

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 01/10/2024 Revision date: 10/09/2024 Supersedes version of: 28/04/202 Supersedes version of: 28/04/2022

Version: 11.3

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

1.1. Product identifier

Product form Mixture

Trade name CFS-IS / CP 611A JMHX-0X17-F22F-D68P Product code **BU Fire Protection**

Type of product Sealants



Product group Trade product

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

1.2.1. Relevant identified uses

Professional use Main use category

Industrial/Professional use spec For professional use only Use of the substance/mixture Firestop intumescent sealant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier Department issuing data specification sheet

Hilti (Gt. Britain) Ltd. Hilti AG 1 Circle Square Feldkircherstraße 100 FL 9494 Schaan 3 Symphony Park

GB M1 7FS Manchester Liechtenstein T +423 234 2111 Great Britain

T+44 161 886 1000 product.compliance-fire.protection@hilti.com 0800 886 100 Toll-free, F +44 161 872 1240

gbsales@hilti.com

1.4. Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number):

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

+44 161 886 1000 0800 886 100 Toll-free

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS Direct (England and Wales) NHS 24 (Scotland)		111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H317 Skin sensitisation, Category 1 H361 Reproductive toxicity, Category 2 Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412



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Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

GHS07

Warning

Signal word (CLP)

Contains 1,2-Benzisothiazol-3(2H)-on; 2-octyl-2H-isothiazol-3-one; hexaboron dizinc undecaoxide, heptahydrate; Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-

3(2H)-one; polypropylene glycol alkyl phenyl ether

Hazard statements (CLP)

H317 - May cause an allergic skin reaction. H361 - Suspected of damaging the unborn child..

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP)

P280 - Wear protective gloves, eye protection, protective clothing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	Component				
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				
2-octyl-2H-isothiazol-3-one (26530-20-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				
pyrithione zinc (13463-41-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				
Calcium carbonate (1317-65-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				
polypropylene glycol alkyl phenyl ether (9064-13-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII				

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %



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Component		
Calcium carbonate (1317-65-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
polypropylene glycol alkyl phenyl ether (9064-13-5)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
pyrithione zinc (13463-41-7)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
2-octyl-2H-isothiazol-3-one (26530-20-1)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium carbonate substance with national workplace exposure limit(s) (GB)	CAS-No.: 1317-65-3 EC-No.: 215-279-6 REACH-no: Exempted in accordance Annex V.7	10 – 25	Not classified
hexaboron dizinc undecaoxide, heptahydrate	CAS-No.: 138265-88-0 EC-No.: 235-804-2	5 – 10	Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 2, H411
polypropylene glycol alkyl phenyl ether	CAS-No.: 9064-13-5 EC-No.: 618-605-9	2.5 – 5	Skin Sens. 1B, H317



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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-Benzisothiazol-3(2H)-on	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-	0.01 - <0.036	Acute Tox. 4 (Oral), H302 (ATE=490 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
pyrithione zinc	CAS-No.: 13463-41-7 EC-No.: 236-671-3 EC Index-No.: 613-333-00-7 REACH-no: 01-2119511196- 46	0.001 – 0.01	Acute Tox. 3 (Oral), H301 (ATE=177 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=1 mg/l/4h) Acute Tox. 2 (Inhalation:dust,mist), H330 (ATE=1 mg/l/4h) Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)
2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	0.001 - 0.01	Acute Tox. 2 (Inhalation), H330 (ATE=0.27 mg/l) Acute Tox. 3 (Dermal), H311 (ATE=311 mg/kg bodyweight) Acute Tox. 3 (Oral), H301 (ATE=125 mg/kg bodyweight) Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	0.0001 – 0.001	Acute Tox. 3 (Oral), H301 (ATE=66 mg/kg bodyweight) Acute Tox. 2 (Dermal), H310 (ATE=50 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=0.05 mg/l/4h) Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
1,2-Benzisothiazol-3(2H)-on	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-	(0.036 ≤ C ≤ 100) Skin Sens. 1, H317	



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Specific concentration limits:				
Name	Product identifier	Specific concentration limits		
2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	(0.0015 ≤ C ≤ 100) Skin Sens. 1A, H317		
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	$(0.0015 \le C \le 100)$ Skin Sens. 1A, H317 $(0.06 \le C < 0.6)$ Skin Irrit. 2, H315 $(0.06 \le C < 0.6)$ Eye Irrit. 2, H319 $(0.6 \le C \le 100)$ Skin Corr. 1C, H314 $(0.6 \le C \le 100)$ Eye Dam. 1, H318		

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general Never give anything by mouth to an unconscious person. IF exposed or concerned: Get

medical advice/attention.

