

**BONDAN ST04 – Component A**

Revision date: 17.02.2021  
Version: 1.002



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

1.1 Product identifier

Trade name BONDAN ST04 – 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

Drei Bond GmbH · Carl-Zeiss-Ring 13 · 85737 Ismaning  
t +49 (0)89 96 24 27-0 · f +49 (0)89 96 24 27-19  
Department responsible for information: [info@bondan.de](mailto:info@bondan.de) · t +49 89 962427-0

1.4 Emergency telephone number

Drei Bond GmbH	Tel. +49 (0)89 96 24 27-0
Carl-Zeiss-Ring 13	During office hours
85737 Ismaning	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 Corr. 1A - H314 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.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.



### Special labelling

Contains: METHYL METHACRYLATE, 2-HYDROXYETHYL METHACRYLATE, 2-ETHYLHEXYL METHACRYLATE, METHACRYLIC ACID

### 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.
P302+P352a	IF ON SKIN: Wash with plenty of soap and water.
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.

## 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	30 - 60 %	Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335



CAS number: 868-77-9 EC number: 212-782-2 REACH registration number: 01-2119490169-29-XXXX	2-HYDROXYETHYL METHACRYLATE	10 - 30 %	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
CAS number: 688-84-6 EC number: 211-708-6 REACH registration number: 01-2119490166-35-XXXX	2-ETHYLHEXYL METHACRYLATE	5 - 10 %	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335 Aquatic Chronic 3 - H412
CAS number: 79-41-4 EC number: 201-204-4 REACH registration number: 01-2119463884-26-XXXX	METHACRYLIC ACID	5 - 10 %	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: 3290-92-4 EC number: 221-950-4 REACH registration number: 01-2119542176-41-XXXX	TRIMETHYLOLPROPANE TRIMETHACRYLATE	1 - 5 %	Aquatic Chronic 2 - H411
CAS number: 80-15-9 EC number: 201-254-7 REACH registration number: 01-2119475796-19-XXXX	CUMENE HYDROPEROXIDE	< 1 %	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
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 %	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410  M factor (acute) = 1 M factor (chronic) = 1

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.

Ingestion

Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention if any discomfort continues.



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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.
<b>5</b>	<b>Fire-fighting measures</b>
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 Products	Burning produces irritating, toxic and obnoxious fumes. Carbon monoxide, carbon dioxide, and unknown hydrocarbons.



### 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

Avoid the spillage or runoff entering drains, sewers or watercourses.

### 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.

### 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/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m<sup>3</sup>

METHACRYLIC ACID

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 40 ppm 143 mg/m<sup>3</sup>

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

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

**METHYL METHACRYLATE (CAS: 80-62-6)**

DNEL

Workers, Industry/Professional - Inhalation; Long term : 208 mg/m<sup>3</sup>

Workers, Industry/Professional - Dermal; Long term : 13.67 mg/kg/day

Workers, Industry/Professional - Inhalation; Short term : 416 mg/m<sup>3</sup>

PNEC

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

**2-HYDROXYETHYL METHACRYLATE (CAS: 868-77-9)**

DNEL

Workers, Industry - Inhalation; Long term systemic effects: 4.9 mg/m<sup>3</sup>

Workers, Industry - Dermal; Long term systemic effects: 1.3 mg/kg/day

**BONDAN ST04 – Component A**

Revision date: 17.02.2021  
Version: 1.002



PNEC

Workers, Industry - Water; Long term 0.482 mg/l  
Workers, Industry - Soil; Long term 0.476 mg/kg  
Workers, Industry - STP; Long term 10 mg/l  
Workers, Industry - Fresh water; 3.79 mg/kg

**2-ETHYLHEXYL METHACRYLATE (CAS: 688-84-6)**

DNEL

Workers - Inhalation; Long term systemic effects: 2.5 mg/m<sup>3</sup>  
Workers, Industry/Professional - Dermal; Long term : 5 mg/kg/day

PNEC

Fresh water; 0.003 mg/l  
marine water; 0 mg/l  
STP; 10 mg/l  
Sediment (Freshwater); 2.24 mg/kg  
Sediment (Marinewater); 0.224 mg/kg  
Soil; 0.446 mg/kg

**METHACRYLIC ACID (CAS: 79-41-4)**

DNEL

Workers, Industry - Inhalation; Long term local effects: 88 mg/m<sup>3</sup>  
Workers, Industry - Dermal; Long term systemic effects: 4.25 mg/kg/day  
Workers, Industry - Inhalation; Long term systemic effects: 29.6 mg/m<sup>3</sup>

