

# SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

**HUNTSMAN**

Enriching lives through innovation

## ARALDITE® 2021-1 B

Version	Revision Date:	SDS Number:	Date of last issue: 06.10.2023
1.4	09.10.2023	400000009925	Date of first issue: 17.03.2020

Print Date 15.01.2024

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

#### 1.1 Product identifier

Trade name : ARALDITE® 2021-1 B

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

Use of the Substance/Mixture : Adhesives and/or sealants

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

Company : HUNTSMAN ADVANCED MATERIALS (UK) LIMITED  
Address : Ickleton Road, Duxford, Cambridgeshire  
CB22 4XQ United Kingdom  
Telephone : +41 61 299 20 41  
E-mail address of person responsible for the SDS : Global\_Product\_EHS\_AdMat@huntsman.com

#### 1.4 Emergency telephone number

Emergency telephone number : EUROPE: +32 35 75 1234  
France ORFILA: +33(0)145425959  
ASIA: +65 6336-6011  
China: +86 20 39377888  
+86 532 83889090  
India: + 91 22 42 87 5333  
Australia: 1800 786 152  
New Zealand: 0800 767 437  
USA: +1 800-424-9300

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

Flammable liquids, Category 2 H225: Highly flammable liquid and vapour.

Skin irritation, Category 2 H315: Causes skin irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - single exposure, Category 3, Respiratory system H335: May cause respiratory irritation.

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### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.

Precautionary statements :

**Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P261 Avoid breathing mist or vapours.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

**Response:**

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

methyl methacrylate

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
methyl methacrylate	80-62-6 201-297-1 607-035-00-6 UK-01-8066448188-6	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system)	>= 70 - < 90
3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	34562-31-7 252-091-3	Acute Tox. 4; H302 Skin Irrit. 2; H315	>= 2.5 - < 10

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		Eye Irrit. 2; H319 Aquatic Chronic 4; H413	
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4	Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Chronic aquatic toxicity): 1	$\geq 0.1$ - $< 0.25$

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Treat symptomatically.  
Get medical attention if symptoms occur.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing  
If potential for exposure exists refer to Section 8 for specific personal protective equipment.  
Avoid inhalation, ingestion and contact with skin and eyes.  
No action shall be taken involving any personal risk or without suitable training.  
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.
- In case of skin contact : If skin irritation persists, call a physician.  
If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

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

- Risks : Causes skin irritation.  
May cause an allergic skin reaction.  
May cause respiratory irritation.

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

Treatment : Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : Exercise caution when using a high volume water jet as it may scatter and spread fire

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

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon oxides

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.

## SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Refer to protective measures listed in sections 7 and 8.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### 6.4 Reference to other sections

For disposal considerations see section 13., See Section 1 for emergency contact information., For personal protection see section 8.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation of susceptible persons. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Keep in properly labelled containers.

Advice on common storage : For incompatible materials please refer to Section 10 of this

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SDS.

Recommended storage temperature : 2 - 8 °C

Further information on storage stability : Stable under normal conditions.

### 7.3 Specific end use(s)

Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
methyl methacrylate	80-62-6	STEL	100 ppm 416 mg/m <sup>3</sup>	GB EH40
		TWA	50 ppm 208 mg/m <sup>3</sup>	GB EH40
		TWA	50 ppm	2009/161/EU
	Further information: Indicative			
		STEL	100 ppm	2009/161/EU
	Further information: Indicative			
2,6-di-tert-butyl-p-cresol	128-37-0	TWA	10 mg/m <sup>3</sup>	GB EH40

#### Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
2,6-di-tert-butyl-p-cresol	Workers	Inhalation	Long-term systemic effects	3.5 mg/m <sup>3</sup>
		Dermal	Long-term systemic effects	0.5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.86 mg/m <sup>3</sup>
		Dermal	Long-term systemic effects	0.25 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0.25 mg/kg bw/day

#### Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
2,6-di-tert-butyl-p-cresol	Fresh water	0.199 µg/l
	Remarks:Assessment Factors	
	Marine water	0.02 µg/l
	Remarks:Assessment Factors	
	Sewage treatment plant	0.17 mg/l
	Remarks:Assessment Factors	

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	Fresh water sediment	0.0996 mg/kg dry weight (d.w.)
	Remarks:Equilibrium method	
	Marine sediment	0.00996 mg/kg dry weight (d.w.)
	Remarks:Equilibrium method	
	Soil	0.04769 mg/kg dry weight (d.w.)
	Remarks:Equilibrium method	
	Oral	8.33 mg/kg

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

#### Hand protection

Material : butyl-rubber  
Break through time : 60 min  
Glove thickness : 0.7 mm

Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).  
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

In the case of vapour formation use a respirator with an approved filter.