First-aid measures after inhalation Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on

this label). Wash contaminated clothing before reuse.

First-aid measures after eye contact Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after inhalation May cause an allergic skin reaction.
Symptoms/effects after skin contact May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.



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6.1.2. For emergency responders

Protective equipment Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away

from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood.

Hygiene measures Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep only in the original container in a cool, well ventilated place away from : Keep

container closed when not in use.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature $5-25\,^{\circ}\text{C}$

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not

relevant for this product.

8.1.1. National occupational exposure and biological limit values

Calcium carbonate (1317-65-3)		
United Kingdom - Occupational Exposure Limits		
Local name Calcium carbonate (Limestone, Marble)		
WEL TWA (OEL TWA)	10 mg/m³ total inhalable 4 mg/m³ respirable	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available



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8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses			EN 166, EN 170

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. ISO 374-1. Wear protective gloves.

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

No additional information available



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateSolidColourdark grey.AppearancePasty.

Molecular mass Not determined Odour characteristic. Odour threshold Not determined Melting point Not applicable Freezing point Not available Boiling point Not available Flammability Non flammable. Lower explosion limit Not applicable Upper explosion limit Not applicable Flash point Not applicable Auto-ignition temperature Not applicable Not available Decomposition temperature

pH 8.5

pH solution Not available Viscosity, kinematic Not applicable Solubility Not available Not available Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Vapour pressure at 50°C Not available Density 1.4 g/cm³ Relative density Not available Relative vapour density at 20°C Not applicable Particle size Not available Not available Particle size distribution Not available Particle shape Not available Particle aspect ratio Particle specific surface area Not available Particle dustiness Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.



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10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes	as defined in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	Not classified Not classified Not classified
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
LD50 oral rat	490 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	670 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg
2-octyl-2H-isothiazol-3-one (26530-20-1)	
LD50 oral rat	550 mg/kg (Rat, Literature study, Oral)
LD50 oral	355 mg/kg
LD50 dermal rabbit	690 mg/kg bodyweight (Rabbit, Literature study, Dermal)
LD50 dermal	311 mg/kg
LC50 Inhalation - Rat	> 2 mg/m³ (4 h, Rat, Literature study, Inhalation (vapours))
LC50 Inhalation - Rat (Dust/Mist)	0.586 mg/l/4h
pyrithione zinc (13463-41-7)	
LD50 oral rat	177 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 269 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value)
LC50 Inhalation - Rat	1 mg/l/4h (Rat; Literature study)
Calcium carbonate (1317-65-3)	
LD50 oral rat	> 5000 mg/kg
hexaboron dizinc undecaoxide, heptahy	ydrate (138265-88-0)
LD50 oral rat	> 5000 mg/kg bodyweight (FIFRA (40 CFR), Rat, Male / female, Experimental value of similar product, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value of similar product, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.95 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Read-across, Inhalation (dust), 14 day(s))
Mixture of 5-chloro-2-methylisothiazol-3	3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)
LD50 oral rat	66 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Calculated by reference to active substance, Oral, 14 day(s))
LD50 dermal rat	> 141 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))



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Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)			
LC50 Inhalation - Rat	0.17 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Inhalation (dust), 14 day(s))		
polypropylene glycol alkyl phenyl ether	(9064-13-5)		
LD50 oral rat	> 5000 mg/kg		
Skin corrosion/irritation	Not classified pH: 8.5		
Additional information	Based on available data, the classification criteria are not met		
Serious eye damage/irritation	Not classified		
	pH: 8.5		
Additional information	Based on available data, the classification criteria are not met		
Respiratory or skin sensitisation	May cause an allergic skin reaction.		
Germ cell mutagenicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Carcinogenicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Reproductive toxicity	Suspected of damaging the unborn child		
STOT-single exposure	Not classified		
Additional information	Based on available data, the classification criteria are not met		
STOT-repeated exposure	Not classified		
Additional information	Based on available data, the classification criteria are not met		
pyrithione zinc (13463-41-7)			
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not classified		
Additional information	Based on available data, the classification criteria are not met		

