

Safety Data Sheet

Quadroseal



According to regulation (EC) No. 1907/2006 (REACH) with its amendment regulation (EU) 2020/878

Revision date: 4/28/2023

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

1.1. Product identifier

Product form : Mixture
Trade name : Quadroseal

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

1.2.1. Relevant identified uses

Main use category : Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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NL- 2495 Den Haag
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info@bloemsealants.com - www.bloemsealants.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Contains Fungicide 2-octyl-2H-isothiazol-3-one, 3-aminopropyltriethoxysilane, N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine. May produce an allergic reaction. EUH208
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]

CLP Signal word : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents and container to a hazardous or special waste collection point.
EUH-statements : EUH208 - Contains Fungicide 2-octyl-2H-isothiazol-3-one, 3-aminopropyltriethoxysilane, N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine. May produce an allergic reaction.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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Component	
N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)	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
toluene (108-88-3)	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
methanol (67-56-1)	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
ethanol; ethyl alcohol (64-17-5)	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 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 at a concentration equal to or greater than 0,1 %

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]
Benzene, C14-30-alkyl derivs	CAS-No.: 68855-24-3 EC-No.: 272-472-8	≥ 2.5 – < 5	Aquatic Chronic 4, H413
2-Pentanone, O,O',O''-(methylsilylidyne)trioxime	CAS-No.: 37859-55-5 EC Index-No.: 484-460-1 REACH-no: 01-2120004323-76	≥ 0.5 – < 5	Acute Tox. 4 (Oral), H302 (ATE=1133 mg/kg bodyweight) Eye Irrit. 2, H319 STOT RE 2, H373
3-aminopropyltriethoxysilane	CAS-No.: 919-30-2 EC-No.: 213-048-4 EC Index-No.: 612-108-00-0 REACH-no: 01-2119480479-24	≥ 0.5 – < 1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317
N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine	CAS-No.: 35141-30-1 EC-No.: 252-390-9	≥ 0.1 – < 0.5	Eye Dam. 1, H318 Skin Sens. 1, H317
toluene substance with a Community workplace exposure limit	CAS-No.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3 REACH-no: 01-2119471310-51	< 0.1	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Fungicide 2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	< 0,025	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
methanol substance with a Community workplace exposure limit	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	< 0.1	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Acute Tox. 3 (Dermal), H311 (ATE=300 mg/kg bodyweight) Acute Tox. 3 (Inhalation), H331 (ATE=0.5 mg/l/4h) STOT SE 1, H370
ethanol; ethyl alcohol substance with a Community workplace exposure limit	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-43	< 0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Fungicide 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
methanol	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	(3 ≤C < 10) STOT SE 2, H371 (10 ≤C < 100) STOT SE 1, H370

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 you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Move to fresh air. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of water/.... Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Seek medical attention if ill effect or irritation develops. 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	: Not expected to present a significant hazard under anticipated conditions of normal use.
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Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: All extinguishing media allowed. 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

Fire hazard	: Not flammable.
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5.3. Advice for firefighters

Precautionary measures fire	: Do not breathe fumes from fires or vapours from decomposition. Evacuate unnecessary personnel. Exercise caution when fighting any chemical fire.
Firefighting instructions	: Cool down the containers exposed to heat with a water spray. 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	: Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses.

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. Respiratory protection equipment may be necessary.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Do not allow to enter drains or water courses. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Cover spill with non combustible material, e.g.: sand, earth, vermiculite. Collect all waste in suitable and labelled containers and dispose according to local legislation. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid all unnecessary exposure. 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.
Handling temperature	: 5 – 40 °C
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a dry, cool area. 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 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

methanol (67-56-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Methanol
IOEL TWA	260 mg/m ³
IOEL TWA [ppm]	200 ppm
Remark	Skin
	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	266 mg/m ³
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	333 mg/m ³
WEL STEL (OEL STEL) [ppm]	250 ppm
ethanol; ethyl alcohol (64-17-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	1900 mg/m ³
IOEL TWA [ppm]	1000 ppm
IOEL STEL	9500 mg/m ³
IOEL STEL [ppm]	5000 ppm
toluene (108-88-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Toluene

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toluene (108-88-3)	
IOEL TWA	192 mg/m ³
IOEL STEL	384 mg/m ³
IOEL STEL [ppm]	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	191 mg/m ³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	384 mg/m ³
WEL STEL (OEL STEL) [ppm]	100 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

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			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

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Hand protection:

In case of repeated or prolonged contact wear gloves. Time of penetration is to be checked with the glove producer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Wear protective gloves.