Filter type : Organic vapour type (A)

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### SECTION 9: Physical and chemical properties

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

Physical state : paste

Colour : light yellow

Odour : acrylic-like

Odour Threshold : No data is available on the product itself.

Melting point/freezing point : No data is available on the product itself.

Boiling point : > 100 °C

Flammability (solid, gas) : No data is available on the product itself.

Lower explosion limit / Lower flammability limit : No data is available on the product itself.

Upper explosion limit / Upper flammability limit : No data is available on the product itself.

Flash point : 10 °C  
Method: closed cup

Auto-ignition temperature : No data is available on the product itself.

Decomposition temperature : No data is available on the product itself.

pH : substance/mixture is non-soluble (in water)

Viscosity  
Viscosity, dynamic : 15,000 - 20,000 mPa.s (25 °C)  
thixotropic

Solubility(ies)  
Water solubility : insoluble

Solubility in other solvents : No data is available on the product itself.

Partition coefficient: n-octanol/water : No data is available on the product itself.

Vapour pressure : No data is available on the product itself.



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Density : 0.95 g/cm<sup>3</sup> (20 °C)

Relative density : 0.95 (20 °C)

Relative vapour density : No data is available on the product itself.

Particle characteristics : No data is available on the product itself.

### 9.2 Other information

No data is available on the product itself.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : Strong acids  
Strong bases  
Strong oxidizing agents

None known.

### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

Hazardous decomposition products : carbon dioxide  
carbon monoxide

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Not classified due to lack of data.

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

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### Components:

#### **methyl methacrylate:**

Acute oral toxicity : LD50 (Rat): 7,900 - 9,400 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 29.8 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Directive 67/548/EEC, Annex V, B.2.

Acute dermal toxicity : LD50 (Rabbit, male): > 5,000 mg/kg  
Method: OECD Test Guideline 402

#### **3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:**

Acute oral toxicity : LD50 (Rat, male and female): > 500 mg/kg  
GLP: yes  
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute dermal toxicity : LD50 (Rabbit, male and female): > 1,000 mg/kg  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity

#### **2,6-di-tert-butyl-p-cresol:**

Acute oral toxicity : LD50 (Rat, male and female): > 6,000 mg/kg  
Method: OECD Test Guideline 401  
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### **Skin corrosion/irritation**

Causes skin irritation.

### Components:

#### **methyl methacrylate:**

Species : Rabbit  
Method : OPPTS 870.2500  
Result : Skin irritation

#### **3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:**

Species : Rabbit  
Exposure time : 4 h  
Method : Other guidelines  
Result : Skin irritation  
GLP : yes

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### 2,6-di-tert-butyl-p-cresol:

Species : Rabbit  
Assessment : No skin irritation  
Method : OECD Test Guideline 404  
Result : No skin irritation

### Serious eye damage/eye irritation

Not classified due to lack of data.

### Components:

#### 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : Mild eye irritation  
GLP : yes

### 2,6-di-tert-butyl-p-cresol:

Species : Rabbit  
Assessment : No eye irritation  
Method : OECD Test Guideline 405  
Result : No eye irritation

### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified due to lack of data.

### Components:

#### methyl methacrylate:

Exposure routes : Skin  
Species : Mouse  
Assessment : May cause sensitisation by skin contact.  
Method : OECD Test Guideline 429  
Result : May cause sensitisation by skin contact.

#### 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:

Test Type : Local lymph node assay (LLNA)  
Species : Mouse  
Assessment : Did not cause sensitisation on laboratory animals.  
Method : OECD Test Guideline 429  
Result : Did not cause sensitisation on laboratory animals.  
GLP : yes

### 2,6-di-tert-butyl-p-cresol:

Exposure routes : Skin  
Species : Humans  
Result : Does not cause skin sensitisation.

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### Germ cell mutagenicity

Not classified due to lack of data.