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and

symptoms

12.1. Toxicity

Based on available data, the classification criteria are not met

SECTION 12: Ecological information

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Ecology - water Hazardous to the aquatic environment, short–term (acute)	Harmful to aquatic life with long lasting effects. Not classified
Hazardous to the aquatic environment, long-term (chronic)	Harmful to aquatic life with long lasting effects.
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
LC50 - Fish [1]	2.18 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	0.99 mg/l
ErC50 algae	150 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
2-octyl-2H-isothiazol-3-one (26530-20-1)	
LC50 - Fish [1]	0.14 mg/l (96 h, Pimephales promelas, Literature study)



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2-octyl-2H-isothiazol-3-one (26530-20-1	
LC50 - Fish [2]	0.05 mg/l (96 h, Oncorhynchus mykiss, Literature study)
EC50 - Crustacea [1]	0.18 mg/l (48 h, Daphnia magna, Literature study)
EC50 - Crustacea [2]	0.32 mg/l (48 h, Daphnia magna, Literature study)
NOEC chronic fish	0.012 mg/l
pyrithione zinc (13463-41-7)	
LC50 - Fish [1]	2.6 μg/l (96 h; Pimephales promelas; GLP)
LC50 - Fish [2]	0.4 mg/l (96 h; Cyprinodon variegatus; GLP)
EC50 - Crustacea [1]	0.05 mg/l (48 h; Daphnia magna; GLP)
EC50 - Crustacea [2]	8.2 μg/l (96 h; Daphnia magna; GLP)
EC50 96h - Algae [1]	1.3 μg/l (EPA OPP 122-2, Skeletonema costatum, Static system, Fresh water, Experimental value, GLP)
Threshold limit - Algae [1]	0.067 mg/l (Selenastrum capricornutum)
Threshold limit - Algae [2]	2.4 μg/l (120 h; GLP)
Calcium carbonate (1317-65-3)	
LC50 - Fish [1]	> 10000 mg/l (Oncorhynchus mykiss (rainbow trout)
EC50 - Crustacea [1]	> 1000 mg/l (Daphnia magna (Water flea)
EC50 72h - Algae [1]	289 mg/l Desmodesmus subspicatus (green algae)
NOEC chronic algae	75 mg/l
hexaboron dizinc undecaoxide, heptah	ydrate (138265-88-0)
LC50 - Fish [1]	169 μ g/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Readacross)
EC50 - Crustacea [1]	155 – 413 μg/l (US EPA, 48 h, Ceriodaphnia dubia, Static system, Fresh water, Readacross)
Mixture of 5-chloro-2-methylisothiazol-	3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)
LC50 - Fish [1]	0.19 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP)
ErC50 algae	19.9 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)
polypropylene glycol alkyl phenyl ether	(9064-13-5)
LC50 - Fish [1]	> 10 - < 100 mg/l Leuciscus idus
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (OECD-Richtlinie 202, Teil 1, statisch
EC50 72h - Algae [1]	> 100 mg/l

12.2. Persistence and degradability

CFS-IS / CP 611A	
Persistence and degradability	May cause long-term adverse effects in the environment.



1,2-Benzisothiazol-3(2H)-on (2634-33-5)

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Persistence and degradability	Not readily biodegradable in water.
2-octyl-2H-isothiazol-3-one (26530-20-1)	
Persistence and degradability	Inherently biodegradable.
pyrithione zinc (13463-41-7)	
Persistence and degradability	Biodegradable in water. No (test)data on mobility of the substance available.
hexaboron dizinc undecaoxide, heptahydrate (13	8265-88-0)
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one	and 2-methylisothiazol-3(2H)-one (55965-84-9)
Persistence and degradability	Not readily biodegradable in water.
12.3. Bioaccumulative potential	
CFS-IS / CP 611A	
Bioaccumulative potential	Not established.
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
BCF - Fish [1]	6.62 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2-octyl-2H-isothiazol-3-one (26530-20-1)	
BCF - Fish [1]	1280 (67 day(s), Lepomis macrochirus, Flow-through system, Literature study)
Partition coefficient n-octanol/water (Log Pow)	2.45 (Experimental value)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
pyrithione zinc (13463-41-7)	
BCF - Other aquatic organisms [1]	7.87 – 11 (30 days; Crassostrea sp.)
Partition coefficient n-octanol/water (Log Pow)	0.9 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
hexaboron dizinc undecaoxide, heptahydrate (13	88265-88-0)
BCF - Fish [1]	116 – 60960 (21 day(s), Semi-static system, Marine water, Read-across, Fresh weight)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one	and 2-methylisothiazol-3(2H)-one (55965-84-9)
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
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Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).	
12.4. Mobility in soil	
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	