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)		> 0,1		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Consumer exposure controls:

Avoid contact with skin and eyes. Wash hands and other exposed areas with soap and water before leaving work. Take off immediately all contaminated clothing.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Transparent.
Appearance	: Paste.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not applicable
Softening point	: Not applicable
Boiling point	: Not applicable
Flammability	: Non flammable.
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: 70 °C (ISO 3679)
Auto-ignition temperature	: > 285 °C (calculated value)
Decomposition temperature	: Not available
pH	: insoluble in water
Viscosity, kinematic	: 6010 mm²/s
Viscosity, dynamic	: 6010 mPa·s (Brookfield spindle 96, 1 rpm)
Non-Newtonian liquid	: Thixotropic behaviour
Solubility	: Water: Negligible.
Partition coefficient n-octanol/water (Log Kow)	: Not applicable for preparations
Partition coefficient n-octanol/water (Log Pow)	: Not applicable for preparations
Vapour pressure	: Does not apply
Vapour pressure at 50°C	: Not applicable.
Density	: 1 g/cm³
Relative density	: 1
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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methanol

Boiling point	64.7 °C Atm. press.: 1013 hPa
Flash point	9.7 °C Atm. press.: 1013 hPa
Auto-ignition temperature	455 °C
Vapour pressure	169.27 hPa Temp.: 25 °C

Fungicide 2-octyl-2H-isothiazol-3-one

Boiling point	342 °C
Vapour pressure	4.9 hPa 25°C

2-Pentanone, O,O',O''-(methylsilyldiylne)trioxime

Flash point	82 °C
Auto-ignition temperature	285 °C
Vapour pressure	0.0172 hPa at 20 °C

3-aminopropyltriethoxysilane

Vapour pressure	1.7 – 2 Pa
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N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine

Vapour pressure	0.015 Pa
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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

No dangerous reactions known.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None to our knowledge. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

None to our knowledge. Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal use. fume. Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

methanol (67-56-1)

LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 oral	1187 – 2769 mg/kg
LD50 dermal rat	300 mg/kg
LD50 dermal rabbit	15800 – 17100 mg/kg
LC50 Inhalation - Rat	128.2 mg/l/4h
LC50 Inhalation - Rat [ppm]	64000 ppm/4h
LC50 Inhalation - Rat (Vapours)	128.2 mg/l/4h

Benzene, C14-30-alkyl derivs (68855-24-3)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg

2-Pentanone, O,O',O''-(methylsilyldiyl)trioxime (37859-55-5)

LD50 oral rat	1133 – 1234 mg/kg
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3-aminopropyltriethoxysilane (919-30-2)

LD50 oral rat	2.83 ml/kg male
LC50 Inhalation - Rat [ppm]	> 5 ppm male

ethanol; ethyl alcohol (64-17-5)

LD50 oral rat	> 2000 ml/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Vapours)	124.7 mg/l/4h (OECD 403 method)

N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.49 mg/l/4h

toluene (108-88-3)

LD50 oral rat	5580 mg/kg
LD50 dermal rabbit	> 12400 mg/kg
LC50 Inhalation - Rat	28.1 mg/l/4h (OECD 403 method)

Skin corrosion/irritation : Not classified
pH: insoluble in water
Additional information : Based on available data, the classification criteria are not met
Serious eye damage/irritation : Not classified
pH: insoluble in water
Additional information : Based on available data, the classification criteria are not met
Respiratory or skin sensitisation : Not classified

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Additional information	: (OECD 406 method) Does not cause cutaneous sensitisation for guinea-pigs Conclusion by analogy Based on available data, the classification criteria are not met
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

3-aminopropyltriethoxysilane (919-30-2)

NOAEL (chronic, oral, animal/male, 2 years)	> 43.8 mg/kg bodyweight
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met

methanol (67-56-1)

NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male
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

2-Pentanone, O,O',O''-(methylsilylidyne)trioxime (37859-55-5)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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3-aminopropyltriethoxysilane (919-30-2)

LOAEL (oral, rat, 90 days)	600 mg/kg bodyweight/day
NOAEL (subchronic, oral, animal/male, 90 days)	200 mg/kg bodyweight

ethanol; ethyl alcohol (64-17-5)

NOAEC (inhalation, rat, vapour, 90 days)	20 mg/l
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N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)

NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight/day
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

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Viscosity, kinematic	6010 mm ² /s
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2-Pentanone, O,O',O''-(methylsilylidyne)trioxime (37859-55-5)

Viscosity, kinematic	16.1 mm ² /s at 20 °C
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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified

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Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	18260 mg/l (OECD 202 method)
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	22000 mg/l Pseudokirchneriella subcapitata
ErC50 algae	16912 mg/l ulva pertusa
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	7900 mg/l Oryzias latipes
Fungicide 2-octyl-2H-isothiazol-3-one (26530-20-1)	
LC50 - Fish [1]	122 µg/l (OECD 203 method)
EC50 - Crustacea [1]	0.42 mg/l (OECD 202 method)
EC50 72h - Algae [1]	0.084 mg/l (OECD 201 method)
ErC50 algae	(OECD 201 method)
NOEC chronic fish	22 µg/l
NOEC chronic crustacea	0.022 mg/l
NOEC chronic algae	0.004 mg/l
3-aminopropyltriethoxysilane (919-30-2)	
LC50 - Fish [1]	> 100 mg/l Brachydanio rerio (zebra-fish)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Big water flea)
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitata
NOEC chronic algae	72h 1.3 mg/l Desmodesmus subspicatus.
ethanol; ethyl alcohol (64-17-5)	
LC50 - Fish [1]	14200 mg/l pimephales promelas
EC50 - Crustacea [1]	5012 mg/l
EC50 72h - Algae [1]	11.5 mg/l
NOEC chronic crustacea	9.6 mg/l
N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)	
LC50 - Fish [1]	597 (OECD 203 method)
EC50 - Crustacea [1]	81 mg/l (OECD 202 method)
EC50 72h - Algae [1]	126 mg/l Test method EU C.3
NOEC chronic crustacea	> 1 mg/l (OECD 211 method)
toluene (108-88-3)	
LC50 - Fish [1]	5.5 (≥ 5) mg/l oncorhynchus kisutch
EC50 - Crustacea [1]	3.78 mg/l Daphnia magna
EC50 72h - Algae [1]	10 mg/l
ErC50 algae	3h 134 mg/l
NOEC chronic crustacea	0.74 mg/l Ceriodaphnia dubai

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toluene (108-88-3)	
NOEC chronic algae	10 mg/l <i>Skeletonema costatum</i>

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.

methanol (67-56-1)	
Persistence and degradability	Readily biodegradable.

Fungicide 2-octyl-2H-isothiazol-3-one (26530-20-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	3 - 5 days

3-aminopropyltriethoxysilane (919-30-2)	
Persistence and degradability	Not readily biodegradable. Hydrolysis in water.
Biodegradation	28d 67 % (OECD 301A method)

ethanol; ethyl alcohol (64-17-5)	
Biochemical oxygen demand (BOD)	0.1 g O ₂ /g substance
Chemical oxygen demand (COD)	1.9 g O ₂ /g substance
Biodegradation	74 % 20 days

toluene (108-88-3)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1.23 g O ₂ /g substance

12.3. Bioaccumulative potential

Quadroseal	
Partition coefficient n-octanol/water (Log Pow)	Not applicable for preparations
Partition coefficient n-octanol/water (Log Kow)	Not applicable for preparations
Bioaccumulative potential	Not established.

methanol (67-56-1)	
Bioconcentration factor (BCF REACH)	< 10
Partition coefficient n-octanol/water (Log Pow)	-0.77
Bioaccumulative potential	Low bioaccumulation potential.

Fungicide 2-octyl-2H-isothiazol-3-one (26530-20-1)	
Partition coefficient n-octanol/water (Log Kow)	2.92 (OECD 117 method)
Bioaccumulative potential	Low bioaccumulation potential.

2-Pentanone, O,O',O''-(methylsilyldiyl)trioxime (37859-55-5)	
Partition coefficient n-octanol/water (Log Pow)	1.25

3-aminopropyltriethoxysilane (919-30-2)	
Bioconcentration factor (BCF REACH)	3.4 <i>Cyprinus carpio</i> (Common Carp)
Bioaccumulative potential	not bioaccumulative.

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ethanol; ethyl alcohol (64-17-5)

Partition coefficient n-octanol/water (Log Kow)	-0.3
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toluene (108-88-3)

Bioaccumulative potential	Bioaccumulation unlikely.
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12.4. Mobility in soil

2-Pentanone, O,O',O''-(methylsilyldiylne)trioxime (37859-55-5)

Surface tension	69.5 mN/m
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toluene (108-88-3)

Ecology - soil	Product adsorbs onto the soil.
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12.5. Results of PBT and vPvB assessment

No additional information available

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

Regional legislation (waste)	: Disposal must be done according to official 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.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	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	Dangerous for the environment: No

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ADR	IMDG	IATA	ADN	RID
No supplementary information available				

14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Not classified.

Transport by sea

Transport regulations (IMDG) : Not classified.

Air transport

Transport regulations (IATA) : Not classified.

Inland waterway transport

Transport regulations (ADN) : Not classified.

Rail transport

Transport regulations (RID) : Not classified.

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)

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 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)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Toluene		108-88-3	2902 30 00	Category 3		Annex I

15.1.2. National regulations

No additional information available

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out:

methanol

toluene

SECTION 16: Other information

Indication of changes:

Regulatory information. Physical and chemical properties.

Abbreviations and acronyms:

CAS-No.	Chemical Abstract Service number
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
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
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
OECD	Organisation for Economic Co-operation and Development
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources

: ECHA (European Chemicals Agency). Supplier's safety documents. 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.

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Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH071	Corrosive to the respiratory tract.
EUH208	Contains Fungicide 2-octyl-2H-isothiazol-3-one, 3-aminopropyltriethoxysilane, N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine. May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 2	Reproductive toxicity, Category 2

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Full text of H- and EUH-statements:

Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity – single exposure, Category 1
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aquatic Chronic 3	H412	Calculation method
EUH208	EUH208	Calculation method

Safety Data Sheet (SDS), EU

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.