

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 1.0

Date of first edition: 1/13/2023

Safety Data Sheet dated 1/13/2023

version 5

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

1.1. Product identifier

Mixture identification:

Trade name: KERAKOVER ACRILEX FLEX 1.0

Trade code: 001029005 -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.

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.

Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection.

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)

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

None

2.3. Other hazards

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: KERAKOVER ACRILEX FLEX 1.0

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

Qty	Name	Ident. Numb.	Classification	Registration Number
2,5-4,9 %	titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	
< 0,5 %	Quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
< 0,01 %	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	01-2120761540-60
< 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	
< 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	01-2120764690-50
< 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	
< 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	
< 0,0015 %	ethanediol; ethylene glycol	CAS:107-21-1 EC:203-473-3	Acute Tox. 4, H302; STOT RE 2, H373	01-2119456816-28

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:

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
Limestone	NATIONAL	BELGIUM		10.000				
	NATIONAL	HUNGARY		10.000				
	NATIONAL	SPAIN		10.000				Inhalable aerosol
	NATIONAL	SWITZERLAND		3.000				Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA		15.000				OSHA: Total dust
	NATIONAL	UNITED STATES OF AMERICA		5.000				OSHA: Respirable dust
	NATIONAL	UNITED STATES OF AMERICA		10.000				NIOSH: total dust
	NATIONAL	UNITED STATES OF AMERICA		5.000				NIOSH: 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
	NATIONAL	CROATIA		10.000				
	NATIONAL	FRANCE		10.000				
	NATIONAL	NETHERLANDS		10.000				
	NATIONAL	PORTUGAL		10.000				
Quartz	NATIONAL	AUSTRALIA		0.050				Respirable fraction
	NATIONAL	AUSTRIA		0.050				MAK value, Respirable fraction
	NATIONAL	BELGIUM		0.100				Respirable dust , Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work
	NATIONAL	CANADA		0.100				Canada Ontario; Respirable aerosol
	NATIONAL	CANADA		0.100				Canada Quebec, Respirable fraction
	NATIONAL	DENMARK		0.300		0.600		Inhalable aerosol
	NATIONAL	DENMARK		0.100		0.200		Respirable aerosol
	NATIONAL	FINLAND		0.050				Respirable fraction

Calcium carbonate	NATIONAL	FRANCE	0.100		Respirable aerosol
	NATIONAL	HUNGARY	0.100		Respirable fraction
	NATIONAL	IRELAND	0.100		Respirable fraction
	NATIONAL	SPAIN	0.050		Respirable fraction
	NATIONAL	SWEDEN	0.100		Respirable fraction
	NATIONAL	SWITZERLAND	0.150		Respirable aerosol
	NATIONAL	NETHERLANDS	0.075		Respirable fraction
	NATIONAL	ITALY	0.100		Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008
	NATIONAL	UNITED STATES OF AMERICA	0.050		NIOSH
	NATIONAL	UNITED STATES OF AMERICA	0.050		Respirable fraction, mppcf × 35.3 = million particles per cubic meter = particles per c.c.
	NATIONAL	INDIA	10.000		
	NATIONAL	NORWAY	0.300		Total dust
	NATIONAL	NORWAY	0.100		Respirable fraction
	NATIONAL	POLAND	0.100		Respirable fraction
	NATIONAL	PORTUGAL	0.050		Respirable fraction
	NATIONAL	SLOVENIA	0.050	0.400	
	NATIONAL	AUSTRALIA	10.000		This value is for inhalable dust containing no asbestos and <1 % crystalline silica.
	NATIONAL	CANADA	10.000		
	NATIONAL	FRANCE	10.000		inhalable aerosol
	NATIONAL	HUNGARY	10.000		inhalable aerosol
	NATIONAL	IRELAND	10.000		Inhalable fraction
	NATIONAL	IRELAND	4.000		Respirable fraction
	NATIONAL	LATVIA	6.000		
	NATIONAL	POLAND	10.000		
	NATIONAL	SWITZERLAND	3.000		respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000		total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000		respirable dust
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		respirable aerosol
	NATIONAL	BELGIUM	10.000		
	NATIONAL	CROATIA	10.000		
	NATIONAL	NETHERLANDS	10.000		

