

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Product name	: 500-TL
Product code	: 500-TL
Type of product	: adhesives
Product group	: Trade product

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

Use of the substance/mixture	: Anaerobic thread locking compound based on methacrylates
Use of the substance/mixture	: Adhesives, sealants
Function or use category	: Other adhesives and sealants

1.3. Details of the supplier of the safety data sheet

Cyanotec Limited
Bay 2, Building 62,
Third Avenue, Pensnett Trading Estate,
Kingswinford DY6 7XT
T +44 (0)1834 294 753
sales@cyanotec.com

1.4. Emergency telephone number

Emergency number	: +44 (0)1834 294 753
	Office hours 0900-1700hrs
	(Monday-Thursday)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Single exposure, Category 3,	H335
Respiratory tract irritation	
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP)



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Signal word (CLP)	: Warning
Contains	: Triethyleneglycol Dimethacrylate; Hydroxypropyl Methacrylate; Acrylic Acid; Reaction Mass of 2,2'-[[4-Methylphenyl]Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-; Tert-butyl Hydroperoxide
Hazard statements (CLP)	: H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.
Precautionary statements (CLP)	: P261 - Avoid breathing vapours. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear eye protection, protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

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

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Hydroxypropyl Methacrylate (27813-02-1), Acrylic Acid (79-10-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Hydroxypropyl Methacrylate (27813-02-1), Acrylic Acid (79-10-7)

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 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Triethyleneglycol Dimethacrylate	CAS-No.: 109-16-0 EC-No.: 203-652-6 REACH-no: 01-2119969287-21	$\geq 60 - < 75$	Skin Sens. 1B, H317
Hydroxypropyl Methacrylate	CAS-No.: 27813-02-1 EC-No.: 248-666-3 REACH-no: 01-2119490226-37	$\geq 3 - < 8$	Eye Irrit. 2, H319 Skin Sens. 1, H317
Acrylic Acid substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 79-10-7 EC-No.: 201-177-9 EC Index-No.: 607-061-00-8 REACH-no: 01-2119452449-31	$\geq 1 - < 3$	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Corr. 1A, H314 Aquatic Acute 1, H400

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tert-butyl Hydroperoxide	CAS-No.: 75-91-2 EC-No.: 200-915-7 EC Index-No.: 617-023-00-2 REACH-no: 01-2119446670-40	≥ 0.3 – < 1	Flam. Liq. 3, H226 Org. Perox. F, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:vapour), H330 Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 STOT SE 3, H335 Aquatic Chronic 2, H411
2'-Phenylacetohydrazide	CAS-No.: 114-83-0 EC-No.: 204-055-3 REACH-no: EXEMPT <1T	>0.1 - <1	Acute Tox. 3 (Oral), H301
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-(Monomer)	EC-No.: 911-490-9 REACH-no: 01-2119979579-10	≥ 0.1 – < 0.3	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Acrylic Acid	CAS-No.: 79-10-7 EC-No.: 201-177-9 EC Index-No.: 607-061-00-8 REACH-no: 01-2119452449-31	(1 ≤ C ≤ 100) STOT SE 3; H335

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	: Treat symptomatically. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Move the affected person away from the contaminated area and into the fresh air. If symptoms persist, consult a doctor.
First-aid measures after skin contact	: Remove all contaminated clothing and footwear. Wash immediately with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Drink plenty of water. Get medical advice/attention.
First-aid measures for first aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects	: May cause an allergic skin reaction.
Symptoms/effects after inhalation	: May cause shortness of breath, tightness of the chest, a sore throat and cough.
Symptoms/effects after skin contact	: Causes skin irritation. Red skin. Itching. Allergic skin rash.
Symptoms/effects after eye contact	: Eye irritation. Redness of the eye tissue. Itching. Causes eyes to water.
Symptoms/effects after ingestion	: Causes irritation of the mouth and throat. Abdominal pain, nausea.
Chronic symptoms	: Repeated or prolonged skin contact can result in sensitisation in susceptible individuals.

