1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	BONDAN ST01 – Component A

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

General use	Adhesive.

1.3 Details of the supplier of the safety data sheet

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Department responsible for information: info@bondan.de · t +49 89 962427-0

1.4 Emergency telephone number

Drei Bond GmbH Carl-Zeiss-Ring 13 85737 Ismaning	Tel. +49 (0)89 96 24 27-0 During office hours Mo – Do 9:00 am – 05:00 pm Fr 8:00 am – 3:00 pm

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335
Environmental hazards	Aquatic Chronic 3 - H412

2.2 Label elements

Labelling CLP:



Signal word	**Danger**

Hazard statements

H225	Highly flammable liquid and vapour.
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

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352a	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.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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Special labelling

EUH205	Contains epoxy constituents. May produce an allergic reaction.

Contains: METHYL METHACRYLATE, EPOXY RESIN (Number average MW <= 700), METHACRYLIC ACID, CUMENE HYDROPEROXIDE

Supplementary precautionary statements

P233	Keep container tightly closed.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapour/ spray.
P264	Wash contaminated skin thoroughly after handling.
P273	Avoid release to the environment.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

2.3 Other hazards

None under normal conditions. This substance is not classified as PBT or vPvB according to current EU criteria.

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3 Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Ingredient	Designation	Content	Classification
CAS number: 80-62-6 EC number: 201-297-1 REACH registration number: 01-2119452498-28-XXXX	METHYL METHACRYLATE	60 - 100 %	Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335
CAS number: 25068-38-6 EC number: 500-033-5 REACH registration number: 01-2119456619-26-XXXX	EPOXY RESIN (Number average MW <= 700)	5 - 10 %	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411
CAS number: 79-41-4 EC number: 201-204-4 REACH registration number: 01-2119463884-26-XXXX	METHACRYLIC ACID	1 - 5 %	Acute Tox. 4 - H302 Acute Tox. 3 - H311 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335
CAS number: 128-37-0 EC number: 204-881-4 REACH registration number: REACH registration exemption – < 1 tonne	2,6-DI-TERT-BUTYL-P-CRESOL	1 - 5 %	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 M factor (acute) = 1 M factor (chronic) = 1
CAS number: 80-15-9 EC number: 201-254-7 REACH registration number: 01-2119475796-19-XXXX	CUMENE HYDROPEROXIDE	1 - < 2.5 %	Org. Perox. E - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

4 First aid measures

4.1 Description of first aid measures

Inhalation — Move the exposed person to fresh air. Get medical attention if any discomfort continues.

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Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. If symptoms develop, obtain medical attention.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact	Skin irritation, mild dermatitis, allergic skin rash.
Eye contact	Irritating and may cause redness and pain.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. Treat symptomatically.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards	Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.
Hazardous combustion	Burning produces irritating, toxic and obnoxious fumes.

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Products	Carbon monoxide, carbon dioxide, and unknown hydrocarbons. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

5.3 Advice for firefighters

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Eliminate all sources of ignition. Ensure adequate ventilation of the working area. Do not breathe vapour. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2 Environmental precautions

Do not discharge into drains or watercourses or onto the ground.

6.3 Methods and material for containment and cleaning up

Absorb spillage with sand or other inert absorbent. Transfer to suitable, labelled containers for disposal.

6.4 Reference to other sections

For personal protection, see Section 8. For waste disposal, see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Use in a well ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges.

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7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in a cool, well ventilated place. Keep container dry. Store in closed original container at temperatures between 2°C and 7°C.

7.3 Specific end use(s)

Adhesive

8 Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

METHYL METHACRYLATE
Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m³

METHACRYLIC ACID
Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³
Short-term exposure limit (15-minute): WEL 40 ppm 143 mg/m³

2,6-DI-TERT-BUTYL-P-CRESOL
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³

WEL = Workplace Exposure Limit

METHYL METHACRYLATE (CAS: 80-62-6)

DNEL
Workers, Industry/Professional - Inhalation; Long term : 208 mg/m³
Workers, Industry/Professional - Dermal; Long term : 13.67 mg/kg/day
Workers, Industry/Professional - Inhalation; Short term : 416 mg/m³

PNEC
Workers, Industry/Professional - Water; Long term <0.94 mg/l

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EPOXY RESIN (Number average MW <= 700) (CAS: 25068-38-6)