titanium dioxide	NDS				
	NATIONAL	PORTUGAL	10.000		
	NATIONAL	SPAIN	10.000		
	NATIONAL	AUSTRALIA	10		
	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	LATVIA	10.000		
	NATIONAL	NEW ZEALAND	10000.000		The value for inhalable dust containing no asbestos and less than 1% free silica
	NATIONAL	CHINA	8.000		Inhalable fraction
	NATIONAL	POLAND	10.000	30.000	
	NATIONAL	ROMANIA	10.000	15.000	
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	SPAIN	10.000		Inhalable aerosol
	NATIONAL	SWEDEN	5.000		Inhalable aerosol
	NATIONAL	SWITZERLAND	3.000		Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA; total dust
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		Respirable aerosol
	NATIONAL	ARGENTINA	10.000		
	NATIONAL	AUSTRIA	5.000	10.000	
	NATIONAL	BULGARIA	10.000		
	NATIONAL	CROATIA	10.000		total dust
	NATIONAL	CROATIA	4.000		respirable dust
	NATIONAL	GREECE	10.000		
	NATIONAL	GREECE	50.000		
	NATIONAL	GREECE	5.000		
	NATIONAL	INDONESIA	10.000		
	NATIONAL	LITHUANIA	5.000		

Quartz

NATIONAL	NORWAY	5.000			
NATIONAL	PORTUGAL	10.000			
NATIONAL	RUSSIAN FEDERATIO N	10.000			
NATIONAL	SLOVAKIA	5.000			
NATIONAL	SLOVENIA	6.000			
NATIONAL	SOUTH SUDAN	10.000			Inhalable fraction
NATIONAL	SOUTH SUDAN	5.000			Respirable fraction
NATIONAL	TAIWAN, PROVINCE OF CHINA	10.000			
ACGIH	NNN	10.000			A4 - LRT irr
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	SWITZERLA ND	0.150			Respirable aerosol
NATIONAL	NETHERLA NDS	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

Propane-1,2-diol	NATIONAL	INDIA	10.000		
	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	
silicon dioxide, chemically prepared	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	2.000		This value is for inhalable dust containing no asbestos and < 1% crystalline silica
	NATIONAL	AUSTRIA	4.000		Inhalable aerosol
	NATIONAL	BELGIUM	10.000		
	NATIONAL	CANADA	10.000		Ontario
	NATIONAL	CANADA	6.000		Quebec
	NATIONAL	DENMARK	2.000	4.000	Inhalable aerosol
	NATIONAL	FINLAND	5.000		
	NATIONAL	GERMANY	4.000		AGS; Inhalable aerosol
	NATIONAL	GERMANY	4.000		DFG; Inhalable aerosol
	NATIONAL	IRELAND	6.000		Inhalable fraction
	NATIONAL	IRELAND	2.400		Respirable fraction
	NATIONAL	LATVIA	1.000		
	NATIONAL	NEW ZEALAND	1.000		
	NATIONAL	CHINA	2.000		Inhalable fraction
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	SWITZERLA ND	4.000		Inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	80.000		OSHA; 80/ % silica total dust (MG3)
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN	6.000		Inhalable aerosol

Aluminium oxide		IRELAND					
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	2.400				Respirable aerosol
	NATIONAL	ESTONIA	2.000				
	NATIONAL	SLOVENIA	4.000				Inhalable fraction
	NATIONAL	SOUTH AFRICA	6.000				Inhalable particulate
	NATIONAL	SOUTH AFRICA	3.000				Respirable particulate
	NATIONAL	FRANCE	10.000				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
	NATIONAL	AUSTRALIA	10.000				Inhalable dust containing no asbestos and < 1% crystalline silica
	NATIONAL	AUSTRIA	10.000		20.000		Long term: inhalable fraction; Short term: inhalable fraction, 60 minutes average value
	NATIONAL	AUSTRIA	5.000		10.000		Long term: respirable fraction; Short term: respirable fraction, 60 minutes average value
	NATIONAL	CANADA	10.000				
	NATIONAL	DENMARK	5.000		10.000		Calculated as Al; Long term and Short term: inhalable aerosol
	NATIONAL	DENMARK	2.000		4.000		Calculated as Al; Long term and Short term: respirable aerosol
	NATIONAL	GERMANY	4.000				Inhalable aerosol
	NATIONAL	GERMANY	1.500				Respirable aerosol
	NATIONAL	HUNGARY	6.000				Respirable 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	2.500		16.000		Aluminium trioxide as Al fume; Long term: total dust fume
	NATIONAL	POLAND	1.200				Aluminium trioxide as Al fume; Long term: respirable dust
	NATIONAL	ROMANIA	2.000	0.500	5.000	1.200	Long term and short term: aerosol