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

Treat symptomatically. An eyewash station should be available on the premises.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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| Suitable extinguishing media | : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | : high volume water jet or water based extinguishing media. |

5.2. Special hazards arising from the substance or mixture

- | | |
|--|---|
| Fire hazard | : Hazardous polymerization may occur if exposed to fire conditions. |
| Explosion hazard | : Prolonged exposure to fire may cause containers to rupture/explode. |
| Reactivity in case of fire | : Polymerises on exposure to temperature rise: pressure build-up may cause closed container to burst. |
| Hazardous decomposition products in case of fire | : Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO ₂ etc.). |

5.3. Advice for firefighters

- | | |
|--------------------------------|--|
| Precautionary measures fire | : Exercise caution when fighting any chemical fire. Do not approach fire except upwind and only with proper skin and respiratory protection (supplied air only). |
| Firefighting instructions | : Avoid contact with skin and eyes. Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| 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

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| General measures | : Clean up any spills as soon as possible, using an absorbent material to collect it. Scoop absorbed substance into closing containers. |
|------------------|---|

For non-emergency personnel

- | | |
|----------------------|--|
| Protective equipment | : Gloves. |
| Emergency procedures | : Avoid breathing vapours. Avoid contact with skin and eyes. |

For emergency responders

- | | |
|----------------------|--|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. Protective gloves. (ISO 374-2). Safety glasses. (ISO 16321-1). For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Ventilate area. Keep people away from and upwind of spill/leak. Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Mark out the contaminated area with signs and prevent access to unauthorized personnel. |

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|---|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. |
| Methods for cleaning up | : Wear recommended personal protective equipment. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Collect all waste in suitable and labelled containers and dispose according to local legislation. |
| Other information | : Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of materials or solid residues at an authorized site. |

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6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Skin contact should be avoided to prevent possible allergic reactions.
Precautions for safe handling	: Ensure that there is a suitable ventilation system. Do not handle in a confined space. Avoid breathing vapours. Avoid contact with skin and eyes. Wear personal protective equipment. Safety glasses with side shields. (ISO 16321-1). Protective gloves. (ISO 374-2). Do not wear protective gloves made from PVC as these absorb (meth)acrylates.
Hygiene measures	: Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store in original container. Keep container tightly closed. Keep cool. IMPORTANT - if stored in bulk, product must be kept in contact with air to aid stabilisation.
Incompatible products	: Strong acids. Strong oxidizing agents. Copper and its alloys. free radical initiators. Metals.
Incompatible materials	: Heat sources. High temperature. Direct sunlight. Sources of ignition.
Storage temperature	: < 30 °C
Heat and ignition sources	: Do not store near heat sources or expose to high temperatures.
Storage area	: Store away from direct sunlight or other heat sources.
Packaging materials	: Always store product in a container of the same material as original container.

7.3. Specific end use(s)

adhesives.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Acrylic Acid (79-10-7)	
United Kingdom - Occupational Exposure Limits	
Local name	Acrylic acid (Prop-2-enoic acid) Asid akrilik
WEL TWA (OEL TWA)	30 mg/m ³
	10 ppm
WEL STEL (OEL STEL)	60 mg/m ³
	20 ppm (STEL in relation to a 1-minute reference period)
	(STEL in relation to a 1-minute reference period) (STEL in relation to a 1-minute reference period)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system. An eyewash station should be available on the premises. Skin contact should be avoided to prevent possible allergic reactions. Wear recommended personal protective equipment. Do not wear protective gloves made from PVC as these absorb (meth)acrylates. See Section 7 for information on safe handling.

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Personal protection equipment

Personal protective equipment:

Safety glasses. (ISO 16321-1). Protective gloves. (ISO 374-2).

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses. (ISO 16321-1)

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	ISO 16321-1:2021

Skin protection

Skin and body protection:

Normal overalls. Lab coat

Hand protection:

Protective gloves. (ISO 374-2). Do not wear protective gloves made from PVC as these absorb (meth)acrylates. Replace gloves immediately whenever signs of wear or perforation appear

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR), Viton® II, Fluoroelastomer (FKM)	5 (> 240 minutes)	>0.3		EN 374-2

Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment. Reusable half mask. Recommended: Filter type A (brown)

Respiratory protection			
Device	Filter type	Condition	Standard
Reusable half mask	Type A - High-boiling (>65 °C) organic compounds	If conc. in air > 1 vol %	EN 140, EN 405, EN 14387

Environmental exposure controls

Environmental exposure controls:

Do not empty into drains. Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green.
Appearance	: Viscous. Liquid.

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Odour	: Characteristic pungent odour.
Odour threshold	: Not available
Melting point	: Not established
Freezing point	: Not available
Boiling point	: Not established
Flammability	: Not flammable
Explosive properties	: Product is not explosive.
Oxidising properties	: Not oxidising. by EC criteria.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 100 °C
Auto-ignition temperature	: Not established
Decomposition temperature	: Not available
pH	: Not established
Viscosity, kinematic	: 480 mm ² /s (calculated value)
Viscosity, dynamic	: ≈ 500 cP Anton Paar cone and plate, controlled stress rheometer
Solubility	: Moderately soluble in water. Soluble in acetone. Water: < 32 g/l
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: Not established
Vapour pressure	: ≈ 0.1 mm Hg @20°C
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: ≈ 1.04
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

Other properties : anaerobic

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Hazardous polymerization may occur if exposed to high temperature.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Polymerises on exposure to temperature rise: pressure build-up may cause closed container to burst.

10.4. Conditions to avoid

Heat sources. High temperature. Direct sunlight. Sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. free radical initiators. Metals.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Combustion products may include the following: carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO₂ etc.).

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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 (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

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ATE CLP (oral)	33540 mg/kg
ATE CLP (dermal)	35553 mg/kg
ATE CLP (vapours)	159 mg/l/4h
Triethyleneglycol Dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg
LD50 dermal	> 2000 mg/kg
Hydroxypropyl Methacrylate (27813-02-1)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	7964 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male
LD50 dermal	> 5000 mg/kg
Acrylic Acid (79-10-7)	
LD50 oral rat	1000 – 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.1 mg/l/4h Animal: rat, OECD Guideline 403: Acute toxicity (inhalation)
2'-Phenylacetohydrazide (114-83-0)	
LD50 oral	270 mg/kg bodyweight mouse
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
LD50 oral rat	619 mg/kg Equivalent to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)
LD50 dermal	> 2000 mg/kg
Tert-butyl Hydroperoxide (75-91-2)	
LD50 oral rat	≈ 560 mg/kg bodyweight Animal: rat, Male/Female: Toxicity, Oral
LD50 dermal rabbit	628 mg/kg bodyweight (Rat, Male / female, Experimental value, Dermal) OECD 402 method
LC50 Inhalation - Rat	1845 mg/m³ Animal: rat, OECD Guideline 403: Acute toxicity (inhalation)
LC50 Inhalation - Rat (Vapours)	1.85 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
pH: Not established

Acrylic Acid (79-10-7)	
pH	2

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Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
Additional information	(OECD 439 method)
Tert-butyl Hydroperoxide (75-91-2)	
pH	4.3 @20°C
Serious eye damage/irritation	: Causes serious eye irritation. pH: Not established
Acrylic Acid (79-10-7)	
pH	2
Tert-butyl Hydroperoxide (75-91-2)	
pH	4.3 @20°C
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Acrylic Acid (79-10-7)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Hydroxypropyl Methacrylate (27813-02-1)	
NOAEL (animal/male, F0/P)	300 mg/kg bodyweight
NOAEL (animal/female, F0/P)	300 mg/kg bodyweight
NOAEL (animal/male, F1)	≥ 1000 mg/kg bodyweight
NOAEL (animal/female, F1)	≥ 1000 mg/kg bodyweight
STOT-single exposure	: May cause respiratory irritation.
Tert-butyl Hydroperoxide (75-91-2)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Triethyleneglycol Dimethacrylate (109-16-0)	
NOAEL (subacute, oral, animal/male, 28 days)	1000 mg/kg bodyweight
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl Methacrylate (27813-02-1)	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Acrylic Acid (79-10-7)	
NOAEL (oral, rat, 90 days)	40 – 375 mg/kg bodyweight/day
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
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Viscosity, kinematic	480 mm²/s (calculated value)
Hydroxypropyl Methacrylate (27813-02-1)	
Viscosity, kinematic	8.9 mm²/s @20°C

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Acrylic Acid (79-10-7)	
Viscosity, kinematic	1.094 mm ² /s
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
Viscosity, kinematic	2320 mm ² /s @25°C

11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms : Causes skin irritation,Causes serious eye irritation,May cause an allergic skin reaction,May cause respiratory irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Ecology - water : Moderately soluble in water.

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

Triethyleneglycol Dimethacrylate (109-16-0)	
LC50 - Fish [1]	16.4 mg/l
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	72.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	100 mg/l Species: Daphnia magna Duration: '21 d'
NOEC (chronic)	32 mg/l Species: Daphnia magna Duration: '21 d'
NOEC chronic fish	9.5 mg/l
NOEC chronic crustacea	32 mg/l

Hydroxypropyl Methacrylate (27813-02-1)	
LC50 - Fish [1]	> 493 mg/l DIN 38412: Pt1
EC50 - Crustacea [1]	> 130 mg/l Species: Daphnia magna (OECD 202 method)
EC50 72h - Algae [1]	> 97.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 97.2 mg/l OECD 201: 72 h Pseudokirchneriella subcapitata (Green Algae)
NOEC (chronic)	45.2 mg/l Species: Daphnia magna Duration: '21 d'
NOEC chronic crustacea	45.2 mg/l
NOEC chronic algae	97.2 mg/l

Acrylic Acid (79-10-7)	
LC50 - Fish [1]	27 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	95 mg/l Species: Daphnia magna

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Acrylic Acid (79-10-7)	
ErC50 algae	0.13 mg/l EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Weight of evidence, Nominal concentration
LOEC (chronic)	8.1 mg/l Species: Daphnia magna Duration: '21 d'
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
LC50 - Fish [1]	> 100 mg/l (OECD 203 method)
EC50 - Crustacea [1]	48 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Other aquatic organisms [1]	48 mg/l
EC50 96h - Algae [1]	> 100 mg/l
Tert-butyl Hydroperoxide (75-91-2)	
LC50 - Fish [1]	42.3 mg/l Test organisms (species): Fathead minnow (Pimephales promelas)
EC50 - Crustacea [1]	20 mg/l Species: Daphnia magna
EC50 72h - Algae [1]	2.1 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

500-TL	
Persistence and degradability	Readily biodegradable.
Triethyleneglycol Dimethacrylate (109-16-0)	
Persistence and degradability	Readily biodegradable.
Biodegradation	≈ 75 %
Hydroxypropyl Methacrylate (27813-02-1)	
Persistence and degradability	> 80 % biodegradation .
Biodegradation	> 80 %
Acrylic Acid (79-10-7)	
Persistence and degradability	Readily biodegradable in water, easily degradable in the soil.
2'-Phenylacetohydrazide (114-83-0)	
Persistence and degradability	Biodegradability in water: no data available.
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
Persistence and degradability	Rapidly degradable
Tert-butyl Hydroperoxide (75-91-2)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

500-TL	
Partition coefficient n-octanol/water (Log Pow)	Not established
Bioaccumulative potential	Slightly or not bioaccumulative.

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Triethyleneglycol Dimethacrylate (109-16-0)	
Bioaccumulative potential	No bioaccumulation potential.
Hydroxypropyl Methacrylate (27813-02-1)	
Partition coefficient n-octanol/water (Log Pow)	0.97 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low bioaccumulation potential.
Acrylic Acid (79-10-7)	
BCF - Fish [1]	3.162 (estimated value)
Partition coefficient n-octanol/water (Log Pow)	0.46 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low bioaccumulation potential. BCF. <500.
2'-Phenylacetohydrazide (114-83-0)	
Bioaccumulative potential	Not established. Lack of data.
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
Partition coefficient n-octanol/water (Log Pow)	2.17
Tert-butyl Hydroperoxide (75-91-2)	
Partition coefficient n-octanol/water (Log Pow)	0.7

12.4. Mobility in soil

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Ecology - soil	Not volatile. Moderately soluble in water. The liquid is heavier than water.
Triethyleneglycol Dimethacrylate (109-16-0)	
Ecology - soil	Product adsorbs onto the soil. The liquid is heavier than water. Not volatile.
Hydroxypropyl Methacrylate (27813-02-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (calculated value)
Acrylic Acid (79-10-7)	
Surface tension	69.9 mN/m (1 g/L) @20°C
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.78 – 2.14
Ecology - soil	Low potential for absorption in soil.
2'-Phenylacetohydrazide (114-83-0)	
Ecology - soil	No specific data.
Reaction Mass of 2,2'-[(4-Methylphenyl)Imino]Bisethanol and Ethanol 2-[[2-(2-Hydroxyethoxy)Ethyl](4-Methylphenyl)Amino]-	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.17 (OECD 121 method)

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12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Hydroxypropyl Methacrylate (27813-02-1), Acrylic Acid (79-10-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Hydroxypropyl Methacrylate (27813-02-1), Acrylic Acid (79-10-7)

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: The product may be polymerised with LA64 activator (care should be taken when polymerizing a large amount of product due to exothermic reaction). Solidified product: May be disposed of with non-hazardous industrial waste.
Product/Packaging disposal recommendations	: a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste. When totally empty, containers are recyclable like any other packing.
Additional information	: Only well-emptied containers with dried or cured product residues and without solvent vapors can be recycled. Recycling is preferred to disposal or incineration.
Ecological waste information	: Do not empty into drains.
HP Code	: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

SECTION 14: Transport information

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

14.1. UN number or ID number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: Not regulated
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IMDG

Transport hazard class(es) (IMDG)	: Not regulated
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IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

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 (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

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Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

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)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Indication of changes:

SDS changed sections. Identification of the substance/mixture and of the company/undertaking. Extra phrases. Composition/information on ingredients. First aid measures. Firefighting measures. Accidental release measures. Handling and storage. Exposure controls/personal protection. Physical and chemical properties. Stability and reactivity. Toxicological information. Ecological information. Disposal considerations.

Indication of changes		
Section	Changed item	Comments
	Version	Modified
	Revision date	Modified
	Supersedes version of	Modified
1.1	UFI on SDS 1.1	Removed
2.2	Extra phrases	Removed
2.2	Precautionary statements (CLP)	Modified
3	Composition/information on ingredients	Modified
4.1	First-aid measures general	Modified
4.1	First-aid measures for first aider	Added
4.2	Chronic symptoms	Added
4.2	Symptoms/effects after eye contact	Modified
4.2	Symptoms/effects after skin contact	Modified
5.3	Precautionary measures fire	Modified
5.3	Firefighting instructions	Modified
6.1	Emergency procedures	Modified
6.1	Protective equipment	Modified
6.3	Methods for cleaning up	Modified
6.3	Other information	Modified
7.1	Precautions for safe handling	Modified
7.1	Additional hazards when processed	Modified
7.2	Heat and ignition sources	Added
7.2	Storage area	Added
8.2	Respiratory protection	Modified
8.2	Environmental exposure controls	Modified

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Indication of changes		
Section	Changed item	Comments
8.2	Hand protection	Modified
8.2	Personal protective equipment	Modified
8.2	Appropriate engineering controls	Modified
8.2	Other information	Added
9	Flammability (solid, gas)	Modified
9	Partition coefficient n-octanol/water (Log Pow)	Added
9	pH	Modified
9	Solubility	Modified
9	Solubility in water	Added
10.1	Reactivity	Modified
11.1	ATE CLP (dermal)	Added
11.1	ATE CLP (oral)	Added
11.1	ATE CLP (vapours)	Added
12.1	Ecology - water	Modified
12.4	Ecology - soil	Modified
13.1	Ecology - waste materials	Added
13.1	Additional information	Added
15.1	REACH Annex XVII	Modified
15.2	Chemical safety assessment	Modified
16	Abbreviations and acronyms	Modified
16	Indication of changes	Modified

Abbreviations and acronyms:	
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)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

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Abbreviations and acronyms:	
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
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor
BS EN	British Standard
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CSA	Chemical safety assessment
EINECS	European Inventory of Existing Commercial Chemical Substances
EWC	European waste catalogue
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
PPE	Personal protection equipment
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
TWA	Time Weighted Average
TLV	Threshold Limit Value
UFI	Unique Formula Identifier
IOELV	Indicative Occupational Exposure Limit Value

Data sources

: Supplier's safety documents. ECHA (European Chemicals Agency). UNECE, <http://www.unece.org/>.

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Full text of H- and EUH-statements:	
Acute Tox. 2 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Org. Perox. F	Organic Peroxides, Type F
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful 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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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Safety Data Sheet applicable for regions : GB

Safety Data Sheet (SDS), EU

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