LOCTITE 638

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2015/830.
Issue date: 01/10/2024 Revision date: 23/07/2025 Supersedes: 03/12/2024 Version: 18.0
SDS No: 114576-0296a

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

1.1. Product identifier

Product form : Mixture
Product name : LOCTITE 638
Product code : S.14958

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

1.2.1. Relevant identified uses

Intended for general public
Use of the substance/mixture : anaerobic Adhesive

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor
Sparex Limited
Exeter Airport
Exeter EX5 2LJ Devon
United Kingdom
T +44 1392 368892
customerservice@sparex.com

Manufacturer
Henkel AG & Co. KGaA
Henkelstr. 67
40589 Düsseldorf
Germany
T +49 211 797 0 - F +49 211 798 2009
ua-productsafety.de@henkel.com

E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

1.4. Emergency telephone number

Emergency number : Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS		111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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 damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GHS UK) :

GHS05 GHS07

Signal word (GHS UK) : Danger

Contains : 3,3,5-trimethylcyclohexyl methacrylate; 2-hydroxyethyl methacrylate; acrylic acid; hydroxypropyl methacrylate; Maleic acid; 2'-phenylacetohydrazide; 2,2'-ethylenedioxydiethyl dimethacrylate; 2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester

Hazard statements (GHS UK) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS UK) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P261 - Avoid breathing spray, vapours, mist.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical attention, advice.
P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

Child-resistant fastening : Not applicable

Tactile warning : Not applicable

2.3. Other hazards

Results of PBT and vPvB assessment

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with UK REACH Annex XIII

Results of Endocrine Disruptor assessment

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of UK 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 GB BPR and GB PPP at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

Mixtures

Name	Product identifier	%	Classification according to GB CLP (SI 2019:720 as amended)
3,3,5-trimethylcyclohexyl methacrylate	CAS-No.: 7779-31-9 EC-No.: 231-927-0	≥ 10 – < 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Chronic 2, H411
2-hydroxyethyl methacrylate	CAS-No.: 868-77-9 EC-No.: 212-782-2	≥ 10 – < 20	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317

Name	Product identifier	%	Classification according to GB CLP (SI 2019:720 as amended)
acrylic acid substance with workplace exposure limit(s) (Note D)	CAS-No.: 79-10-7 EC-No.: 201-177-9 UK Index-No.: 607-061-00-8	≥ 1 – < 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 (ATE=1000 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411
hydroxypropyl methacrylate	CAS-No.: 27813-02-1 EC-No.: 248-666-3	≥ 1 – < 5	Eye Irrit. 2, H319 Skin Sens. 1, H317
α, α-dimethylbenzyl hydroperoxide; cumene hydroperoxide	CAS-No.: 80-15-9 EC-No.: 201-254-7	≥ 0.1 – < 1	Org. Perox. E, H242 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=0.05 mg/l/4h) Skin Corr. 1B, H314 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411
Maleic acid	CAS-No.: 110-16-7 EC-No.: 203-742-5 UK Index-No.: 607-095-00-3	≥ 0.1 – < 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Acute Tox. 4 (Dermal), H312
2'-phenylacetohydrazide	CAS-No.: 114-83-0 EC-No.: 204-055-3	≥ 0.1 – < 1	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
2,2'-ethylenedioxydiethyl dimethacrylate	CAS-No.: 109-16-0 EC-No.: 203-652-6 UK Index-No.: 607-768-00-1	≥ 0.1 – < 1	Skin Sens. 1B, H317
Methacrylic acid substance with workplace exposure limit(s) (Note D)	CAS-No.: 79-41-4 EC-No.: 201-204-4 UK Index-No.: 607-088-00-5	≥ 0.1 – < 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester	CAS-No.: 2351-43-1 EC-No.: 800-422-2	≥ 0.1 – < 1	Eye Irrit. 2, H319 Skin Sens. 1, H317

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
acrylic acid	CAS-No.: 79-10-7 EC-No.: 201-177-9 UK Index-No.: 607-061-00-8	(1 ≤ C ≤ 100) STOT SE 3; H335

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
α, α-dimethylbenzyl hydroperoxide; cumene hydroperoxide	CAS-No.: 80-15-9 EC-No.: 201-254-7	(1 ≤ C < 3) Eye Irrit. 2; H319 (1 ≤ C < 10) STOT SE 3; H335 (3 ≤ C < 10) Eye Dam. 1; H318 (3 ≤ C < 10) Skin Irrit. 2; H315 (10 ≤ C ≤ 100) Skin Corr. 1B; H314
Maleic acid	CAS-No.: 110-16-7 EC-No.: 203-742-5 UK Index-No.: 607-095-00-3	(0.1 ≤ C ≤ 100) Skin Sens. 1; H317
Methacrylic acid	CAS-No.: 79-41-4 EC-No.: 201-204-4 UK Index-No.: 607-088-00-5	(1 ≤ C ≤ 100) STOT SE 3; H335

Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

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 : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

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

Symptoms/effects after eye contact : Serious damage to eyes.

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 : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Contain the extinguishing fluids by bunding. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

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 : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

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

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing 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 locked up. Store in a well-ventilated place. Keep container tightly closed.

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Packaging materials : Store always product in container of same material as original container.

7.3. Specific end use(s)

See Section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 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)
WEL TWA (OEL TWA)	29 mg/m³
	10 ppm
WEL STEL (OEL STEL)	59 mg/m³ STEL in relation to a 1-minute reference period
	20 ppm STEL in relation to a 1-minute reference period
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Methacrylic acid (79-41-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Methacrylic acid
WEL TWA (OEL TWA)	72 mg/m³
	20 ppm
WEL STEL (OEL STEL)	143 mg/m³
	40 ppm
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

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.

8.2.2. Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.

8.2.2.1. Eye and face protection

Eye protection:
Protective goggles (EN 166)

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

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

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Green.
Odour	:	acrylic.
Odour threshold	:	Not available
pH	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	> 150 °C
Flash point	:	> 100 °C
Explosive limits	:	Not available
Vapour pressure	:	< 0.13 mbar (20 °C)
Vapour pressure at 50°C	:	Not available
Relative vapour density at 20°C	:	Not available
Relative density	:	> 1 (20 °C)
Density	:	1.1 g/cm³ (20 °C)
Solubility	:	Water: Easily soluble
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
Viscosity, kinematic	:	> 20.5 mm²/s (40 °C)
Explosive properties	:	Not available

9.2. Other information

VOC content	:	< 3 %
Particle characteristics	:	Not applicable
Additional information	:	Solidifying temperature : < -30°C

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

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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)

2-hydroxyethyl methacrylate (868-77-9)	
LD50 oral	5050 mg/kg
LD50 dermal	3000 mg/kg

acrylic acid (79-10-7)	
LD50 oral rat	1000 – 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:
LC50 Inhalation - Rat	> 5.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

α, α-dimethylbenzyl hydroperoxide; cumene hydroperoxide (80-15-9)	
LC50 Inhalation - Rat [ppm]	220 ppm Animal: rat, Animal sex: male, Remarks on results: other:

Maleic acid (110-16-7)	
LD50 oral rat	708 mg/kg
LD50 dermal rabbit	1560 mg/kg

2'-phenylacetohydrazide (114-83-0)	
LD50 oral rat	310 mg/kg

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
LD50 oral	8700 mg/kg
LD50 dermal	2500 mg/kg

Methacrylic acid (79-41-4)	
LD50 oral rat	1320 mg/kg
LD50 dermal rabbit	500 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
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)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

3,3,5-trimethylcyclohexyl methacrylate (7779-31-9)	
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)

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
LOAEC (inhalation, rat, gas, 90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:
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)
NOAEC (inhalation, rat, gas, 90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

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) : Harmful to aquatic life with long lasting effects.

acrylic acid (79-10-7)	
LC50 fish 1	27 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 Daphnia 1	95 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	8.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 10.1 mg/l Test organisms (species): Oryzias latipes Duration: '45 d'

α, α-dimethylbenzyl hydroperoxide; cumene hydroperoxide (80-15-9)	
LC50 fish 1	3.9 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 Daphnia 1	18.84 mg/l Test organisms (species): Daphnia magna

Maleic acid (110-16-7)	
EC50 Daphnia 1	42.81 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	≈ 93.8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	74.35 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	17.17 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
LC50 fish 1	16.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
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)
ErC50 algae	100 mg/l
LOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	32 mg/l
NOEC chronic algae	18.6 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
3,3,5-trimethylcyclohexyl methacrylate (7779-31-9)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
2-hydroxyethyl methacrylate (868-77-9)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
acrylic acid (79-10-7)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
hydroxypropyl methacrylate (27813-02-1)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
α, α-dimethylbenzyl hydroperoxide; cumene hydroperoxide (80-15-9)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
Maleic acid (110-16-7)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
2'-phenylacetohydrazide (114-83-0)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
Methacrylic acid (79-41-4)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester (2351-43-1)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII

12.6. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Packaging that is not properly emptied must be disposed of as the unused product.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. National regulations

UK REACH Annex XVII (Restriction List)

This product contains no substance(s) listed on UK REACH Annex XVII (Restriction List) equal to or above the level of SDS disclosure

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

This product contains no substance(s) listed on the UK REACH Candidate List (SVHC) above the 0.1% level of disclosure

GB PIC regulation (Prior Informed Conset)

This product contains no substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure

POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

Control of Poisons and Explosives Precursors Act

This product contains no substance(s) listed as a reportable poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure
This product contains no substance(s) listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure
This product contains no substance(s) listed as a reportable explosive precursor on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure
This substance is not listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations

Drug Precursors Regulation (EC 273/2004)

This product contains no substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure

15.1.2. Other Information

VOC content	:	< 3 %
British National Regulations	:	- Statutory Instrument 2019 No. 758 - The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 - Statutory Instrument 2019 No. 858 - The REACH etc. (Amendment etc.) (EU Exit) (No. 2) Regulations 2019 - Statutory Instrument 2019 No. 1144 - The REACH etc. (Amendment etc.) (EU Exit) (No. 3) Regulations 2019 - Statutory Instrument 2020 No. 1577 - The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 - Statutory Instrument 2021 No. 904 - The REACH etc. (Amendment) Regulations 2021 - Statutory Instrument 2019 No. 720 – The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 - Statutory Instrument 2020 No. 1567 – The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU exit) Regulations 2020 - Statutory Instrument 2022 No. 1037 – The Chemicals (Health and Safety) Trade and Miscellaneous Amendments Regulations 2022.

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:	
ACGIH	American Conference of Government Industrial Hygienists
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
OEL	Occupational Exposure Limit
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

Abbreviations and acronyms:	
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
N.O.S.	Not Otherwise Specified
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
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average

Abbreviations and acronyms:	
UFI	Unique Formula Identifier
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
ADG	Transport of Australian Dangerous Goods
DOT	Department of Transport
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
TDG	Transportation of Dangerous Goods

Other information : Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

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. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) 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 1	Hazardous to the aquatic environment – Chronic 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
Carc. 2	Carcinogenicity, Category 2
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
Org. Perox. E	Organic Peroxides, Type E
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
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. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Full text of H- and EUH-statements:	
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.
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.
H351	Suspected of causing cancer.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Expert judgement

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.