	NATIONAL	SINGAPORE	10.000					
	NATIONAL	KOREA, REPUBLIC OF	10.000					
	NATIONAL	SPAIN	10.000					Inhalable aerosol
	NATIONAL	SPAIN	5.000					Respirable aerosol
	NATIONAL	SWEDEN	5.000					Inhalable aerosol
	NATIONAL	SWEDEN	2.000					Respirable aerosol
	NATIONAL	SWITZERLA ND	3.000					Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000					OSHA; Total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000					OSHA; Inhalable dust
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	SWITZERLA ND	8.700	2.400	17.400	4.800		
	NATIONAL	SLOVENIA	3.700	1.000	17.400	4.800		
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			
	NATIONAL	CHINA	3.000		5.000			
	NATIONAL	SINGAPORE	10.000					
	NATIONAL	SPAIN	10.000					
	NATIONAL	SWEDEN	5.000					
	NATIONAL	SWITZERLA ND	3.000		3.000			Long term and short term: respirable fraction
	NATIONAL	UNITED C 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			

Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	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 FEDERATIO N	0.500	1.500	
	NATIONAL	SOUTH AFRICA	5.000	10.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	5.000		
Barium sulfate	NATIONAL	HUNGARY	5.000	20.000	
	ACGIH	NNN	2.000	10.000	(R) - Metal fume fever
	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	SWITZERLA ND		1000.000	
	NATIONAL	RUSSIAN FEDERATIO N		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		

diuron (ISO); 3-(3,4-dichlorophenyl)-1,1-dimethylurea	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
	ACGIH	NNN	5		(I, E) - Pneumoconiosis
	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	SWITZERLAND	10.000		inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	10.000		
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		
	NATIONAL	PORTUGAL	10.000		

	NATIONAL	ARGENTINA	10.000		
	NATIONAL	GREECE	10.000		
	NATIONAL	NORWAY	5.000		
	NATIONAL	SLOVENIA	5.000		
	ACGIH	NNN	10.000		A4 - URT irr
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		
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 hydroxide; caustic soda	NATIONAL	AUSTRALIA C		2	
	NATIONAL	AUSTRIA	2.000	4.000	Long term and short term: inhalable aerosol
	NATIONAL	BELGIUM	2.000		
	NATIONAL	CANADA C		2.000	Ontario
	NATIONAL	CANADA C		2.000	Quebec
	NATIONAL	DENMARK	2.000	2.000	
	NATIONAL	FINLAND C		2.000	
	NATIONAL	FRANCE	2.000		
	NATIONAL	HUNGARY	2.000	2.000	
	NATIONAL	IRELAND		2.000	
	NATIONAL	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	

