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

#### 1.1 Product identifier

Trade name : ARALDITE® 2050 B

Unique Formula Identifier

(UFI)

: HCY6-K0WG-E00E-SSAW

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

Use of the : Adhesives and/or sealants

Substance/Mixture

Recommended restrictions

on use

: For industrial use only.

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

Company : Huntsman Advanced Materials (Europe) BV

Address : Grijpenlaan 18

3300 Tienen Belgium

Telephone : +41 61 299 20 41 Telefax : +41 61 299 20 40

E-mail address of person

responsible for the SDS

: Global\_Product\_EHS\_AdMat@huntsman.com

# 1.4 Emergency telephone

Emergency telephone : Berlin: 0049 30 19 24 0 & 0049 30 30 68 6 7 11

Bonn: 0049 228 19 27 0 & 0049 228 28 7 3 32 11

Erfurt: 0049 361 73 07 30 Freiburg: 0049 761 16 24 0

Göttingen: 0049 51 19 24 0 & 0049 551 38 31 80

Homburg: 0049 6841 19 24 0

Mainz: 0049 6131 19 24 0 & 0049 6131 23 24 66

München: 0049 89 19 24 0 Nürnberg: 0049 911 39 8 2 45 1 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

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# **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

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

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.

#### 2.2 Label elements

# Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.

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 vapors.
 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 ingredients 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.

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Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### **Hazardous ingredients**

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concent ration (% w/w)
methyl methacrylate	80-62-6 201-297-1 607-035-00-6 01-2119452498-28	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 01-2120769712-47	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 4; H413	>= 2,5 - < 10
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4 01-2119555270-46	Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 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 material 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.

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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.

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 (CO2)

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 : Wear self-contained breathing apparatus for firefighting if

according to Regulation (EC) No. 1907/2006, as amended



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for fire-fighters 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 vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

# 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 sensitization of susceptible persons. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this

product.

Do not breathe vapors/dust.

according to Regulation (EC) No. 1907/2006, as amended



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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 vapors). 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 wellventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Keep in properly labeled containers.

Advice on common storage

For incompatible materials please refer to Section 10 of this

SDS.

Storage class (TRGS 510) : 3

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	TWA	50 ppm	2009/161/EU
	Further information: Indicative			

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		STEL	100 ppm	2009/161/EU
	Further information: Indicative			
		AGW	50 ppm	DE TRGS
			210 mg/m3	900
	Peak-limit cat			
			compliance with the OEL ar	nd biological
	tolerance values, there is no risk of harming the unborn child			T
		MAK	50 ppm	DE DFG MAK
			210 mg/m3	
	Peak-limit category: 2; I			
	Further information: Danger of sensitization of the skin, Damage to the			
	embryo or foetus is unlikely when the MAK value or the BAT value is			
	observed			T
2,6-di-tert-butyl-p-	128-37-0	AGW (Vapour	10 mg/m3	DE TRGS
cresol		and aerosols,		900
		inhalable		
	5 1 11 11 1	fraction)		
	Peak-limit category: 4;(II)			
	Further information: When there is compliance with the OEL and biological			
	tolerance values, there is no risk of harming the unborn child			
		MAK (inhalable	10 mg/m3	DE DFG MAK
		fraction)		
	Peak-limit category: 4; II			
	Further information: Substances that cause cancer in humans or animals or			
	that are considered to be carcinogenic for humans and for which a MAK value			
	can be derived., Damage to the embryo or foetus is unlikely when the MAK			
	value or the BAT value is observed			

# Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

	,		(==, ::::: ::::=:::	
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/m3
	Workers	Dermal	Long-term systemic effects	0,5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0,86 mg/m3
	Consumers	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) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value	
2,6-di-tert-butyl-p-cresol	Fresh water	0,199 μg/l	
	Remarks: Assessment Factors	Remarks:Assessment Factors	
	Sea water	0,02 μg/l	
Remarks: Assessment Factors			
	Sewage treatment plant	0,17 mg/l	
	Remarks: Assessment Factors		
	Fresh water sediment	0,0996 mg/kg dry weight (d.w.)	
	Remarks:Equilibrium method		
	Sea sediment	0,00996 mg/kg	

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	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 : 4H(R) gloves
Break through time : > 480 min
Glove thickness : 0,08 mm

Material : butyl-rubber
Break through time : > 60 min
Glove thickness : 0,6 mm

Material : Nitrile rubber
Break through time : > 30 min
Glove thickness : 0,7 mm

Remarks : 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).

The selected protective gloves have to satisfy the

specifications of Regulation (EU) 2016/425 and the standard

EN 374 derived from it.

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

Equipment should conform to EN 14387

Filter type : Combined particulates and organic vapor type (A-P)

#### **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Physical state : paste

according to Regulation (EC) No. 1907/2006, as amended



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Color : light yellow

Odor : like acrylic

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

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

Boiling point :  $> 100 \, ^{\circ}\text{C}$ 

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

Autoignition 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.

