Safety Data Sheet
Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878
AQUA-PUR FLEX
Date of first edition: 8/12/2020
Safety Data Sheet dated 11/10/2022
version 3

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

1.1. Product identifier

Mixture identification:

Trade name: AQUA-PUR FLEX

Trade code: B0324 .015

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

Recommended use: Grout

Uses advised against: Data not available.

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.
Via dell'Artigianato, 9
41049 Sassuolo (MODENA) - ITALY
Tel.+39 0536 816511 Fax. +39 0536816581
safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112
Kerakoll Italy - +39-0536-816511
Ireland
Poison information centre: 01 809 2166 (Daily 8am-10pm)
In case of emergency call 999 or 112
Malta
In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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

Special Provisions:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

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

EUH210 Safety data sheet available on request.

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

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: AQUA-PUR FLEX

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

Qty	Name	Ident. Numb.	Classification	Registration Number
< 0,2 %	titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	
< 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
< 0,0015 %	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:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

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

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

N.A.

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

N.A.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
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	
titanium dioxide	NATIONAL	AUSTRALIA		10				
	NATIONAL	BELGIUM		10.000				
	NATIONAL	CANADA		10.000				Ontario
	NATIONAL	CANADA		10.000				Quebeq
	NATIONAL	DENMARK		6.000		12.000		Long term and short term: total dust
	NATIONAL	FRANCE		11.000				Inhalable aerosol
	NATIONAL	GERMANY		0.300		2.400		DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density;

NATIONAL	IRELAND	10.000		Inhalable fraction
NATIONAL	IRELAND	8.000		Respirable fraction
NATIONAL	JAPAN	0.300		JSOH; Nanoparticle, as Ti
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	ITALY	10.000		
NATIONAL	ARGENTINA	10.000		
NATIONAL	AUSTRIA	5.000	10.000	
NATIONAL	BULGARIA	10.000		
NATIONAL	CROATIA	10.000		total dust
NATIONAL	CROATIA	4.000		respirable dust
NATIONAL	GREECE	10.000		
NATIONAL	GREECE	50.000		
NATIONAL	GREECE	5.000		
NATIONAL	INDONESIA	10.000		
NATIONAL	LITHUANIA	5.000		
NATIONAL	MALAYSIA	10.000		
NATIONAL	MEXICO	10.000		
NATIONAL	NORWAY	5.000		
NATIONAL	PORTUGAL	10.000		
NATIONAL	RUSSIAN FEDERATION	10.000		
NATIONAL	SLOVAKIA	5.000		
NATIONAL	SLOVENIA	6.000		
NATIONAL	SOUTH SUDAN	10.000		Inhalable fraction
NATIONAL	SOUTH	5.000		Respirable fraction