12.4. Mobility in soil	
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
Surface tension	72.6 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.
2-octyl-2H-isothiazol-3-one (26530-20-1)	
Ecology - soil	No (test)data on mobility of the substance available.
pyrithione zinc (13463-41-7)	
Surface tension	0.073 N/m (20 °C; 7220 μg/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.295 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.
hexaboron dizinc undecaoxide, heptahydrate (138	265-88-0)
Surface tension	Data waiving
Ecology - soil	Adsorbs into the soil.
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one a	nd 2-methylisothiazol-3(2H)-one (55965-84-9)
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

CFS-IS / CP 611A

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods Dispose in a safe manner in accordance with local/national regulations.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to hazardous or special waste collection point, in accordance with local,

regional, national and/or international regulation.

Ecological information Avoid release to the environment.



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European List of Waste (LoW, EC 2000/532)

 $08\ 04\ 09^{\star}$ - waste adhesives and sealants containing organic solvents or other dangerous

substances

HP Code

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information availa	able		

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)



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REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
16		Modified	

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disrupting properties
EN	European Standard



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Abbreviations and acrony	yms:
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
N.O.S.	Not Otherwise Specified
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class
VOC	Volatile Organic Compounds
SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
OEL	Occupational Exposure Limit
OECD	Organisation for Economic Co-operation and Development
COD	Chemical oxygen demand (COD)
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
TLM	Median Tolerance Limit
STP	Sewage treatment plant

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

None.

Full text of H- and EUH-statements:	
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2



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Acute Tox. 3 (Oral) Ac	cute toxicity (dermal), Category 3 cute toxicity (oral), Category 3 cute toxicity (oral), Category 4
· · · ·	
Acute Tox. 4 (Oral) Ac	guta tovigity (gral) Catagony A
, ,	cute toxicity (oral), Category 4
Aquatic Acute 1 Ha	azardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1 Ha	azardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2 Ha	azardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3 Ha	azardous to the aquatic environment – Chronic Hazard, Category 3
EUH071 Co	orrosive to the respiratory tract.
Eye Dam. 1 Se	erious eye damage/eye irritation, Category 1
Eye Irrit. 2 Se	erious eye damage/eye irritation, Category 2
H301 To	oxic if swallowed.
H302 Ha	armful if swallowed.
H310 Fa	atal in contact with skin.
H311 To	oxic in contact with skin.
H314 Ca	auses severe skin burns and eye damage.
H315 Ca	auses skin irritation.
H317 Ma	lay cause an allergic skin reaction.
H318 Ca	auses serious eye damage.
H319 Ca	auses serious eye irritation.
H330 Fa	atal if inhaled.
H360D Ma	lay damage the unborn child.
H361 Su	uspected of damaging fertility or the unborn child.
H361d Su	uspected of damaging the unborn child.
H372 Ca	auses damage to organs through prolonged or repeated exposure.
H400 Ve	ery toxic to aquatic life.
H410 Ve	ery toxic to aquatic life with long lasting effects.
H411 To	oxic to aquatic life with long lasting effects.
H412 Ha	armful to aquatic life with long lasting effects.
Repr. 1B Re	eproductive toxicity, Category 1B
Repr. 2	eproductive toxicity, Category 2
Skin Corr. 1 Sk	kin corrosion/irritation, Category 1
Skin Corr. 1C Sk	kin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2 Sk	kin corrosion/irritation, Category 2
Skin Sens. 1 Sk	kin sensitisation, Category 1
Skin Sens. 1A Sk	kin sensitisation, category 1A



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Full text of H- and EUH-statements:		
Skin Sens. 1B	Skin sensitisation, category 1B	
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Skin Sens. 1	H317	Calculation method	
Repr. 2	H361	Calculation method	
Aquatic Chronic 3	H412	Calculation method	

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.