DNEL
Workers - Inhalation; Long term systemic effects: 12.25 mg/m³
Workers - Dermal; Long term systemic effects: 8.33 mg/kg/day
Workers - Inhalation; Short term systemic effects: 12.25 mg/m³
Workers - Dermal; Short term systemic effects: 8.33 mg/kg/day

PNEC
- Fresh water; Long term 0.006 mg/l
- Sediment (Freshwater); Long term 0.996 mg/l
- Sediment (Marinewater); 0.0996 mg/l
- STP; Long term 10 mg/l
- Soil; Long term 0.196 mg/l
- Marine water; 0.0006 mg/l
- Water; 0.0018 mg/l

METHACRYLIC ACID (CAS: 79-41-4)

DNEL
Workers, Industry - Inhalation; Long term local effects: 88 mg/m³
Workers, Industry - Dermal; Long term systemic effects: 4.25 mg/kg/day
Workers, Industry - Inhalation; Long term systemic effects: 29.6 mg/m³

PNEC
Workers, Industry - Fresh water; 0.82 mg/l
Workers, Industry - marine water; 0.82 mg/l
Workers, Industry - STP; 10 mg/l
Workers, Industry - Soil; 1.2 mg/kg

CUMENE HYDROPEROXIDE (CAS: 80-15-9)

DNEL
Workers - Inhalation; Long term systemic effects: 6 mg/m³

PNEC
Workers - Fresh water; 0.0031 mg/l
Workers - marine water; 0.00031 mg/l
Workers - Intermittent release; 0.031 mg/l
Workers, Industry - Soil; 1.2 mg/kg
Workers - STP; 0.35 mg/l

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Workers - Sediment (Freshwater); 0.023 mg/kg
Workers - Sediment (Marinewater); 0.0023 mg/kg
Workers - Soil; 0.0029 mg/kg

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

DNEL
Workers - Inhalation; Long term systemic effects: 3.5 mg/m³
Workers - Dermal; Long term systemic effects: 0.5 mg/kg/day

8.2 Exposure controls

Protection equipment


Appropriate engineering controls	Normal (mechanical) room ventilation should be adequate for small volumes. For higher volume activities, or if needed for worker comfort, local mechanical exhaust should be provided.
Eye/face protection	Use approved safety goggles or face shield. Personal eye protection should conform to EN 166.
Hand protection	It is recommended that chemical-resistant, impervious gloves are worn. Gloves should conform to EN 374. For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. Thickness: ≥ 0.4 mm The selected gloves should have a breakthrough time of at least 0.5 hours. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber. Thickness: ≥ 0.4 mm The selected gloves should have a breakthrough time of at least 8 hours. The breakthrough time for any glove material may be different for different glove manufacturers. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information

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	about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.
Other skin and body protection	Uniforms, coveralls, or a lab coat should be worn.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Wash promptly if skin becomes contaminated. Use of good industrial hygiene practices is required.
Respiratory protection	Ensure adequate ventilation of the working area. Respiratory protection may be required if excessive airborne contamination occurs. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Organic vapour filter, Type A (EN14387).

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	paste
Colour	off-white
Odour	pungent, acrylic
Odour threshold	not available
pH	not relevant
Melting point	not available
Initial boiling point and range	≈ 100 °C
Flash point	11 °C
Evaporation rate	not available
Upper/lower flammability or explosive limits	not available
Vapour pressure	≈ 28 mm Hg
Vapour density	≈ 3.46
Relative density	1.0
Solubility(ies)	Slightly soluble in water. Soluble in the following materials: Organic solvents.

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Auto-ignition temperature	not available
Viscosity	≈ 45.000 mPa·s @ 23°C, thixotropic
Oxidising properties	not available

10 Stability and reactivity

10.1 Reactivity

The following materials may react with the product: Strong oxidising agents, strong acids, strong alkalis

10.2 Chemical stability

Stable at normal ambient temperatures.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, no hazardous reactions will occur.

10.4 Conditions to avoid

Take precautionary measures against static discharges. Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

strong oxidising agents, strong acids, strong alkalis

10.6 Hazardous decomposition products

Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

11 Toxicological information

11.1 Information on toxicological effects

Toxicological effects	The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC.