		SUDAN			
	NATIONAL	TAIWAN, PROVINCE OF CHINA	10.000		
	ACGIH	NNN	10.000		A4 - LRT irr
zinc oxide	NATIONAL	AUSTRALIA	10.000		This value is for inhalable dust containing no asbestos and < 1% crystalline silica
	NATIONAL	AUSTRALIA	10.000	5.000	Long term and short term: Fume
	NATIONAL	BELGIUM	10.000		
	NATIONAL	CANADA	2.000	10.000	Ontario; Long term and short term: respirable aerosol
	NATIONAL	CANADA	10.000		Quebec
	NATIONAL	FRANCE	10.000		
	NATIONAL	JAPAN	1.000		Respirable dust
	NATIONAL	JAPAN	4.000		Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler
	NATIONAL	LATVIA	0.500		
	NATIONAL	NEW ZEALAND	10.000	10.000	
	NATIONAL	CHINA	3.000	5.000	
	NATIONAL	SINGAPORE	10.000		
	NATIONAL	SPAIN	10.000		
	NATIONAL	SWEDEN	5.000		
	NATIONAL	SWITZERLAND	3.000	3.000	Long term and short term: respirable fraction
	NATIONAL	UNITED STATES OF AMERICA	C 15.000	5.000	Total dust
	NATIONAL	ITALY	2.000	10.000	
	NATIONAL	ARGENTINA	5.000	10.000	Long term and short term: fume
	NATIONAL	ARGENTINA	10.000		Dust
	NATIONAL	AUSTRIA	5.000		
	NATIONAL	BULGARIA	5.000	10.000	
	NATIONAL	CZECHIA	2.000	5.000	
	NATIONAL	CHILE	10.000	4.400	
	NATIONAL	KOREA, REPUBLIC OF	5.000	10.000	
	NATIONAL	CROATIA	2.000	10.000	Long term: respirable dust
	NATIONAL	DENMARK	4.000		
	NATIONAL	ESTONIA	5.000		
	NATIONAL	FINLAND	2.000	10.000	
	NATIONAL	GREECE	5.000	10.000	
	NATIONAL	INDONESIA	2.000	10.000	
	NATIONAL	IRELAND	2.000	10.000	Long term: respirable fraction
	NATIONAL	LITHUANIA	5.000		
	NATIONAL	MALAYSIA	5.000	10.000	
	NATIONAL	NORWAY	5.000		
	NATIONAL	POLAND	5.000	10.000	
	NATIONAL	PORTUGAL	2.000	10.000	

	NATIONAL	ROMANIA	5.000		10.000		
	NATIONAL	RUSSIAN 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		10		(R) - Metal fume fever
ammonia, anhydrous	EU	NNN	14	20	36	50	
	NATIONAL	AUSTRIA	14.000	20.000	35.000	50.000	
	NATIONAL	BELGIUM	14.000	20.000	36.000	50.000	
	NATIONAL	CANADA		25.000		35.000	Ontario
	NATIONAL	CANADA	17.000	25.000	24.000	35.000	Québec
	NATIONAL	DENMARK	14.000	20.000	28.000	40.000	
	NATIONAL	FINLAND	14.000	20.000	36.000	50.000	
	NATIONAL	FRANCE	7.000	10.000	14.000	20.000	
	NATIONAL	GERMANY	14.000	20.000	28.000	40.000	AGS
	NATIONAL	GERMANY	14.000	20.000	28.000	40.000	DFG
	NATIONAL	HUNGARY	14.000		36.000		
	NATIONAL	IRELAND	14.000	20.000	35.000	50.000	
	NATIONAL	ISRAEL	17.000	25.000			
	NATIONAL	ITALY	14.000	20.000	36.000	50.000	
	NATIONAL	LATVIA	14.000	20.000	36.000	50.000	
	NATIONAL	CHINA	20.000		30.000		
	NATIONAL	POLAND	14.000		28.000		
	NATIONAL	ROMANIA	14.000	20.000	36.000	50.000	
	NATIONAL	KOREA, REPUBLIC OF	18.000	25.000	27.000	35.000	
	NATIONAL	SPAIN	14.000	20.000	36.000	50.000	
	NATIONAL	SWEDEN	14.000	20.000			
	NATIONAL	SWEDEN C			36.000	50.000	
	NATIONAL	SWITZERLAND	14.000	20.000	28.000	40.000	
	NATIONAL	NETHERLANDS	14.000		36.000		
	NATIONAL	TURKEY	14.000	20.000	36.000	50.000	
	NATIONAL	UNITED STATES OF AMERICA	18.000	25.000	27.000	35.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA	18.000	25.000	27.000	35.000	OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	18.000	25.000	25.000	35.000	
	NATIONAL	BULGARIA	14.000	20.000	36.000	50.000	
	NATIONAL	CZECHIA	14.000		36.000		
	NATIONAL	CHILE	15.000	22.000	24.000	35.000	
	NATIONAL	CROATIA	14.000	20.000	36.000	50.000	