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

**TRIMETHYLOLPROPANE TRIMETHACRYLATE (CAS: 3290-92-4)**

DNEL

Workers - Inhalation; Long term systemic effects: 14.81 mg/m<sup>3</sup>  
Workers - Dermal; Long term systemic effects: 42 mg/kg/day  
Workers - Dermal; Long term local effects: 9.33 mg/cm<sup>2</sup>





PNEC

Fresh water; 2.76 µg/l  
marine water; 0.276 µg/l  
STP; 10 mg/l  
Sediment (Freshwater); 0.495 mg/kg  
Sediment (Marinewater); 0.05 mg/kg  
Soil; 0.097 mg/kg

**CUMENE HYDROPEROXIDE (CAS: 80-15-9)**

DNEL

Workers - Inhalation; Long term systemic effects: 6 mg/m<sup>3</sup>

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  
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/m<sup>3</sup>  
Workers - Dermal; Long term systemic effects: 0.5 mg/kg/day

PNEC

Fresh water; 0.199 µg/l  
marine water; 0.02 µg/l  
STP; 0.17 mg/l  
Sediment (Freshwater); 99.6 µg/kg  
Sediment (Marinewater); 9.96 µg/kg  
Soil; 8.33 mg/kg

## 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:  $\geq 0.4$  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:  $\geq 0.4$  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 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	gel
Colour	colourless
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	not available
Vapour density	not available
Relative density	1.0
Auto-ignition temperature	not available
Viscosity	≈ 500000 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

There are no known reactivity hazards associated with this product. Reactions with the following materials may generate heat: Amines, organic peroxides/hydroperoxides

## 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. 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	Causes burns.
Eye contact	May cause severe eye irritation.

Toxicological effects on ingredients

**METHYL METHACRYLATE**

Acute toxicity - oral

Acute toxicity oral (LD <sub>50</sub> mg/kg)	5,000.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD <sub>50</sub> mg/kg)	5,000.0
Species	Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)	29.8
Species	Rat

Skin corrosion/irritation

Skin corrosion/irritation	Not irritating. Prolonged skin contact may cause temporary irritation.
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Serious eye damage/irritation

Serious eye damage/irritation	not irritating
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Respiratory sensitisation

Respiratory sensitisation	Mouse: Sensitising
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Skin sensitisation

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

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

**2-HYDROXYETHYL METHACRYLATE**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,000.0  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 5,000.0  
Species Rabbit

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) no information available

Skin corrosion/irritation

Animal data Erythema/eschar score: Very slight erythema - barely perceptible (1). Not irritating.



Serious eye damage/irritation

Serious eye damage/irritation moderately irritating

Respiratory sensitisation

Respiratory sensitisation no information available

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig:  
Sensitising

Germ cell mutagenicity

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

Genotoxicity - in vivo

Chromosome aberration: Negative

Carcinogenicity

Carcinogenicity No specific test data are available.

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL  $\geq$ 1000 mg/kg/day, Oral, Rat F1

Reproductive toxicity -  
development

Developmental toxicity: - NOAEL:  $\geq$ 1000 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 No specific test data are available.

Aspiration hazard

Aspiration hazard not applicable

**2-ETHYLHEXYL METHACRYLATE**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,000.1  
Species Rat

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) no information available

**BONDAN ST04 – Component A**

Revision date: 17.02.2021  
Version: 1.002



Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) no information available

Skin corrosion/irritation

Human skin model test not irritating

Serious eye damage/irritation

Serious eye damage/irritation not irritating

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Not sensitising

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative

Carcinogenicity

Carcinogenicity NOAEC  $\geq 2.05$  mg/l, Inhalation, Rat

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 300 mg/kg/day, Oral, Rat F1

Reproductive toxicity -  
development

Developmental toxicity: - LOAEL: 1000 mg/kg/day,  
Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure not available

Specific target organ toxicity - repeated exposure

STOT - repeated exposure not available

Aspiration hazard

Aspiration hazard not available

**METHACRYLIC ACID**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 1,320.0

Species Rat



**BONDAN ST04 – Component A**

Revision date: 17.02.2021  
Version: 1.002



Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,000.0  
Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation 7.1  
(LC<sub>50</sub> vapours mg/l)  
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.

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.