### Components:

#### **methyl methacrylate:**

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)  
Test system: Salmonella typhimurium  
Method: OECD Test Guideline 471  
Result: negative

#### **3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:**

Genotoxicity in vitro : Test Type: reverse mutation assay  
Test system: Salmonella typhimurium and E. coli  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative  
GLP: yes

#### **2,6-di-tert-butyl-p-cresol:**

Genotoxicity in vitro : Test Type: reverse mutation assay  
Metabolic activation: with and without metabolic activation  
Result: negative

Test Type: Chromosome aberration test in vitro  
Metabolic activation: with and without metabolic activation  
Result: negative

Genotoxicity in vivo : Application Route: Intraperitoneal injection  
Dose: 75 mg/kg  
Result: negative

Application Route: Oral  
Exposure time: 9 Months  
Dose: ca 750 mg/kg  
Result: negative

### Carcinogenicity

Not classified due to lack of data.

### Components:

#### **methyl methacrylate:**

Species : Rat, male and female  
Application Route : Oral  
Exposure time : 2 Years  
Dose : 6, 60, 2000 ppm  
Frequency of Treatment : once daily  
NOAEL : 90.3 mg/kg bw/day  
Result : negative

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### 2,6-di-tert-butyl-p-cresol:

Species : Rat, male and female  
Application Route : Oral  
Result : negative

### Reproductive toxicity

Not classified due to lack of data.

### Components:

#### methyl methacrylate:

Effects on foetal development : Species: Rat  
Application Route: Inhalation  
Dose: 99, 304, 1178 ppm  
Teratogenicity: NOAEC F1: 8,300 mg/m<sup>3</sup>  
Embryo-foetal toxicity: NOAEC F1: 8,300 mg/m<sup>3</sup>  
Method: OECD Test Guideline 414  
Result: No teratogenic effects

### 2,6-di-tert-butyl-p-cresol:

Effects on fertility : Test Type: Two-generation study  
Species: Rat, male and female  
Application Route: Oral  
Dose: 25/100/500 mg/kg bw/day  
General Toxicity - Parent: NOAEL: 100 mg/kg body weight  
General Toxicity F1: NOAEL: 25 mg/kg body weight  
Result: negative

Effects on foetal development : Test Type: Pre-natal  
Species: Mouse, female  
Application Route: Oral  
Duration of Single Treatment: 7 d  
General Toxicity Maternal: NOAEL: 240 mg/kg body weight  
Developmental Toxicity: NOAEL: 800 mg/kg body weight  
Target Organs: spleen, Kidney

### STOT - single exposure

May cause respiratory irritation.

### Components:

#### methyl methacrylate:

Exposure routes : Inhalation  
Target Organs : Respiratory Tract  
Assessment : May cause respiratory irritation.

### STOT - repeated exposure

Not classified due to lack of data.

### Repeated dose toxicity

### Components:

#### methyl methacrylate:

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Species : Rat, male and female  
NOAEL : 124.1 mg/kg  
Application Route : oral (drinking water)  
Exposure time : 2 years  
Number of exposures : daily  
Dose : 6, 60, 2000 ppm

### 2,6-di-tert-butyl-p-cresol:

Species : Pig, male and female  
NOAEL : >= 61 mg/kg  
Application Route : oral (feed)  
Exposure time : daily  
Method : Chronic toxicity

### Aspiration toxicity

Not classified due to lack of data.

## 11.2 Information on other hazards

### Endocrine disrupting properties

No data available

### Experience with human exposure

No data available

### Toxicology, Metabolism, Distribution

No data available

### Neurological effects

No data available

### Further information

#### Product:

Remarks : Solvents may degrease the skin.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

#### **methyl methacrylate:**

Toxicity to fish : LC50 : 191 mg/l  
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): > 79 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
Method: EPA OPPTS 850.1400

Toxicity to daphnia and other : EC50 : 69 mg/l  
aquatic invertebrates Exposure time: 48 h

Toxicity to algae/aquatic : EC50 : > 110 mg/l

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plants Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 37 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Test Type: flow-through test  
Method: OECD Test Guideline 211

### 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 22 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 40 mg/l  
Exposure time: 72 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

NOEC (Pseudokirchneriella subcapitata (green algae)): 16 mg/l  
Exposure time: 72 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

### Ecotoxicology Assessment

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

### 2,6-di-tert-butyl-p-cresol:

Toxicity to fish : LC50 (Fish): 0.199 mg/l  
Exposure time: 96 h  
Test substance: Fresh water  
Method: QSAR

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.48 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 0.24 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 201

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NOEC (Pseudokirchneriella subcapitata (green algae)): 0.24 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 201

Toxicity to microorganisms : ErC50 (activated sludge): 1.7 mg/l  
Exposure time: 24 h  
Test Type: static test