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate	NATIONAL	KOREA, REPUBLIC OF	C			2.000		
	NATIONAL	SPAIN		2.000				
	NATIONAL	SWEDEN		1.000		1.000		Long term and short term: inhalable fraction
	NATIONAL	SWITZERLAND		2.000		2.000		long term and short term: inhalable fraction
	NATIONAL	UNITED STATES OF AMERICA	C			2.000		NIOSH
	NATIONAL	UNITED STATES OF AMERICA	C	2.000				OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND				2.000		
	NATIONAL	BULGARIA		2.000				
	NATIONAL	CZECHIA		1.000		2.000		
	NATIONAL	ESTONIA		1.000		2.000		
	NATIONAL	GREECE		2.000		2.000		
	NATIONAL	SLOVAKIA		2.000				
	NATIONAL	SLOVENIA		2.000				
	NATIONAL	TAIWAN, PROVINCE OF CHINA		2.000				
	ACGIH	NNN	C			2.000		URT, eye, and skin irr
	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	
	NATIONAL	ARGENTINA	C			100.000		
ethanediol; ethylene glycol	EU	NNN		52.000	20.000	104.000	40.000	Skin
	NATIONAL	BELGIUM		52.000	20.000	104.000	40.000	
	NATIONAL	ITALY		52.000	20.000	104.000	40.000	Cute
	NATIONAL	ROMANIA		52.000	20.000	104.000	40.000	
	NATIONAL	SWEDEN		25.000	10.000	104.000	40.000	
	NATIONAL	TURKEY		52.000	20.000	104.000	40.000	
	NATIONAL	AUSTRALIA		52.000	20.000	104.000	40.000	
	NATIONAL	AUSTRIA		26.000	10.000	52.000	20.000	
	NATIONAL	BULGARIA		52.000	20.000	104.000	40.000	
	NATIONAL	CANADA		10.000		20.000		
	NATIONAL	CANADA	C			100.000	50.000	
	NATIONAL	CZECHIA		50.000		100.000		
	NATIONAL	CHILE	C			100.000	40.000	
	NATIONAL	CHINA		20.000		40.000		
	NATIONAL	KOREA, REPUBLIC OF	C			100.000		

glyoxal...%; ethandial...%	NATIONAL	CROATIA	52.000	20.000	104.000	40.000	
	NATIONAL	DENMARK	26.000	10.000			
	NATIONAL	ESTONIA	52.000	20.000	104.000	40.000	
	NATIONAL	FRANCE	52.000	20.000	104.000	40.000	
	NATIONAL	GERMANY	26.000	10.000			
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	52.000	20.000	104.000	40.000	
	NATIONAL	GREECE	125.000	50.000	125.000	50.000	
	NATIONAL	INDONESIA			100.000		
	NATIONAL	IRELAND	20.000		104.000	52.000	
	NATIONAL	ICELAND	26.000	10.000	104.000	40.000	
	NATIONAL	LATVIA	52.000	20.000	104.000	40.000	
	NATIONAL	LITHUANIA	25.000	10.000	50.000	20.000	
	NATIONAL	NORWAY	52.000	20.000	104.000	40.000	
	NATIONAL	NEW ZEALAND			127.000	50.000	
	NATIONAL	NETHERLANDS	52.000	20.000	104.000	40.000	
	NATIONAL	POLAND	15.000		50.000		
	NATIONAL	PORTUGAL			100.000		
	NATIONAL	RUSSIAN FEDERATION	5.000		10.000		
	NATIONAL	SINGAPORE			127.000	50.000	
	NATIONAL	SLOVAKIA	52.000	20.000	127.000	40.000	
	NATIONAL	SPAIN	52.000	20.000	127.000	40.000	
	NATIONAL	SOUTH AFRICA		20.000		40.000	
	NATIONAL	SWITZERLAND	26.000	10.000	52.000	20.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	127.000	50.000			
	NATIONAL	HUNGARY	52.000		104.000		
	ACGIH	NNN		25.000		50.000	(V), A4 - URT irr
	ACGIH	NNN			10.000		(I, H), A4 - URT irr
	EU	NNN	52.000	20.000	104.000	40.000	Skin
	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

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
titanium dioxide	13463-67-7	0.184 mg/l	Freshwater	
		0.018 mg/l	Marine water	
		1.000 mg/kg	Intermittent releases (freshwater)	
		100.000 mg/kg	Intermittent releases (marine water)	
		100.000 mg/kg	Microorganisms in sewage treatments	
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	
		3.000 mg/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	
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	
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
ethanediol; ethylene glycol	107-21-1	10.000 mg/l	Freshwater
		10.000 mg/l	Intermittent releases (freshwater)
		1.000 mg/l	Marine water
		10.000 mg/l	Intermittent releases (marine water)
		199.500 mg/l	Microorganisms in sewage treatments
		37.000 mg/kg	Freshwater sediments
		3.700 mg/kg	Marine water sediments
		1.530 mg/kg	Soil

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
titanium dioxide	13463-67-7		10.000 mg/m ³		Human Inhalation	Long Term, local 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
Pyrithione zinc	13463-41-7		10.000 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
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
ethanediol; ethylene glycol	107-21-1		35.000 mg/m ³	7.000 mg/m ³	Human Inhalation	Long Term, local effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

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

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

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

Appearance and colour: In compliance with the product description

Odour: N.A.

