	2.000		Respirable fraction
NATIONAL	MALAYSIA	2.000		
NATIONAL	MEXICO	2.000		Respirable dust
NATIONAL	POLAND	4.000		frakcja wdychalna
NATIONAL	POLAND	1.000		frakcja respirabilna
NATIONAL	PORTUGAL	2.000		

Mica

NATIONAL	SLOVENIA	2.000		
NATIONAL	SOUTH AFRICA	10.000		Inhalable particulate
NATIONAL	SOUTH AFRICA	1.000		Respirable particulate
NATIONAL	TAIWAN, PROVINCE OF CHINA	2.000		
ACGIH	NNN	2		Containing no asbestos fibers. (E,R), A4 - Pulm fibrosis, pulm func
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	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

Quartz

NATIONAL	SOUTH AFRICA	1.000		Respirable particulate
NATIONAL	TAIWAN, PROVINCE OF CHINA	3.000		
ACGIH	NNN	3		(R) - Pneumoconiosis
NATIONAL	AUSTRALIA	0.100		Respirable fraction
NATIONAL	AUSTRIA	0.150		respirable aerosol
NATIONAL	BELGIUM	0.100		
NATIONAL	CANADA	0.100		Canada Ontario. Respirable aerosol
NATIONAL	CANADA	0.100		Canada Quebec
NATIONAL	DENMARK	0.300	0.600	Inhalable aerosol
NATIONAL	DENMARK	0.100	0.200	Respirable aerosol
NATIONAL	FINLAND	0.050		Respirable fraction
NATIONAL	FRANCE	0.100		Respirable aerosol
NATIONAL	HUNGARY	0.150		Respirable aerosol
NATIONAL	IRELAND	0.100		Respirable fraction
NATIONAL	NEW ZEALAND	0.200		Respirable aerosol
NATIONAL	CHINA	1.000		Inhalable fraction. 10% <= free SiO2 <= 50%.
NATIONAL	CHINA	0.700		Inhalable fraction. 50% < free SiO2 <= 80%.
NATIONAL	CHINA	0.500		Inhalable fraction. Free SiO2 < 80%.
NATIONAL	SINGAPORE	0.100		Respirable aerosol.
NATIONAL	SPAIN	0.100		Respirable fraction
NATIONAL	SWEDEN	0.100		Respirable aerosol
NATIONAL	SWITZERLAND	0.150		Respirable aerosol
NATIONAL	NETHERLANDS	0.075		Respirable dust
NATIONAL	ITALY	0.050		Silice cristallina
NATIONAL	ITALY	0.025		A2
NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH
NATIONAL	KOREA, REPUBLIC OF	0.050		
NATIONAL	ARGENTINA	0.050		
NATIONAL	CHILE	0.080		
NATIONAL	CROATIA	0.100		
NATIONAL	ESTONIA	0.100		
NATIONAL	INDIA	10.000		
NATIONAL	LITHUANIA	0.100		
NATIONAL	MALAYSIA	0.100		
NATIONAL	MEXICO	0.025		Respirable fraction
NATIONAL	NORWAY	0.300		Total dust
NATIONAL	NORWAY	0.100		Respirable dust
NATIONAL	PORTUGAL	0.025		
NATIONAL	SLOVENIA	0.050	0.400	
NATIONAL	SOUTH AFRICA	0.100		

	ACGIH	NNN	0.025		(R), A2 - Pulm fibrosis, lung cancer
	EU	NNN	0.100		(R), A2 - Pulm fibrosis, lung cancer
Propane-1,2-diol	NATIONAL	AUSTRALIA	474.000	150.000	
	NATIONAL	CANADA	155.000	50.000	Ontario
	NATIONAL	IRELAND	470.000	150.000	
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	474.000	150.000	
	NATIONAL	NEW ZEALAND	474.000	150.000	
	NATIONAL	NEW ZEALAND	10.000		Particulates only
	NATIONAL	LATVIA	7.000		
	NATIONAL	LITHUANIA	7.000		
	NATIONAL	NORWAY	79.000	25.000	
	NATIONAL	POLAND	100.000		
	NATIONAL	RUSSIAN FEDERATION		7.000	
	NATIONAL	SOUTH AFRICA	470.000	150.000	Total particulate and vapour
	NATIONAL	SOUTH AFRICA	10.000		Particulate
Magnesium carbonate	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: The value is for particulate matter containing no asbestos and < 1% crystalline silica.
	NATIONAL	CANADA	10.000		Quebec
	NATIONAL	FRANCE	10.000		Respirable aerosol
	NATIONAL	NEW ZEALAND	10.000		
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	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 fraction
	NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA: total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000		OSHA: respirable fraction