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	Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.
Skin sensitisation	
Skin sensitization	May cause sensitisation by skin contact.
Aspiration hazard	
Aspiration hazard	None under normal conditions.
Inhalation	May cause respiratory system irritation.
Skin contact	Irritating to skin.
Eye contact	Causes serious eye damage.

Toxicological effects on ingredients

METHYL METHACRYLATE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rat
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	29.8
Species	Rat
Skin corrosion/irritation	
Skin corrosion/irritation	Not irritating. Prolonged skin contact may cause temporary irritation.
Serious eye damage/irritation	
Serious eye damage/irritation	not irritating

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Respiratory sensitisation

Respiratory sensitisation	Mouse: Sensitising

Skin sensitisation

Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising

Germ cell mutagenicity

Genotoxicity - in vitro	inconclusive
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity	CMR: no
IARC carcinogenicity	IARC Group 3: Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies. non-teratogenic, not embryotoxic

Specific target organ toxicity - single exposure

STOT - single exposure	respiratory tract Irritation

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No specific target organs known.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

EPOXY RESIN (Number average MW <= 700)

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	11,400.0
Species	Rat

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Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,000.1
Species	Rabbit

Acute toxicity - inhalation

Notes (inhalation LC_{50})	No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation	not irritating
Animal data	Oedema score: Very slight oedema - barely perceptible (1).

Serious eye damage/irritation

Serious eye damage/irritation	not irritating

Respiratory sensitisation

Respiratory sensitisation	No specific test data are available.

Skin sensitisation

Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising

Germ cell mutagenicity

Genotoxicity - in vitro	Conclusive data but not sufficient for classification.

Carcinogenicity

Carcinogenicity	Conclusive data but not sufficient for classification.

Reproductive toxicity

Reproductive toxicity - fertility	Fertility - NOAEL 750 mg/kg/day, Oral, Rat
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 180 mg/kg/day, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	No specific test data are available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Conclusive data but not sufficient for classification.

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Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

METHACRYLIC ACID

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,320.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	1,000.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	7.1
Species	Rat

Skin corrosion/irritation

Animal data	Dose: Method: OECD 404, 3 minutes, Rabbit: Corrosive

Serious eye damage/irritation

Serious eye damage/irritation	Method: OECD 405, Rabbit: Corrosive

Respiratory sensitisation

Respiratory sensitisation	Guinea pig: Not sensitising. Method: various test systems

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising

Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	CMR: no

Reproductive toxicity

Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.

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Reproductive toxicity - development	non-teratogenic, not embryotoxic

Specific target organ toxicity - single exposure

STOT - single exposure	respiratory tract Irritation

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No specific target organs known.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

CUMENE HYDROPEROXIDE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	328.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	1,200.0
Species	Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	1.37
Species	Rat

Skin corrosion/irritation

Animal data	highly irritating

Serious eye damage/irritation

Serious eye damage/irritation	irritating to eyes

Skin sensitisation

Skin sensitisation	not sensitising

Germ cell mutagenicity

Genotoxicity - in vitro	positive

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Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity	CMR: no

Reproductive toxicity

Reproductive toxicity - fertility	No specific test data are available.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: ≥100 mg/kg/day, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	No specific test data are available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Toxic: danger of serious damage to health by prolonged exposure through inhalation.

Aspiration hazard

Aspiration hazard	No specific test data are available.

2,6-DI-TERT-BUTYL-P-CRESOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	6,000.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,000.1
Species	Rat

Skin corrosion/irritation

Animal data	Erythema/eschar score: No erythema (0); Not irritating

Serious eye damage/irritation

Serious eye damage/irritation	Method: OECD 405, Rabbit Not irritating

Skin sensitisation

Skin sensitisation	- Guinea pig: Not sensitising

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Germ cell mutagenicity

Genotoxicity - in vitro	Gene mutation: Negative
Genotoxicity - in vivo	Chromosome aberration: Negative

Carcinogenicity

Carcinogenicity	No evidence of carcinogenicity in animal studies.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEL 100 mg/kg/day, Oral, Rat F1
Reproductive toxicity - development	Developmental toxicity: - LOAEL: 500 mg/kg/day, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	no information available

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	no information available

Aspiration hazard

Aspiration hazard	no information available

12 Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects.

