

# Permabond®

## Engineering Adhesives

### SAFETY DATA SHEET

#### Permabond TA4207B

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

##### 1.1. Product identifier

**Product name** Permabond TA4207B

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

**Identified uses** Adhesive.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Permabond Engineering Adhesives GmbH  
Niederkasseler Lohweg 18  
40547 Düsseldorf  
Germany  
info.europe@permabond.com

**Manufacturer** Permabond Engineering Adhesives Ltd.  
Wessex Way  
Colden Common  
Winchester  
Hampshire SO21 1WP  
United Kingdom  
Tel: +44 (0)1962 711 661  
Fax: +44 (0)1962 711 662  
info@permabond.co.uk

##### 1.4. Emergency telephone number

**Emergency telephone** CHEMTREC UK: +(44)-870-8200418 CHEMTREC US: 800-424-9300 (CCN: 829878)

**National emergency telephone number** CHEMTREC Ireland: +(353)-19014670  
CHEMTREC Australia: +(61)-290372994  
CHEMTREC New Zealand: +(64)-98010034

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

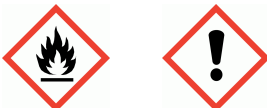
**Physical hazards** Flam. Liq. 3 - H226

**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335

**Environmental hazards** Aquatic Chronic 3 - H412

##### 2.2. Label elements

###### Hazard pictograms



**Signal word** Warning

## Permabond TA4207B

<b>Hazard statements</b>	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment. 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. P308+P313 IF exposed or concerned: Get medical advice/ attention.
<b>Contains</b>	METHYL METHACRYLATE, 2-HYDROXYETHYL METHACRYLATE
<b>Supplementary precautionary statements</b>	P243 Take action to prevent static discharges. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: 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. P501 Dispose of contents/container in accordance with existing Community, National and local regulations.

### 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>METHYL METHACRYLATE</b>		<b>60-100%</b>
CAS number: 80-62-6	EC number: 201-297-1	REACH registration number: 01-2119452498-28-XXXX
<b>Classification</b>		
Flam. Liq. 2 - H225		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
STOT SE 3 - H335		

## Permabond TA4207B

<b>2-HYDROXYETHYL METHACRYLATE</b>	<b>10-30%</b>
CAS number: 868-77-9	EC number: 212-782-2
	REACH registration number: 01-2119490169-29-XXXX
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
<b>3,5-DIETHYL-1,2-DIHYDRO-1-PHENYL-2-PROPYLPYRIDINE</b>	<b>5-10%</b>
CAS number: 34562-31-7	EC number: 252-091-3
	REACH registration number: 01-2120769712-47-XXXX
REACH registration exemption – < 1 tonne	
<b>Classification</b>	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Aquatic Chronic 4 - H413	
<b>2,6-DI-TERT-BUTYL-P-CRESOL</b>	<b>&lt;1%</b>
CAS number: 128-37-0	EC number: 204-881-4
M factor (Acute) = 1	M factor (Chronic) = 1
REACH registration exemption – < 1 tonne	
<b>Classification</b>	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
<b>ANILINE</b>	<b>&lt;1%</b>
CAS number: 62-53-3	EC number: 200-539-3
	REACH registration number: 01-2119451454-41-XXXX
M factor (Acute) = 1	
<b>Classification</b>	
Acute Tox. 3 - H301	
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Muta. 2 - H341	
Carc. 2 - H351	
STOT RE 1 - H372	
Aquatic Acute 1 - H400	

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

### SECTION 4: First aid measures

## Permabond TA4207B

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move the exposed person to fresh air. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. If symptoms develop, obtain medical attention
<b>Eye contact</b>	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 if any discomfort continues.

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

<b>Skin contact</b>	Skin irritation. Mild dermatitis, allergic skin rash.
<b>Eye contact</b>	Irritating and may cause redness and pain.

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

<b>Notes for the doctor</b>	No specific recommendations. Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Flammable liquid and vapour. 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.
<b>Hazardous combustion products</b>	Burning produces irritating, toxic and obnoxious fumes. 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

<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	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.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Do not discharge into drains or watercourses or onto the ground.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Absorb spillage with sand or other inert absorbent. Transfer to suitable, labelled containers for disposal.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	For personal protection, see Section 8. For waste disposal, see section 13.
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## Permabond TA4207B

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions**                      Avoid contact with skin and eyes. Use in a well ventilated area. Do not ingest or inhale. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions**                      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)

**Specific end use(s)**                      Adhesive.

### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### **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>

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

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

##### **ANILINE**

Long-term exposure limit (8-hour TWA): WEL 1 ppm 4 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

#### 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

**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

#### 3,5-DIETHYL-1,2-DIHYDRO-1-PHENYL-2-PROPYLPYRIDINE (CAS: 34562-31-7)

**DNEL**                                      No data available.

**PNEC**                                      No data available.

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

## Permabond TA4207B

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 3.5 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 0.5 mg/kg/day
<b>PNEC</b>	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

### ANILINE (CAS: 62-53-3)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 7.7 mg/m <sup>3</sup> Workers - Inhalation; Short term systemic effects: 15.4 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 2 mg/kg/day Workers - Dermal; Short term systemic effects: 4 mg/kg/day
<b>PNEC</b>	Fresh water; 0.001 mg/l marine water; 0 mg/l STP; 2 mg/l Sediment (Freshwater); 0.153 mg/kg, dw Sediment (Marinewater); 0.015 mg/kg, dw Soil; 0.033 mg/kg, dw

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

### Eye/face protection

If risk of splashing, wear 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 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

Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance.

### Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

### 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)

## Permabond TA4207B

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Appearance	Opaque liquid.
Colour	Yellow.
Odour	Acrylic
Odour threshold	Not available.
pH	Not relevant.
Melting point	Not available.
Initial boiling point and range	~100°C
Flash point	≈30°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
Solubility(ies)	Slightly soluble in water. Soluble in the following materials: Organic solvents.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Viscosity	≈1300 mPa s @ 23°C
Oxidising properties	Not available.

#### 9.2. Other information

Other information	Not relevant.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity	The following materials may react with the product: Strong oxidising agents. Strong acids. Strong alkalis.
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#### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
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#### 10.4. Conditions to avoid

Conditions to avoid	Take precautionary measures against static discharges. Avoid heat, flames and other sources of ignition.
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#### 10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids. Strong alkalis.
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## Permabond TA4207B

### 10.6. Hazardous decomposition products

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

### **SECTION 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 sensitisation** 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

Irritating and may cause redness and pain.

#### Toxicological information 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.

##### Serious eye damage/irritation

**Serious eye damage/irritation** Not irritating.

##### Respiratory sensitisation

**Respiratory sensitisation** Mouse: Sensitising.

##### Skin sensitisation



## Permabond TA4207B

<b>Skin sensitisation</b>	Local Lymph Node Assay (LLNA) - Mouse: Sensitising.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Inconclusive.
<b>Genotoxicity - in vivo</b>	This substance has no evidence of mutagenic properties.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	CMR: no
<b>IARC carcinogenicity</b>	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	No evidence of reproductive toxicity in animal studies.
<b>Reproductive toxicity - development</b>	No evidence of reproductive toxicity in animal studies. non-teratogenic, not embryotoxic
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>Target organs</b>	Respiratory tract Irritation.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>Target organs</b>	No specific target organs known.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Based on available data the classification criteria are not met.

### 2-HYDROXYETHYL METHACRYLATE

<b><u>Acute toxicity - oral</u></b>	
<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	5,000.0
<b>Species</b>	Rat
<b><u>Acute toxicity - dermal</u></b>	
<b>Acute toxicity dermal (LD<sub>50</sub> mg/kg)</b>	5,000.0
<b>Species</b>	Rabbit
<b><u>Acute toxicity - inhalation</u></b>	
<b>Notes (inhalation LC<sub>50</sub>)</b>	No information available.
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Erythema/eschar score: Very slight erythema - barely perceptible (1). Not irritating.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Moderately irritating.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	No information available.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

## Permabond TA4207B

### 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.

## 3,5-DIETHYL-1,2-DIHYDRO-1-PHENYL-2-PROPYLPYRIDINE

### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 500.1

**Species** Rat

### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 1,000.1

**Species** Rabbit

### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** No specific test data are available.

### Skin corrosion/irritation

**Skin corrosion/irritation** Moderately irritating.

### Serious eye damage/irritation

**Serious eye damage/irritation** Moderately irritating.

### Respiratory sensitisation

**Respiratory sensitisation** May cause respiratory system irritation.

### Skin sensitisation

**Skin sensitisation** No specific test data are available.

### Germ cell mutagenicity

**Genotoxicity - in vitro** No specific test data are available.

## Permabond TA4207B

### Carcinogenicity

**Carcinogenicity** No specific test data are available.

### Reproductive toxicity

**Reproductive toxicity - fertility** No specific test data are available.

### 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** 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

## Permabond TA4207B

### 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. No information available.

## SECTION 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: > 79 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 69 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** NOEC, 72 hours: > 110 mg/l, Selenastrum capricornutum  
EC<sub>50</sub>, 72 hours: > 100 mg/l, Selenastrum capricornutum

**Acute toxicity - microorganisms** EC<sub>20</sub>, 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

#### 2-HYDROXYETHYL METHACRYLATE

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: > 100 mg/l, Oryzias latipes (Red killifish)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 380 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 836 mg/l, Selenastrum capricornutum  
NOEC, 72 hours: 400 mg/l, Selenastrum capricornutum

**Acute toxicity - microorganisms** EC<sub>50</sub>, 16 hours: > 3000 mg/l, Pseudomonas fluorescens

##### Chronic aquatic toxicity

## Permabond TA4207B

**Chronic toxicity - aquatic invertebrates** NOEC, 21 days: 24.1 mg/l, Daphnia magna

### 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

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not available.

### Ecological information on ingredients.

#### 2-HYDROXYETHYL METHACRYLATE

**Bioaccumulative potential** BCF: 1.34 - 1.54,

### 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

### 12.5. Results of PBT and vPvB assessment

## Permabond TA4207B

**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

**Other adverse effects** None known.

## SECTION 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** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Waste class** 08 04 09\* waste adhesives and sealants containing organic solvents or other dangerous substances.

## SECTION 14: Transport information

### 14.1. UN number

1993

### 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

III

### 14.5. Environmental hazards

### 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 and the IBC Code

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

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

**National regulations** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

## Permabond TA4207B

<b>EU legislation</b>	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)
<b>Guidance</b>	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.

### SECTION 16: Other information

<b>Revision date</b>	26/01/2022
<b>Revision</b>	4
<b>Supersedes date</b>	15/06/2020
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. 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. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. H372 Causes damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life.

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