Odour threshold: N.A.

pH: =9.00 (OECD 122)

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: Not Applicable

Evaporation rate: N.A.

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

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.66 g/cm³ (ISO 2811)

Solubility in water: Miscible

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Volatile Organic compounds - VOCs = 0.47 % ; 7.74 g/l

9.2. Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Conductivity: N.A.

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 toxicological effects

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:

titanium dioxide	a) acute toxicity	LD50 Oral Rat > 5000.00 mg/kg LC50 Inhalation > 6.82 mg/l	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	
	i) STOT-repeated exposure	No Observed Adverse Effect Level 1000.00	
Quartz	a) acute toxicity	LD50 Oral > 2000.00000 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	
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 Guinea pig 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	
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
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 Guinea pig 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	
ethanediol; ethylene glycol	a) acute toxicity	LD50 Oral Rat = 7712.00 mg/kg	
		LC50 Inhalation of aerosol Rat > 2.50 mg/l 6h	
		LD50 Skin Mouse > 3500.00 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit No 24h	

d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
f) carcinogenicity	Genotoxicity Rat Negative Carcinogenicity Negative	Oral route
g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat > 1000.00 mg/kg	

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
titanium dioxide	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas (Cavedano americano) > 1000.00 mg/L 96h a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata (alghe cloroficee) > 100.00 mg/L 72h a) Aquatic acute toxicity : NOEC Algae = 5600.00 mg/L a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna (Pulce d'acqua grande) > 100.00 mg/L 48h
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
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-72-2 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 <i>Folsomia candida</i> = 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
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
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 <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 <i>Daphnia magna</i> = 0.10000 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days a) Aquatic acute toxicity : EC50 <i>Skeletonema costatum</i> = 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 <i>Eisenia fetida</i> = 613.00000 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days e) Plant toxicity : NOEC <i>Trifolium pratense</i>, <i>Oryza sativa</i>, <i>Brassica napus</i> = 1000.00000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days
ethanediol; ethylene glycol	CAS: 107-21-1 - EINECS: 203-	a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> = 72860.00 mg/L 96h

- b) Aquatic chronic toxicity : NOEC Fish = 15380.00 mg/L - 7 days
 b) Aquatic chronic toxicity : NOEC Ceriodaphnia dubia = 8590.00 mg/L - 7days
 a) Aquatic acute toxicity : NOEC Algae Pseudokirchnerella subcapitata = 100.00 mg/L 72h OECD guideline 201

12.2. Persistence and degradability

Component	Persistence/Degradability:	Test	Value	Notes
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Non-readily biodegradable	CO2 production		OECD Guideline 301C
Pyrithione zinc	Non-readily biodegradable	CO2 production		OECD 301B CO2evolution
2-methylisothiazol-3(2H)-one	Non-readily biodegradable	CO2 production		OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
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			
ethanediol; ethylene glycol	Readily biodegradable	Dissolved organic carbon	90.000	10days

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	
Pyrithione zinc	Bioaccumulative	BCF - Bioconcentration factor	1.400	
2-methylisothiazol-3(2H)-one	Bioaccumulative	BCF - Bioconcentration factor	5.750	carcass
	Bioaccumulative	BCF - Bioconcentration factor	48.100	viscera
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. 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

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID) :

N.A.

Air (IATA) :

N.A.

Sea (IMDG) :

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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) 2015/830

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

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

Code	Hazard class and hazard category	Description
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.6/2	Carc. 2	Carcinogenicity, Category 2
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2

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
----------	--------------------

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

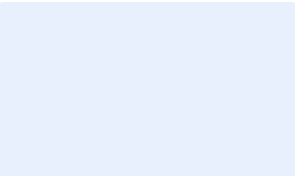
IATA: International Air Transport Association.

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.