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

Density : 0,95 g/cm3 (20 °C)

Relative density : 0,95 (20 °C)

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

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

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#### 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 : Vapors 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 hazardous decomposition products are known.

# **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

#### 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: vapor

Method: Directive 67/548/EEC, Annex V, B.2.

Acute dermal toxicity : LD50 (Rabbit, male): > 5 000 mg/kg

Method: OECD Test Guideline 402

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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

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.

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## **Components:**

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

Species : Rabbit

Method : OECD Test Guideline 405

Result : Mild eye irritation

GLP : ves

## 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.

#### 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

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Result: negative

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

Genotoxicity in vitro : Test Type: reverse mutation assay

Test system: Salmonella tryphimurium 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

Application Route: Intraperitoneal injection Genotoxicity in vivo

> 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

: Oral Application Route : 2 Years Exposure time

6, 60, 2000 ppmonce daily Dose

Frequency of Treatment

NOAEL 90,3 mg/kg bw/day

Result : negative

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

Rat, male and female **Species** 

Application Route Oral Result negative

#### Reproductive toxicity

Not classified due to lack of data.

#### **Components:**

methyl methacrylate:

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Effects on fetal development : Species: Rat

Application Route: Inhalation Dose: 99, 304, 1178 ppm

Teratogenicity: NOAEC F1: 8 300 mg/m³ Embryo-fetal toxicity.: NOAEC F1: 8 300 mg/m³

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 fetal 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:

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)

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Exposure time : daily

Method : Chronic toxicity

#### **Aspiration toxicity**

Not classified due to lack of data.

#### 11.2 Information on other hazards

# **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher

# **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: Fish Early-life Stage Toxicity Test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 : 69 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 : > 110 mg/l

Exposure time: 72 h

Toxicity to daphnia and other :

aquatic invertebrates

NOEC: 37 mg/l Exposure time: 21 d

(Chronic toxicity)

Species: Daphnia magna (Water flea)

according to Regulation (EC) No. 1907/2006, as amended



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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

Exposure time: 72 h Test Type: static test Test substance: Fresh water

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,24

mg/l

Exposure time: 72 h Test Type: static test

Test substance: Fresh water

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Method: OECD Test Guideline 201

M-Factor (Acute aquatic

toxicity)

: 1

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: >= 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:

Biodegradability : Result: Not biodegradable

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## 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- : log Pow: > 6,5 (25 °C)

octanol/water 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 : Koc: 8183

environmental compartments

#### 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

# **Product:**

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher

# 12.7 Other adverse effects

#### **Product:**

Additional ecological : An environmental hazard cannot be excluded in the event of

according to Regulation (EC) No. 1907/2006, as amended



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information unprofessional handling or disposal.

Harmful to aquatic life.

# **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

ADN : UN 1133
ADR : UN 1133
RID : UN 1133
IMDG : UN 1133
IATA : UN 1133

# 14.2 UN proper shipping name

ADN : ADHESIVES
ADR : ADHESIVES
RID : ADHESIVES
IMDG : ADHESIVES
IATA : Adhesives

#### 14.3 Transport hazard class(es)

Class Subsidiary risks

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

# 14.4 Packing group

ADN

Packing group : II

according to Regulation (EC) No. 1907/2006, as amended



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Classification Code : F1
Hazard Identification Number : 33
Labels : 3

**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** 

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

IATA (Cargo)

Packing instruction (cargo : 364

aircraft)

Packing instruction (LQ) : Y341
Packing group : II

Labels : Flammable Liquids

IATA (Passenger)

Packing instruction : 353

(passenger aircraft)

Packing instruction (LQ) : Y341
Packing group : II

Labels : Flammable Liquids

14.5 Environmental hazards

**ADN** 

Environmentally hazardous : no

**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.

according to Regulation (EC) No. 1907/2006, as amended



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## **SECTION 15: Regulatory information**

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

REACH - List of substances subject to authorisation :

(Annex XIV)

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

: This product does not contain substances of very high concern.

Conditions of restriction for the following entries should be

considered: Number on list 3

Number on list 75: If you intend to use this product as tattoo ink, please

contact your vendor.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

FLAMMABLE LIQUIDS

Water hazard class : WGK 1 slightly hazardous to water

(Germany) Classification according to AwSV, Annex 1 (5.2)

#### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

P5c

#### The ingredients 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

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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), NZIOC (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.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H225 : Highly flammable liquid and vapor.

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

DE DFG MAK : Germany. MAK BAT Annex IIa

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

2009/161/EU / TWA : Limit Value - eight hours 2009/161/EU / STEL : Short term exposure limit

DE DFG MAK / MAK : MAK value

DE TRGS 900 / AGW : Time Weighted Average

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## **Further information**

## Classification of the mixture: Classification procedure:

Flam. Liq. 2	H225	Based on product data or assessment
Skin Irrit. 2	H315	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method

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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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