Toxicity to fish (Chronic toxicity) : NOEC: 0.053 mg/l  
Exposure time: 30 d  
Species: Oryzias latipes (Orange-red killifish)  
Test substance: Fresh water  
Method: OECD Test Guideline 210

NOEC:  $\geq$  23.8 mg/l  
Exposure time: 70 d  
Species: Fish  
Test substance: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50: 0.096 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Test substance: Fresh water  
Method: OECD Test Guideline 211

NOEC: 0.069 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Test substance: Fresh water  
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

## 12.2 Persistence and degradability

### Components:

#### **methyl methacrylate:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d

#### **3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 0.132 %  
Exposure time: 28 d  
Method: QSAR  
GLP: no

#### **2,6-di-tert-butyl-p-cresol:**



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Biodegradability : Result: Not biodegradable

### 12.3 Bioaccumulative potential

#### Components:

##### **methyl methacrylate:**

Bioaccumulation : Bioconcentration factor (BCF): 3

Partition coefficient: n-octanol/water : log Pow: 1.38

##### **3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine:**

Partition coefficient: n-octanol/water : log Pow: > 6.5 (25 °C)  
pH: 5.7  
Method: OECD Test Guideline 117  
GLP: yes

##### **2,6-di-tert-butyl-p-cresol:**

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Exposure time: 28 d  
Bioconcentration factor (BCF): 330 - 1,800  
Method: flow-through test

Partition coefficient: n-octanol/water : log Pow: 5.2

### 12.4 Mobility in soil

#### Components:

##### **2,6-di-tert-butyl-p-cresol:**

Distribution among environmental compartments : Koc: 8183

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

#### Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Harmful to aquatic life.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

- Product : Dispose of contents and container in accordance with all local, regional, national and international regulations.  
Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

- IMDG : UN 1133  
IATA : UN 1133

#### 14.2 UN proper shipping name

- ADR : ADHESIVES  
RID : ADHESIVES  
IMDG : ADHESIVES  
IATA : Adhesives

#### 14.3 Transport hazard class(es)

- |      | Class | Subsidiary risks |
|------|-------|------------------|
| ADR  | : 3   |                  |
| RID  | : 3   |                  |
| IMDG | : 3   |                  |
| IATA | : 3   |                  |

#### 14.4 Packing group

- ADR**  
Packing group : II  
Classification Code : F1  
Hazard Identification Number : 33  
Labels : 3  
Tunnel restriction code : (D/E)
- RID**  
Packing group : II  
Classification Code : F1  
Hazard Identification Number : 33  
Labels : 3
- IMDG**

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Packing group : II  
Labels : 3  
EmS Code : F-E, S-D

### IATA (Cargo)

Packing instruction (cargo aircraft) : 364  
Packing instruction (LQ) : Y341  
Packing group : II  
Labels : Flammable Liquids

### IATA (Passenger)

Packing instruction (passenger aircraft) : 353  
Packing instruction (LQ) : Y341  
Packing group : II  
Labels : Flammable Liquids

## 14.5 Environmental hazards

### ADR

Environmentally hazardous : no

### RID

Environmentally hazardous : no

### IMDG

Marine pollutant : no

## 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the following entries should be considered:  
Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha (Number on list 29, 28)

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation : Ovaj proizvod ne sadrži supstance koje izazivaju veliku zabrinutost.

UK REACH List of substances subject to authorisation (Annex XIV) : Not applicable

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### Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

### The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AIIC : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

ENCS : Notified. Allowed to be imported / manufactured only by the notifiers. Please contact your Huntsman sales representative for more information.

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

### Inventories

AICS (Australia), AIIC (Australia), DSL (Canada), IECSC (China), ENCS (Japan), KECI (Korea), NZIOIC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States of America (USA))

### 15.2 Chemical safety assessment

Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

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## SECTION 16: Other information

### Full text of H-Statements

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H225	: Highly flammable liquid and vapour.
H302	: Harmful if swallowed.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H413	: May cause long lasting harmful effects to aquatic life.

### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Irrit.	: Eye irritation
Flam. Liq.	: Flammable liquids
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT SE	: Specific target organ toxicity - single exposure
2009/161/EU	: Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
2009/161/EU / TWA	: Limit Value - eight hours
2009/161/EU / STEL	: Short term exposure limit
GB EH40 / TWA	: Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	: Short-term exposure limit (15-minute reference period)

### Further information

#### Classification of the mixture:

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Skin Sens. 1	H317
STOT SE 3	H335

#### Classification procedure:

Based on product data or assessment
Calculation method
Calculation method
Calculation method

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IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

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