Exposure Scenario

Ethane-1,2-diol

Exposure Scenario, 09/08/2021

Substance identity	
	Ethane-1,2-diol
CAS No.	107-21-1
INDEX No.	603-027-00-1
EINECS No.	203-473-3
Registration number	01-2119456816-28

Table of contents

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

1. ES 1

Widespread use by professional workers; Various products (PC9a, PC9b)

1.1 TITLE SECTION

Exposure Scenario name	Use in coatings - Use in rigid foams, coatings, adhesives and sealants
Date - Version	09/08/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b)

Environment Contributing Scenario

CS1	ERC8d
------------	-------

Worker Contributing Scenario

CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11
CS5 Handling and dilution of concentrates	PROC19

1.2 Conditions of use affecting exposure**1.2. CS1: Environment Contributing Scenario (ERC8d)**

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d)
---	--

Product (article) characteristics**Physical form of product:**

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use (or from service life)**Amounts used:**

Daily amount per site = 5479 kg

Release type: Continuous release**Emission days:** 365 days per year***Technical and organisational conditions and measures*****Control measures to prevent releases**

Municipal sewage treatment plant is assumed.	Air - minimum efficiency of: = 95 % Water - minimum efficiency of: = 87 %
--	--

Conditions and measures related to treatment of waste (including article waste)**Waste treatment**

Contain and dispose of waste according to local regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
--------------------	--

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration < 8 h

Frequency:

Use frequency < 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Provide extract ventilation to points where emissions occur. Ensure operatives are trained to minimise exposures. Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	Inhalation - minimum efficiency of: 80 %
--	--

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable respiratory protection.

Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
--------------------	---

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration < 8 h

Frequency:

Use frequency < 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Provide extract ventilation to points where emissions occur. Ensure operatives are trained to minimise exposures. Supervision in place to check that the risk management measures in place are being used correctly and	Inhalation - minimum efficiency of: 80 %
---	--

operation conditions followed.		
Conditions and measures related to personal protection, hygiene and health evaluation		
Personal protection		
Wear suitable respiratory protection. Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.		Dermal - minimum efficiency of: 90 %
Other conditions affecting worker exposure		
Indoor use Professional use Temperature: Assumes use at not more than 20 °C above ambient temperature. Body parts exposed: Assumes that potential dermal contact is limited to hands.		
1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)		
Process Categories	Non industrial spraying (PROC11)	
Product (article) characteristics		
Physical form of product: Liquid		
Concentration of substance in product: Covers percentage substance in the product up to 1 %.		
Amount used, frequency and duration of use/exposure		
Amounts used: Application rate 0.05 L/min		
Duration: Exposure duration < 150 min		
Frequency: Use frequency < 5 days per week		
Technical and organisational conditions and measures		
Technical and organisational measures Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Ensure operatives are trained to minimise exposures. Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.		
Conditions and measures related to personal protection, hygiene and health evaluation		
Personal protection		
Wear suitable respiratory protection. Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. Wear suitable coveralls to prevent exposure to the skin.		Dermal - minimum efficiency of: 80 % Inhalation - minimum efficiency of: 40 %
Other conditions affecting worker exposure		
Indoor use Professional use Room size: Covers use in room size of < 1000 m³ Temperature: Assumes use at not more than 20 °C above ambient temperature. Body parts exposed: Assumes that potential dermal contact is limited to hands and forearms.		
1.2. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)		
Process Categories	Manual activities involving hand contact (PROC19)	

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration < 15 min

Frequency:

Use frequency < 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Provide extract ventilation to points where emissions occur.

Ensure operatives are trained to minimise exposures.

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Inhalation - minimum efficiency of: 80 %

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable respiratory protection.

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.

Dermal - minimum efficiency of: 90 %

Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 12.94 mg/m ³	ECETOC TRA worker v2.0	= 0.37
dermal, systemic, long-term	= 13.71 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.01

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 12.94 mg/m ³	ECETOC TRA worker v2.0	= 0.37
dermal, systemic, long-term	= 2.74 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.03

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 14.05 mg/m ³	ECETOC TRA worker v2.0	= 0.4
dermal, systemic, long-term	= 53.75 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.51

1.3. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 6.47 mg/m ³	ECETOC TRA worker v2.0	= 0.18
dermal, systemic, long-term	= 14.14 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.13

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.