	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		Respirable aerosol
Dolomite	NATIONAL	LATVIA	6.000		
	NATIONAL	CHINA	8.000		Inhalable fraction
	NATIONAL	CHINA	4.000		Respirable fraction
sodium hydroxide; caustic soda	NATIONAL	POLAND	10.000		
	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		2.000	

			NORTHERN IRELAND			
	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
zinc oxide	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		
	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		
sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen	NATIONAL	HUNGARY	5.000	20.000	
	ACGIH	NNN	2	10	(R) - Metal fume fever
	NATIONAL	RUSSIAN FEDERATIO N		5.000	
diuron (ISO); 3-(3,4- dichlorophenyl)-1,1- dimethylurea	NATIONAL	AUSTRALIA	10		
	NATIONAL	AUSTRIA	5.000	10.000	Long Term and Short term: inhalable aerosol
	NATIONAL	BELGIUM	10.000		
	NATIONAL	CANADA	10.000		Canada-Ontario
	NATIONAL	CANADA	10.000		Canada-Quebec
	NATIONAL	DENMARK	5.000	10.000	
	NATIONAL	FINLAND	10.000	20.000	
	NATIONAL	FRANCE	10.000		
	NATIONAL	IRELAND	10.000		
	NATIONAL	NEW ZEALAND	10.000		
	NATIONAL	CHINA	10.000		
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	SPAIN	10.000		
	NATIONAL	SWITZERLA ND	10.000		inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	10.000		
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		
	NATIONAL	ITALY	10.000		
	NATIONAL	CHILE	8.800		
	NATIONAL	MALAYSIA	10.000		
	NATIONAL	PORTUGAL	10.000		

2-methylisothiazol-3(2H)-one	NATIONAL	ARGENTINA	10.000						
	NATIONAL	GREECE	10.000						
	NATIONAL	NORWAY	5.000						
	NATIONAL	SLOVENIA	5.000						
	ACGIH	NNN	10						A4 - URT irr
octhilinone (ISO); 2-octyl-2H-isothiazol-3-one	NATIONAL	AUSTRIA	0.050						
	NATIONAL	GERMANY	0.200		0.400				DFG; long term: inhalable fraction
	NATIONAL	SWITZERLAND	0.100		0.400				Long term and short term: inhalable fraction
	NATIONAL	SLOVENIA	0.050						
	NATIONAL	AUSTRIA	0.050		0.050				Long term and short term: inhalable aerosol
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	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	SWITZERLAND	0.050		0.100				Long term and short term: inhalable aerosol
	NATIONAL	SLOVENIA	0.050		0.100				Long term and short term: inhalable fraction
	NATIONAL	AUSTRIA	0.050						
glyoxal...%; ethandial...%	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						
	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
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(Z)-9-octadecen-1-ol ethoxylated	9004-98-2	1.900 µg/l	Freshwater
		100.000 µg/l	Intermittent releases (freshwater)
		1.900 µg/l	Marine water
		10.000 mg/l	Microorganisms in sewage treatments
		86.900 mg/kg	Freshwater sediments
		86.900 mg/kg	Marine water sediments
		1.000 mg/kg	Soil
1,2-benzisothiazol-3(2H)- one; 1,2-benzisothiazolin- 3-one	2634-33-5	4.030 µg/l	Freshwater
		1.100 µg/l	Intermittent releases (freshwater)
		403.000 ng/L	Marine water
		110.000 ng/L	Intermittent releases (marine water)
		1.030 mg/l	Microorganisms in sewage treatments
		49.900 µg/kg	Freshwater sediments
		4.990 µg/kg	Marine water sediments
2-methylisothiazol-3(2H)- one	2682-20-4	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
		47.100 µg/kg	Soil
Pyrithione zinc	13463-41-7	90.000 ng/L	Freshwater
		90.000 ng/L	Marine water
		10.000 µg/l	Microorganisms in sewage treatments
		9.500 µg/kg	Freshwater sediments
		9.500 µg/kg	Marine water sediments
		1.020 mg/kg	Soil
octhlinone (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
(Z)-9-octadecen-1-ol ethoxylated	9004-98-2		294.000 mg/m ³	87.000 mg/m ³	Human Inhalation	Long Term, systemic effects
			2080.000 mg/kg	1250.000 mg/kg	Human Dermal	Long Term, systemic effects
				25.000 mg/kg	Human Oral	Long Term, systemic effects
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	2634-33-5		6.810 mg/m ³	1.200 mg/m ³	Human Inhalation	Long Term, systemic effects
			966.000 µg/kg	345.000 µg/kg	Human Dermal	Long Term, systemic effects
2-methylisothiazol-3(2H)-one	2682-20-4		21.000 µg/m ³	21.000 µg/m ³	Human Inhalation	Long Term, local effects
			43.000 µg/m ³	43.000 µg/m ³	Human Inhalation	Short Term, local effects
				27.000 µg/kg	Human Oral	Long Term, systemic effects
				53.000 µg/kg	Human Oral	Short Term, systemic effects
Pyrithione zinc	13463-41-7		10.000 µg/kg		Human Dermal	Long Term, systemic 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/m ³	20.000 µg/m ³	Human Inhalation	Long Term, local effects
			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:

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
Color: In compliance with the product description
Odour: Light
Odour threshold: N.A.
pH: N.A.
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: 23.00 hPa
Relative density: 1.39 g/cm³
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 = 0.8 % ; 11.12 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

This product contains crystalline silica. IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles.

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

e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	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:

Quartz	a) acute toxicity	LD50 Oral > 2000.00000 mg/kg	
(Z)-9-octadecen-1-ol ethoxylated	a) acute toxicity	LD50 Oral Rat > 21000.00000 mg/kg	
		LC50 Inhalation Vapour Rat > 100.00000 mg/m3 6h	
		LD50 Skin Rabbit = 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No 72h	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Skin Rat >= 250.00000 mg/kg	
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	a) acute toxicity	LD50 Oral Rat = 670.00000 mg/kg	
		LD50 Skin Rat > 2000.00000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Corrosive Positive	irreversible damage
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive	
	f) carcinogenicity	Genotoxicity Rat Negative	Oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 112.00000 mg/kg	
2-methylisothiazol-3(2H)-one	a) acute toxicity	LC50 Inhalation of aerosol Rat = 0.10000 mg/l 4h	
		LD50 Oral Rat = 120.00000 mg/kg	
		LD50 Skin Rat = 242.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Corrosive Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive	
	f) carcinogenicity	Genotoxicity Rat Negative	Oral route
		Carcinogenicity Oral Rat Negative	
	g) reproductive toxicity	Reproductive Toxicity Oral Rat = 200.00000 Ppm	NOAEL
Pyrithione zinc	a) acute toxicity	ATE - Oral : 221 mg/kg bw	

		LD50 Oral Rat = 269.00000 mg/kg	14 days
		LC50 Inhalation Rat = 1.03000 mg/l 4h	
		LD50 Skin Rat > 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Negative	
		Carcinogenicity Oral Rat = 0.50000 mg/kg	NOAEL
		Carcinogenicity Skin = 5.00000 mg/kg	NOAEL; mouse
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 1.40000 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	
	a) acute toxicity	LD50 Oral Rat = 69.00 mg/kg	
		LD50 Skin Rabbit = 141.00 mg/kg	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)		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:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
(Z)-9-octadecen-1-ol ethoxylated	CAS: 9004-98-2 - EINECS: 500-016-2	a) Aquatic acute toxicity : LC50 Fish Danio rerio = 108.00000 mg/L 96h ECHA a) Aquatic acute toxicity : EL50 Daphnia Daphnia magna = 51.00000 mg/L 48h OECD 202 b) Aquatic chronic toxicity : EC20 Daphnia Daphnia magna = 0.04800 mg/L USEPA-TSCA - Duration 21d a) Aquatic acute toxicity : EL50 Algae Pseudokirchneriella subcapitata > 10.00000 mg/L 72h OECD 201 a) Aquatic acute toxicity : EC50 Sludge sewage sludge > 1000.00000 mg/L 3h OECD guideline 209 b) Aquatic chronic toxicity : EC20 Fish Pimephales promelas = 0.24900 mg/L d) Terrestrial toxicity : LC50 Worm Eisenia fetida > 1000.00000 mg/kg OECD 207 e) Plant toxicity : NOEC Lepidum sativum, Brassica alba and Triticum aestivum = 100.00000 mg/kg OECD 208
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 2.15000 mg/L 96h OECD Guideline 203 a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 2.90000 mg/L 48h OECD Guideline 202 a) Aquatic acute toxicity : EC50 Algae green alga Selenastrum capricornutum freshwater algae = 110.00000 µg/L OECD Guideline 201 d) Terrestrial toxicity : EC50 Worm Eisenia fetida > 410.60000 mg/kg OECD Guideline 207 - Duration 14d d) Terrestrial toxicity : EC10 soil microorganisms = 263.70000 mg/kg - long term a) Aquatic acute toxicity : NOEC Sludge activated sludge 10.30000 mg/L 3h OECD Guideline 209 e) Plant toxicity : LC50 Triticum aestivum = 200.00000 mg/kg OECD Guideline 208
2-methylisothiazol-3(2H)-one	CAS: 2682-20-4 - EINECS: 220-239-6 - INDEX: 613-326-00-9	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4.77000 mg/L 96h „OECD Guideline 203 (Fish, Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Fish Oncorhynchus mykiss = 4.93000 mg/L Dossier ECHA a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 0.93400 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) b) Aquatic chronic toxicity : EC10 Daphnia Daphnia magna = 0.04400 mg/L OECD Guideline 211 (Daphnia magna Reproduction Test) - Duration 21d a) Aquatic acute toxicity : EC50 Algae Selenastrum capricornutum = 0.10300 mg/L 72h Dossier ECHA a) Aquatic acute toxicity : EC50 Sludge activated sludge of a predominantly domestic sewage = 41.00000 mg/L 3h „OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test b) Aquatic chronic toxicity : EC50 freshwater sediment = 50.00000 mg/kg Duration 28d Draft OECD Guideline (now OECD Guideline 225) - 28days
Pyrithione zinc	CAS: 13463-41-7 - EINECS: 236-671-3 - INDEX: 613-333-00-7	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 2.60000 µg/L 96h US EPA-72-1 a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 8.20000 µg/L US EPA-