**TRIMETHYLOLPROPANE TRIMETHACRYLATE**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,000.1  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 2,000.1  
Species Rat

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) no information available

Skin corrosion/irritation

Skin corrosion/irritation Rabbit: Not irritating

Serious eye damage/irritation

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

Respiratory sensitisation

Respiratory sensitisation no information available

Skin sensitisation

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

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative

Genotoxicity - in vivo

Chromosome aberration: Negative

Carcinogenicity

Carcinogenicity NOAEL 833 mg/kg/day, Dermal, Mouse

Reproductive toxicity

Reproductive toxicity - fertility - NOAEL > 900 mg/kg/day, Oral, Rat P, F1

**BONDAN ST04 – Component A**

Revision date: 17.02.2021  
Version: 1.002



Reproductive toxicity - development                      Developmental toxicity: - NOAEL: 300 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                      not applicable

**CUMENE HYDROPEROXIDE**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg)                      328.0  
Species                      Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg)                      1,200.0  
Species                      Rat

Acute toxicity - inhalation

Acute toxicity inhalation                      1.37  
(LC<sub>50</sub> dust/mist mg/l)  
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

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:  $\geq 100$  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<sub>50</sub> mg/kg) 6,000.0  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 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



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.



Ecological information on ingredients

**METHYL METHACRYLATE**

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 85 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic Invertebrates EC<sub>50</sub>, 48 hours: > 130 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC<sub>50</sub>, 72 hours: 45 mg/l, Selenastrum capricornutum  
LOEC, 72 hours: 45 mg/l, Selenastrum capricornutum

Acute toxicity - microorganisms EC<sub>50</sub>, 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

**TRIMETHYLOLPROPANE TRIMETHACRYLATE**

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic Invertebrates EC<sub>50</sub>, 48 hours: > 9.22 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC<sub>50</sub>, 72 hours: 3.88 mg/l, Pseudokirchneriella subcapitata  
NOEC, 72 hours: 0.177 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms EC<sub>50</sub>, 3 hours: > 1000 mg/l, Activated sludge



Chronic aquatic toxicity

Chronic toxicity - fish early life stage

NOEC, 21 days: 0.138 mg/l, Pimephales promelas (Fat-head Minnow)

**CUMENE HYDROPEROXIDE**

Acute aquatic toxicity

Acute toxicity - fish

LC<sub>50</sub>, 96 hour: 3.9 mg/l, Oncorhynchus mykiss (Rainbow trout)

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

Acute aquatic toxicity

LE(C)<sub>50</sub>

0.1 < L(E)C<sub>50</sub> ≤ 1

M factor (acute)

1

Acute toxicity - fish

LC<sub>50</sub>, 96 hours: 0.199 mg/l, Fish

Acute toxicity - aquatic Invertebrates

EC<sub>50</sub>, 48 hours: 0.48 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC<sub>50</sub>, 96 hours: 0.758 mg/l, Algae

Chronic aquatic toxicity

M factor (chronic)

1

12.2. Persistence and degradability

Persistence and degradability

The product is not readily biodegradable.

Ecological information on ingredients

**METHYL METHACRYLATE**

Biodegradation

Water - Degradation 94%: 14 days

**2-HYDROXYETHYL METHACRYLATE**

Biodegradation

Water - Degradation 84%: 28 days



**2-ETHYLHEXYL METHACRYLATE**

Biodegradation Water - Degradation 88%: 28 days

**METHACRYLIC ACID**

Biodegradation Water - Degradation 86%: 28 days

**TRIMETHYLOLPROPANE TRIMETHACRYLATE**

Stability (hydrolysis) pH7 - Half-life : > 9.999 hours @ 25°C

Biodegradation Water - Degradation 53%: 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

**2-HYDROXYETHYL METHACRYLATE**

Bioaccumulative potential BCF: 1.34 - 1.54

**TRIMETHYLOLPROPANE TRIMETHACRYLATE**

Partition coefficient log Kow: 2.75 - 4.2

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

Partition coefficient log Pow: 5.1

12.4 Mobility in soil

Mobility No data available. The product has poor water-solubility.





Ecological information on ingredients

**2-HYDROXYETHYL METHACRYLATE**

Adsorption/desorption coefficient                      Water - Koc: 42.7 @ 20°C

**TRIMETHYLOLPROPANE TRIMETHACRYLATE**

Surface tension    53 mN/m @ 20°C

12.5 Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

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

2924

14.2 UN proper shipping name

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (contains Methylmethacrylate and Methacrylic Acid)

14.3 Transport hazard class(es)

3(8)

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-C

Hazard Identification Number (ADR/RID) 338 Highly flammable liquid, corrosive.

Tunnel restriction code (C/E)

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

not applicable



## 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

A Chemical Safety Assessment has not been carried out.

## 16 Other information

Revision date: 17.02.2021

Supersedes date: 19.02.2020

### **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.



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.)*