	NATIONAL	ESTONIA	14.000	20.000	36.000	50.000	
	NATIONAL	GREECE	35.000	50.000	35.000	50.000	
	NATIONAL	INDONESIA	17.000	25.000	24.000	35.000	
	NATIONAL	ICELAND	14.000	20.000	36.000	50.000	
	NATIONAL	LITHUANIA	14.000	20.000	36.000	50.000	
	NATIONAL	NORWAY	11.000	15.000	36.000	50.000	
	NATIONAL	PORTUGAL		25.000		35.000	
	NATIONAL	RUSSIAN FEDERATION		25.000		35.000	
	NATIONAL	SLOVAKIA	14.000	20.000	36.000	50.000	
	NATIONAL	SLOVENIA	14.000	20.000	36.000	50.000	
	NATIONAL	SOUTH AFRICA	17.000	25.000	24.000	35.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA			35.000	50.000	
	ACGIH	NNN		25.000		35.000	Eye dam, URT irr
	EU	NNN	14.000	20.000	36.000	50.000	
N, N-dimethylformamide; dimethyl formamide	EU	NNN	15	5	30	10	Skin
	NATIONAL	AUSTRIA	15.000	5.000	30.000	10.000	
	NATIONAL	BELGIUM	15.000	5.000	30.000	10.000	
	NATIONAL	CANADA		10.000			Ontario
	NATIONAL	CANADA	30.000	10.000			Québec
	NATIONAL	DENMARK	30.000	10.000	60.000	20.000	
	NATIONAL	FINLAND	15.000	5.000	30.000	10.000	
	NATIONAL	FRANCE	15.000	5.000	30.000	10.000	
	NATIONAL	GERMANY	15.000	5.000	30.000	10.000	AGS;
	NATIONAL	GERMANY	15.000	5.000	30.000	10.000	DFG;
	NATIONAL	HUNGARY	15.000		30.000		
	NATIONAL	IRELAND	15.000	5.000	30.000	10.000	
	NATIONAL	ITALY	15.000	5.000	30.000	10.000	Cute
	NATIONAL	JAPAN		10.000			MHLW
	NATIONAL	JAPAN	30.000	10.000			JSOH
	NATIONAL	LATVIA	15.000	5.000	30.000	10.000	
	NATIONAL	NEW ZEALAND	30.000	10.000			
	NATIONAL	CHINA	20.000				
	NATIONAL	POLAND	15.000		30.000		
	NATIONAL	ROMANIA	15.000	5.000	30.000	10.000	
	NATIONAL	SINGAPORE	30.000	10.000			
	NATIONAL	KOREA, REPUBLIC OF	30.000	10.000			
	NATIONAL	SPAIN	15.000	5.000	30.000	10.000	
	NATIONAL	SWEDEN	15.000	5.000	30.000	10.000	
	NATIONAL	SWITZERLAND	15.000	5.000	30.000	10.000	
	NATIONAL	NETHERLANDS	15.000		30.000		
	NATIONAL	TURKEY	15.000	5.000	30.000	10.000	
	NATIONAL	UNITED STATES OF AMERICA	30.000	10.000			NIOSH