- a) Aquatic acute toxicity : EC50 Algae *Navicula pelliculosa* = 3.00000 µg/L dossier ECHA
- b) Aquatic chronic toxicity : NOEC Fish *Pimephales promelas* = 1.22000 µg/L „OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 28days
- b) Aquatic chronic toxicity : EC50 *Lemna gibba* = 9.60000 µg/L EPA OPPTS 850.4400 (Aquatic Plant Toxicity Test using *Lemna* spp. Tiers I & II))
- d) Terrestrial toxicity : LC50 *Folsomia candida* = 822.00000 mg/kg ISO 11267 (Inhibition of Reproduction of *Collembola* by Soil Pollutants)
- e) Plant toxicity : NOEC Tomato, Cucumber, Lettuce, Soybean, Cabbage, Carrot, Oat > 0.49000 µg/L USEPA OPPTS 850.4100
- d) Terrestrial toxicity : LC50 Avian Northern Bobwhite = 60.00000 mg/kg EPA FIFRA Guideline 71-1 - 14days
- d) Terrestrial toxicity : NOEC Avian Northern Bobwhite = 31.20000 mg/kg EPA FIFRA Guideline 71-1 - 14days

octhlinone (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 Algae 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 *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 magna* = 0.16000 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test)

b) Aquatic chronic toxicity : NOEC *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:	Test	Value	Notes
(Z)-9-octadecen-1-ol ethoxylated	Readily biodegradable	CO2 production	83.600	in 28 days (OECD 301B)
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Non-readily biodegradable	CO2 production		OECD Guideline 301C
2-methylisothiazol-3(2H)-one	Non-readily biodegradable	CO2 production		OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Pyrethione zinc	Non-readily biodegradable	CO2 production		OECD 301B CO2evolution

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
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Bioaccumulative	BCF - Bioconcentration factor	6.620	
2-methylisothiazol-3(2H)-one	Bioaccumulative	BCF - Bioconcentration factor	5.750	carcass
	Bioaccumulative	BCF - Bioconcentration factor	48.100	viscera
Pyrrithione zinc	Bioaccumulative	BCF - Bioconcentration factor	1.400	
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):

HP 13: Sensitising; HP 14: Ecotoxic

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: 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 = 11.12 g/L

REGULATION (EU) No 528/2012

The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments.
Substances included in Regulation (EU) n. 528/2012 (concerning the making available on the market and use of biocidal products):
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 ; The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments.
Substances included in Regulation (EU) n. 528/2012 (concerning the making available on the market and use of biocidal products):
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

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

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
3.4.2/1A	Calculation method
4.1/C3	Calculation method

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

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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

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

This MSDS cancels and replaces any preceding release.

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

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
BCF: Biological Concentration Factor
BEI: Biological Exposure Index
BOD: Biochemical Oxygen Demand

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

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 5. FIRE-FIGHTING MEASURES
- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY

- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION