

Safety Data Sheet

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

KERAKOVER SILOX VELATURA

Date of first edition: 12/1/2020

Safety Data Sheet dated 1/10/2023

version 5

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

1.1. Product identifier

Mixture identification:

Trade name: KERAKOVER SILOX VELATURA

Trade code: 001028004 -5

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

Recommended use: Paints/coatings - Decorative; Paints/coatings - Protective and functional

Uses advised against: All uses other than recommended ones

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.

P302+P352 IF ON SKIN: Wash with plenty of water.

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
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 3.00 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: Contains biocidal product;; C(M)IT/MIT (3:1); OIT; IPBC; 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 SILOX VELATURA

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	
< 0,5 %	(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
< 0,05 %	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
< 0,05 %	bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	CAS:52-51-7 EC:200-143-0 Index:603-085-00-8	STOT SE 3, H335; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Acute Tox. 4, H312; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:10	
< 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 %	Pyrithione 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 %	Terbutryn	CAS:886-50-0 EC:212-950-5	Acute Tox. 4, H302; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100
< 0,01 %	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/m3	Long Term ppm	Short Term mg/m3	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	POLAND		10.000				
	NATIONAL	SWITZERLAND		3.000				respirable aerosol
	NATIONAL	UNITED		15.000				total dust

		STATES OF AMERICA			
	NATIONAL	UNITED STATES OF AMERICA	5.000		respirable dust
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		respirable aerosol
	NATIONAL	BELGIUM	10.000		
	NATIONAL	CROATIA	10.000		
	NATIONAL	NETHERLANDS	10.000		
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	SPAIN	10.000		
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	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	KOREA, REPUBLIC OF	2.000		
	NATIONAL	LATVIA	4.000		
	NATIONAL	NETHERLANDS	0.250		Respirable aerosol
	NATIONAL	NEW ZEALAND	2.000		Containing no asbestos; asbestos containing talc: use asbestos standards
	NATIONAL	SINGAPORE	2.000		

Quartz	NATIONAL	SPAIN	2.000		Respirable aerosol
	NATIONAL	SWEDEN	2.000		Inhalable aerosol
	NATIONAL	SWEDEN	1.000		Respirable aerosol
	NATIONAL	SWITZERLAND	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	CHILE	1.750		Respirable fraction
	NATIONAL	CROATIA	1.000		Respirable fraction
	NATIONAL	GREECE	10.000		εισπν
	NATIONAL	GREECE	2.000		αvapn
	NATIONAL	INDONESIA	2.000		Respirable fraction
	NATIONAL	POLAND	4.000		frakcja wdychalna
	NATIONAL	POLAND	1.000		frakcja respirabilna
	NATIONAL	PORTUGAL	2.000		
	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	2.000		Containing no asbestos fibers. (E,R), A4 - Pulm fibrosis, pulm func
	NATIONAL	AUSTRALIA	0.050		Respirable fraction
	NATIONAL	AUSTRIA	0.050		MAK value, Respirable fraction
	NATIONAL	BELGIUM	0.100		Respirable dust , Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work
	NATIONAL	CANADA	0.100		Canada Ontario; Respirable aerosol
	NATIONAL	CANADA	0.100		Canada Quebec, Respirable fraction
	NATIONAL	DENMARK	0.300	0.600	Inhalable aerosol
	NATIONAL	DENMARK	0.100	0.200	Respirable aerosol
	NATIONAL	FINLAND	0.050		Respirable fraction
	NATIONAL	FRANCE	0.100		Respirable aerosol
	NATIONAL	HUNGARY	0.100		Respirable fraction
	NATIONAL	IRELAND	0.100		Respirable fraction
	NATIONAL	SPAIN	0.050		Respirable fraction
	NATIONAL	SWEDEN	0.100		Respirable fraction
	NATIONAL	SWITZERLAND	0.150		Respirable aerosol

Mica

NATIONAL	NETHERLANDS	0.075		Respirable fraction
NATIONAL	ITALY	0.100		Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008
NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH
NATIONAL	UNITED STATES OF AMERICA	0.050		Respirable fraction, mppcf × 35.3 = million particles per cubic meter = particles per c.c.
NATIONAL	INDIA	10.000		
NATIONAL	NORWAY	0.300		Total dust
NATIONAL	NORWAY	0.100		Respirable fraction
NATIONAL	POLAND	0.100		Respirable fraction
NATIONAL	PORTUGAL	0.050		Respirable fraction
NATIONAL	SLOVENIA	0.050	0.400	
NATIONAL	AUSTRALIA	2.500		
NATIONAL	AUSTRIA	10.000		Inhalable aerosol
NATIONAL	BELGIUM	3.000		
NATIONAL	CANADA	3.000		Ontario: respirable aerosol
NATIONAL	CANADA	3.000		Quebec
NATIONAL	DENMARK	0.300	0.300	Long term and short term: fibres per cm ³
NATIONAL	IRELAND	10.000		Inhalable fraction
NATIONAL	IRELAND	0.800		respirable fraction
NATIONAL	LATVIA	4.000		and phlogopite, muscovite
NATIONAL	NEW ZEALAND	3.000		respirable dust
NATIONAL	CHINA	2.000		Inhalable fraction
NATIONAL	CHINA	1.500		Respirable fraction
NATIONAL	SINGAPORE	3.000		respirable dust
NATIONAL	KOREA, REPUBLIC OF	3.000		
NATIONAL	SWITZERLAND	3.000		Respirable aerosol
NATIONAL	UNITED STATES OF AMERICA	3.000		NIOSH: respirable fraction
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		Inhalable aerosol
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	0.800		Respirable aerosol
NATIONAL	CHILE	2.630		
NATIONAL	CROATIA	10.000		Total dust
NATIONAL	CROATIA	0.800		Respirable dust
NATIONAL	ARGENTINA	3.000		
NATIONAL	SPAIN	3.000		Respirable fraction

Diiron trioxide	NATIONAL	SOUTH AFRICA	10.000		Inhalable particulate
	NATIONAL	SOUTH AFRICA	1.000		Respirable particulate
	NATIONAL	TAIWAN, PROVINCE OF CHINA	3.000		
	ACGIH	NNN	3.000		(R) - Pneumoconiosis
	NATIONAL	AUSTRALIA	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	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	NORWAY	3.000		
	NATIONAL	PORTUGAL	5.000		
	NATIONAL	RUSSIAN FEDERATION	6.000		

		N			
	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		
	ACGIH	NNN	5.000		(R), A4 - Pneumoconiosis
Quartz	NATIONAL	AUSTRALIA	0.050		Respirable fraction
	NATIONAL	AUSTRIA	0.050		respirable fraction
	NATIONAL	BELGIUM	0.100		Respirable dust , Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work
	NATIONAL	CANADA	0.100		Canada Ontario. Respirable aerosol
	NATIONAL	CANADA	0.100		Canada Quebec, respirable fraction
	NATIONAL	DENMARK	0.300	0.600	Inhalable aerosol
	NATIONAL	DENMARK	0.100	0.200	Respirable aerosol
	NATIONAL	FINLAND	0.050		Respirable fraction
	NATIONAL	FRANCE	0.100		Respirable aerosol
	NATIONAL	HUNGARY	0.100		Respirable aerosol
	NATIONAL	IRELAND	0.100		Respirable fraction
	NATIONAL	SPAIN	0.050		Respirable fraction
	NATIONAL	SWEDEN	0.100		Respirable aerosol
	NATIONAL	SWITZERLAND	0.150		Respirable aerosol
	NATIONAL	NETHERLANDS	0.075		Respirable dust
	NATIONAL	ITALY	0.100		Polvere di silice cristallina respirabile (frazione inalabile). D.Lgs 81/2008
	NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH
	NATIONAL	CROATIA	0.100		
	NATIONAL	ESTONIA	0.100		
	NATIONAL	LITHUANIA	0.100		
	NATIONAL	NORWAY	0.300		Total dust
	NATIONAL	NORWAY	0.100		Respirable dust
	NATIONAL	POLAND	0.100		Respirable fraction
	NATIONAL	PORTUGAL	0.050		
	NATIONAL	SLOVENIA	0.050	0.400	
	EU	NNN	0.100		Polvere di silice cristallina respirabile, frazione inalabile. (R), A2 - Pulm fibrosis, lung cancer. Directive 2017/2398
	NATIONAL	INDIA	10.000		

Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	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
	NATIONAL	SWITZERLAND		1000.000	
Barium sulfate	NATIONAL	RUSSIAN FEDERATION		10.000	
	NATIONAL	SLOVAKIA	100.000		
	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
	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

Magnesium carbonate	ACGIH	NNN	5		(I, E) - 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: 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	POLAND	10.000		
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	LATVIA	0.500		
	NATIONAL	NEW ZEALAND	10.000	10.000	

Propane-1,2-diol	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	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	NORWAY	5.000		
	NATIONAL	POLAND	5.000	10.000	
	NATIONAL	PORTUGAL	2.000	10.000	
	NATIONAL	ROMANIA	5.000	10.000	
	NATIONAL	RUSSIAN FEDERATION	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	2.000	10.000	(R) - Metal fume fever
	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		

sodium hydroxide; caustic soda	NATIONAL	LITHUANIA	7.000		
	NATIONAL	NORWAY	79.000	25.000	
	NATIONAL	POLAND	100.000		
	NATIONAL	RUSSIAN FEDERATIO N		7.000	
	NATIONAL	SOUTH AFRICA	470.000	150.000	Total particulate and vapour
	NATIONAL	SOUTH AFRICA	10.000		Particulate
	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	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,	2.000		

		PROVINCE OF CHINA						
	ACGIH	NNN	C			2.000		URT, eye, and skin irr
2-amino-2-methylpropanol	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	
2-methylisothiazol-3(2H)-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				
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	
	NATIONAL	SLOVENIA		0.120	0.010	0.240	0.020	
2-octyl-2H-isothiazol-3-one	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	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
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	NATIONAL	AUSTRIA		0.050				
	NATIONAL	GERMANY		0.200		0.400		DFG; Long term and short term: inhalable fraction
	NATIONAL	SWITZERLAND		0.200		0.400		Inhalable fraction
	NATIONAL	KOREA, REPUBLIC OF		0.100				
	NATIONAL	NETHERLANDS		0.200				
sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen	NATIONAL	RUSSIAN FEDERATION				5.000		
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	ARGENTINA	0.100				
	NATIONAL	UNITED STATES OF AMERICA	0.100				
	NATIONAL	PORTUGAL	0.100				
	ACGIH	NNN	0.100				(IFV), DSEN, A4 - URT irr, larynx metaplasia
octamethylcyclotetrasiloxane	NATIONAL	UNITED STATES OF AMERICA		10.000			OARS WEEL

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
(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	
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	2634-33-5	1.000 mg/kg	Soil	
		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	
bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	52-51-7	49.900 µg/kg	Freshwater sediments	
		4.990 µg/kg	Marine water sediments	
		3.000 mg/kg	Soil	
		10.000 µg/l	Freshwater	
		2.500 µg/l	Intermittent releases (freshwater)	
		800.000 ng/L	Marine water	
2-methylisothiazol-3(2H)-one	2682-20-4	430.000 µg/l	Microorganisms in sewage treatments	
		41.000 µg/l	Freshwater sediments	
		3.280 µg/kg	Marine water sediments	
		500.000 µg/kg	Soil	
		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
Pyrithione zinc	13463-41-7	47.100 µg/kg	Soil
		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
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
bronopol (INN); 2-bromo- 2-nitropropane-1,3-diol	52-51-7		4.100 mg/m ³	1.200 mg/m ³	Human Inhalation	Long Term, systemic effects
			12.300 mg/m ³		Human Inhalation	Short Term, systemic effects

2-methylisothiazol-3(2H)-one	2682-20-4	4.200 mg/m ³	1.300 mg/m ³	Human Inhalation	Long Term, local effects
		4.200 mg/m ³	1.300 mg/m ³	Human Inhalation	Short Term, local effects
		2.300 mg/kg	1.400 mg/kg	Human Dermal	Long Term, systemic effects
		7.000 mg/kg		Human Dermal	Short Term, systemic effects
			350.000 µg/kg	Human Oral	Long Term, systemic effects
			1.100 mg/kg	Human Oral	Short Term, systemic effects
		0.013 mg/cm ²	0.008 mg/cm ²	Human Dermal	Long Term, local effects
		0.013 mg/cm ²	0.008 mg/cm ²	Human Dermal	Short Term, local effects
		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
Pyrithione zinc	13463-41-7		27.000 µg/kg	Human Oral	Long Term, systemic effects
			53.000 µg/kg	Human Oral	Short Term, systemic effects
		10.000 µg/kg		Human Dermal	Long Term, systemic effects
		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
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9		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:

No special precaution must be adopted for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or 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: N.A.
Odour threshold: N.A.
pH: Not Relevant
Kinematic viscosity: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: 100 °C (212 °F)
Flash point: > 93°C
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: 23.00 hPa
Relative density: 1.26 g/cm³
Solubility in water: Soluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: N.A.
Volatile Organic compounds - VOCs = 0.24 % ; 3.00 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	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/m ³ 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 Guinea pig 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 = 670.00 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 Guinea pig Positive	
	f) carcinogenicity	Genotoxicity Rat Negative	Oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 112.00000 mg/kg	
bronopol (INN); 2-bromo- 2-nitropropane-1,3-diol	a) acute toxicity	LD50 Oral Rat = 305.00 mg/kg	
		LC50 Inhalation of aerosol Rat >= 0.59 mg/l 4h	
		LD50 Skin Rat > 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
		Carcinogenicity Oral Rat Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat 200.00000	
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 Guinea pig 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 = 269.00 mg/kg LC50 Inhalation Dust Rat = 0.14 mg/l 4h LD50 Skin Rat > 2000.00000 mg/kg 24h	14 days
	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 Carcinogenicity Skin = 5.00000 mg/kg	NOAEL NOAEL; mouse
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 1.40000 mg/kg	
2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 125 mg/kg bw ATE - Dermal : 311 mg/kg bw LD50 Oral Rat = 125.00 mg/kg LC50 Inhalation Mist Rat = 0.27 mg/l 4h LD50 Skin Rabbit = 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:

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
bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	CAS: 52-51-7 - EINECS: 200-143-0 - INDEX: 603-085-00-8	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 37.50000 mg/L 96h US EPA Guideline OPP 72 -1 b) Aquatic chronic toxicity : NOEC Fish Oncorhynchus mykiss = 21.50000 mg/L OECD guideline 210 - 49days a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 1.40000 mg/L 48h OECD guideline 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 0.27000 mg/L OECD guideline 202 - 21days a) Aquatic acute toxicity : NOEC Algae Skeletonema costatum = 0.08000 mg/L 72h ISO 10253 a) Aquatic acute toxicity : EC20 Sludge activated sludge = 2.00000 mg/L OECD 209 d) Terrestrial toxicity : LC50 Worm Eisenia foetida > 500.00000 mg/kg OECD 207 d) Terrestrial toxicity : EC50 soil microorganisms = 679.00000 mg/kg OECD guideline 216 - 28days

2-methylisothiazol-3(2H)-one	CAS: 2682-20-4 - EINECS: 220-239-6 - INDEX: 613-326-00-9	a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> = 4.77000 mg/L 96h „OECD Guideline 203 (Fish, Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Fish <i>Oncorhynchus mykiss</i> = 4.93000 mg/L Dossier ECHA a) Aquatic acute toxicity : LC50 <i>Daphnia magna</i> = 0.93400 mg/L 48h OECD Guideline 202 (<i>Daphnia</i> sp. Acute Immobilisation Test) b) Aquatic chronic toxicity : EC10 <i>Daphnia magna</i> = 0.04400 mg/L OECD Guideline 211 (<i>Daphnia magna</i> Reproduction Test) - Duration 21d a) Aquatic acute toxicity : EC50 <i>Selenastrum capricornutum</i> = 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 <i>Pimephales promelas</i> = 2.60000 µg/L 96h US EPA-72-1 a) Aquatic acute toxicity : LC50 <i>Daphnia magna</i> = 8.20000 µg/L US EPA-72-2 a) Aquatic acute toxicity : EC50 <i>Navicula pelliculosa</i> = 3.00000 µg/L dossier ECHA b) Aquatic chronic toxicity : NOEC Fish <i>Pimephales promelas</i> = 1.22000 µg/L „OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 28days b) Aquatic chronic toxicity : EC50 <i>Lemna gibba</i> = 9.60000 µg/L EPA OPPTS 850.4400 (Aquatic Plant Toxicity Test using <i>Lemna</i> spp. Tiers I & II) d) Terrestrial toxicity : LC50 <i>Folsomia candida</i> = 822.00000 mg/kg ISO 11267 (Inhibition of Reproduction of <i>Collembola</i> 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
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 <i>Daphnia magna</i> = 0.16000 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test)

b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 0.10000 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days

a) Aquatic acute toxicity : EC50 Algae Skeletonema costatum = 0.00 mg/L 96h „OECD Guideline 201 (Alga, Growth Inhibition Test)

a) Aquatic acute toxicity : EC50 Sludge activated sludge = 4.50000 mg/L 3h „OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

d) Terrestrial toxicity : LC50 Worm Eisenia fetida = 613.00000 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days

e) Plant toxicity : NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000.00000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days

12.2. Persistence and degradability

Component	Persitence/Degradability:	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
bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	Readily biodegradable			OECD guideline 301B
2-methylisothiazol-3(2H)-one	Non-readily biodegradable	CO2 production		OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Pyrrithione zinc	Non-readily biodegradable	CO2 production		OECD 301B CO2evolution
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	
bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	Bioaccumulative	BCF - Bioconcentration factor		
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	
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: 40, 70, 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 = 0.24 %

Volatile Organic compounds - VOCs = 3.00 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: 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. ; Nomenclature IUPAC: 2-methyl-2H-isothiazol-3-one

Nomenclature BPR: MIT

CAS number: 2682-20-4

Product-type 6: Preservatives for products during storage

Assessment status: Initial application for approval in progress. ; 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: 3-iodo-2-propynyl butylcarbamate

Nomenclature BPR: IPBC

CAS number: 55406-53-6

Product-type 6: Preservatives for products during storage

Assessment status: Approved EU 1037/2013

Commission Implementing Regulation

Product-type 7: Film preservatives

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

Product-type 8: Film preservatives

Assessment status: Approved

Commission Implementing Regulation EU 2015/1728; 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.
 Product-type 7: Film preservatives
 Assessment status: Initial application for approval in progress.
 Product-type 8: Film preservatives
 Assessment status: Approved
 Commission Implementing Regulation EU 2017/1277
 Product-type 10: Construction material preservatives
 Assessment status: Initial application for approval in progress.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H315	Causes skin irritation.
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