	NATIONAL	UNITED STATES OF AMERICA	30.000	10.000			NIOSH
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	30.000	10.000	61.000	20.000	
	NATIONAL	ARGENTINA		10.000			
	NATIONAL	BULGARIA	15.000	5.000	30.000	10.000	
	NATIONAL	CZECHIA	15.000		30.000		
	NATIONAL	CROATIA	15.000	5.000	30.000	10.000	
	NATIONAL	ESTONIA	15.000	5.000	30.000	10.000	
	NATIONAL	GREECE	15.000	5.000	30.000	10.000	
	NATIONAL	INDONESIA			30.000	10.000	
	NATIONAL	ICELAND	15.000	5.000	30.000	10.000	
	NATIONAL	LITHUANIA	15.000	5.000	30.000	10.000	
	NATIONAL	MALAYSIA	30.000	10.000			
	NATIONAL	MEXICO		10.000			
	NATIONAL	NORWAY	15.000	5.000	30.000	10.000	
	NATIONAL	PORTUGAL		10.000			
	NATIONAL	RUSSIAN FEDERATION			10.000		
	NATIONAL	SLOVAKIA	15.000	5.000	30.000	10.000	
	NATIONAL	SLOVENIA	15.000	5.000	30.000	10.000	
	NATIONAL	SOUTH AFRICA	30.000	10.000	60.000	20.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	30.000	10.000			
	ACGIH	NNN		5			Skin, A3, BEI - Liver dam, eye and URT irr
	EU	NNN	15	5	30	10	Skin
N,N-dimethylacetamide	EU	NNN	36	10	72	20	Skin
	NATIONAL	AUSTRIA	36.000	10.000	72.000	20.000	
	NATIONAL	BELGIUM	36.000	10.000	72.000	20.000	
	NATIONAL	CANADA		10.000			Ontario
	NATIONAL	CANADA	36.000	10.000			Québec
	NATIONAL	DENMARK	35.000	10.000	70.000	20.000	
	NATIONAL	FINLAND	36.000	10.000	72.000	20.000	
	NATIONAL	FRANCE	7.200	2.000	36.000	10.000	
	NATIONAL	GERMANY	18.000	5.000	36.000	10.000	AGS
	NATIONAL	GERMANY	18.000	5.000	36.000	10.000	DFG
	NATIONAL	HUNGARY	36.000		72.000		
	NATIONAL	IRELAND	36.000	10.000	72.000	20.000	
	NATIONAL	ITALY	36.000	10.000	72.000	20.000	
	NATIONAL	JAPAN	36.000	10.000			JSOH
	NATIONAL	LATVIA	36.000	10.000	72.000	20.000	
	NATIONAL	NEW ZEALAND	36.000	10.000			
	NATIONAL	CHINA	20.000				
	NATIONAL	ROMANIA	36.000	10.000	72.000	20.000	

	NATIONAL	SINGAPORE	36.000	10.000			
	NATIONAL	KOREA, REPUBLIC OF	35.000	10.000			
	NATIONAL	SPAIN	36.000	10.000	72.000	20.000	
	NATIONAL	SWEDEN	35.000	10.000	70.000	20.000	
	NATIONAL	SWITZERLAND	35.000	10.000	70.000	20.000	
	NATIONAL	NETHERLANDS	36.000		72.000		
	NATIONAL	TURKEY	36.000	10.000	72.000	20.000	
	NATIONAL	UNITED STATES OF AMERICA	35.000	10.000			NIOSH
	NATIONAL	UNITED STATES OF AMERICA	35.000	10.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	36.000	10.000	72.000	20.000	
	NATIONAL	ITALY	36.000	10.000	72.000	20.000	Cute
	NATIONAL	ARGENTINA		10.000			
	NATIONAL	BULGARIA	36.000	10.000	72.000	10.000	
	NATIONAL	CZECHIA	30.000		60.000		
	NATIONAL	CROATIA	36.000	10.000	72.000	20.000	
	NATIONAL	ESTONIA	36.000	10.000	72.000	20.000	
	NATIONAL	GREECE	36.000	10.000	72.000	20.000	
	NATIONAL	INDONESIA	36.000	10.000			
	NATIONAL	ICELAND	36.000	10.000	72.000	20.000	
	NATIONAL	LITHUANIA	36.000	10.000	72.000	20.000	
	NATIONAL	MALAYSIA	36.000	10.000			
	NATIONAL	MEXICO		10.000			
	NATIONAL	NORWAY	35.000	10.000			
	NATIONAL	PORTUGAL		10.000			
	NATIONAL	RUSSIAN FEDERATION	1.000		3.000		
	NATIONAL	SLOVAKIA	36.000	10.000	72.000	20.000	
	NATIONAL	SLOVENIA	36.000	10.000	72.000	20.000	
	NATIONAL	SOUTH AFRICA	36.000	10.000	71.000	20.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	36.000	10.000			
	ACGIH	NNN		10			Skin, A3, BEI - Liver, embryo and fetal dam; repro, renal and teratogenic eff
	EU	NNN	36	10	72	20	Skin
sodium chloride	NATIONAL	LATVIA	5.000				
	NATIONAL	LITHUANIA	5.000				
	NATIONAL	RUSSIAN FEDERATION			5.000		
reaction mass of 5-	NATIONAL	AUSTRIA	0.050				

chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	NATIONAL	GERMANY	0.200	0.400	DFG; Long term and short term: inhalable fraction
	NATIONAL	SWITZERLAND	0.200	0.400	Inhalable fraction
	NATIONAL	KOREA, REPUBLIC OF	0.100		
	NATIONAL	NETHERLANDS	0.200		

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
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	
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
titanium dioxide	13463-67-7		10.000 mg/m³		Human Inhalation	Long Term, local effects

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	2634-33-5	6.810 mg/m³	1.200 mg/m³	Human Inhalation	Long Term, systemic effects
		966.000 µg/kg	345.000 µg/kg	Human Dermal	Long Term, systemic effects
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	20.000 µg/m³	20.000 µg/m³	Human Inhalation	Long Term, local effects
		40.000 µg/m³	20.000 µg/m³	Human Inhalation	Short Term, local effects
			90.000 µg/kg	Human Oral	Long Term, systemic effects
			110.000 µg/kg	Human Oral	Short Term, systemic effects

8.2. Exposure controls

Eye protection:

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

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Color: White

Odour: Characteristic

Odour threshold: N.A.

pH: =6.50

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

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

Flash point: > 100°C / 212°F

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

Vapour density: N.A.

Vapour pressure: 23.00 hPa

Relative density: 1.05 g/cm3

Solubility in water: Miscible

Solubility in oil: N.A.

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

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0.99 % ; 10.35 g/l

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A.

Viscosity: 2,000.00 cPo

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified
	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

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	
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 Guineapig Positive	

	f) carcinogenicity	Genotoxicity Rat Negative	Oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 112.00000 mg/kg	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	a) acute toxicity	LD50 Oral Rat = 69.00 mg/kg	
		LD50 Skin Rabbit = 141.00 mg/kg	
		LC50 Inhalation Rat = 0.33 mg/l 4h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	
	f) carcinogenicity	Genotoxicity Negative	
		Carcinogenicity Skin Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 22.70000 mg/kg	

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

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

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
titanium dioxide	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas (Cavedano americano) > 1000.00 mg/L 96h
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata (alghe cloroficee) > 100.00 mg/L 72h
		a) Aquatic acute toxicity : NOEC Algae = 5600.00 mg/L
		a) Aquatic acute toxicity : EC50 Daphnia |Daphnia magna (Pulce d'acqua grande) > 100.00 mg/L 48h
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 Oncorynchus 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
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS: 55965-84-9 - INDEX: 613-167-00-5	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 0.19000 mg/L 96h EPA OPP 72-1 (Fish Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Fish Danio rerio = 0.02000 mg/L ,,OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 35days a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 0.16000 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 0.10000 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days a) Aquatic acute toxicity : EC50 Algae Skeletonema costatum = 0.00 mg/L 96h ,,OECD Guideline 201 (Alga, Growth Inhibition Test) a) Aquatic acute toxicity : EC50 Sludge activated sludge = 4.50000 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) d) Terrestrial toxicity : LC50 Worm Eisenia fetida = 613.00000 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days e) Plant toxicity : NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000.00000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Notes
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Non-readily biodegradable	CO2 production	OECD Guideline 301C
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 - Bioconcentrantion factor	6.620	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Bioaccumulative	BCF - Bioconcentrantion factor	54.000	≤ 54

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/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):

N.A.

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: None

Restrictions related to the substances contained: 28, 30, 40, 72, 75

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

N.A.

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

NWG: Not hazardous for water

SVHC Substances:

No data available

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H351	Suspected of causing cancer if inhaled.

Code	Hazard class and hazard category	Description
3.6/2	Carc. 2	Carcinogenicity, Category 2

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