12.1 Toxicity

Toxicity	The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

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Ecological information on ingredients

METHYL METHACRYLATE

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hours: > 79 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic Invertebrates	EC_{50}, 48 hours: 69 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 72 hours: > 110 mg/l, Selenastrum capricornutum EC_{50}, 72 hours: > 100 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{20}, 30 minutes: 150 - 200 mg/l, Activated sludge
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	NOEC, 35 days: 9.4 mg/l, Danio rerio (Zebrafish)
Chronic toxicity - aquatic Invertebrates	NOEC, 21 days: 37 mg/l, Daphnia magna

EPOXY RESIN (Number average MW <= 700)

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 24 hours: 4.4 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic Invertebrates	LC_{50}, 24 hours: 4.9 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: 9.1 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	IC_{50}, 3 hours: > 100 mg/l, Activated sludge
Chronic aquatic toxicity	
Chronic toxicity - aquatic Invertebrates	NOEC, 21 days: 0.3 mg/l, Daphnia magna

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METHACRYLIC ACID

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hours: 85 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic Invertebrates	EC_{50}, 48 hours: > 130 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 45 mg/l, Selenastrum capricornutum LOEC, 72 hours: 45 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{50}, 17 hours: 270 mg/l, Pseudomonas putida
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	NOEC, 35 days: 10 mg/l, Danio rerio (Zebrafish)
Chronic toxicity - aquatic Invertebrates	NOEC, 21 days: 53 mg/l, Daphnia magna

CUMENE HYDROPEROXIDE

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hour: 3.9 mg/l, Oncorhynchus mykiss (Rainbow trout)

2,6-DI-TERT-BUTYL-P-CRESOL

Acute aquatic toxicity	
$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 0.199 mg/l, Fish
Acute toxicity - aquatic Invertebrates	EC_{50}, 48 hours: 0.48 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 0.758 mg/l, Algae

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Chronic aquatic toxicity
M factor (chronic) 1

12.2. Persistence and degradability

The product is not readily biodegradable.

Ecological information on ingredients

METHYL METHACRYLATE

Biodegradation Water - Degradation 94%: 14 days

EPOXY RESIN (Number average MW <= 700)

Biodegradation Water - 6 - 12%: 28 days

METHACRYLIC ACID

Biodegradation Water - Degradation 86%: 28 days

CUMENE HYDROPEROXIDE

Biodegradation The substance is readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulative potential There is no data available on bioaccumulation.

Ecological information on ingredients

EPOXY RESIN (Number average MW <= 700)

Bioaccumulative potential BCF: 100 – 3000

Partition coefficient log Pow: 3.242

2,6-DI-TERT-BUTYL-P-CRESOL

Partition coefficient log Pow: 5.1

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12.4 Mobility in soil

There is no data available. The product has poor water-solubility.

Ecological information on ingredients

EPOXY RESIN (Number average MW <= 700)

Adsorption/desorption coefficient	Water - log Koc: 2.65 @ 20°C

12.5 Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6 Other adverse effects

none known

13 Disposal considerations

13.1 Waste treatment methods

General information	Waste disposal should be in accordance with existing Community, National and local regulations Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.
Disposal methods	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Waste class	08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances.

14 Transport information

14.1 UN number

1993

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14.2 UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (contains Methylmethacrylate)

14.3 Transport hazard class(es)

3

Transport labels

14.4 Packing group

II

14.5 Environmental hazards

Environmentally hazardous substance/marine pollutant: no

14.6 Special precautions for user

EmS	F-E, S-E
Tunnel restriction code	(D/E)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

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15 Regulatory information

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

National regulations
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

EU legislation Regulation (EC)
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 (as amended).
COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Guidance
Workplace Exposure Limits EH40.
CHIP for everyone HSG228.
Safety Data Sheets for Substances and Preparations.
Approved Classification and Labelling Guide (Sixth edition) L131.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

16 Other information

Revision date: 23.02.2021

Supersedes date: 19.03.2020

Wording of the hazard statements under paragraph 2 and 3:

H225 Highly 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.

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H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
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.

Department issuing data sheet:

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.
(The data on the hazardous ingredients were taken from the most recent safety data sheet from the supplier.)

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