according to Regulation (EC) No. 1907/2006

ARALDITE® 2051 RESIN

Version	Revision Date:	SDS Number:
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier	
Trade name	: ARALDITE® 2051 RESIN
Unique Formula Identifier (UFI)	: C2R5-V02E-T00Q-RHF4

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

Use of the	: Adhesives
Substance/Mixture	

1.3 Details of the supplier of the safety data sheet

Company Address	 Huntsman Advanced Materials (Europe)BVBA Everslaan 45 3078 Everberg Belgium
Telephone Telefax	: +41 61 299 20 41 : +41 61 299 20 40
E-mail address of person responsible for the SDS	: Global_Product_EHS_AdMat@huntsman.com

1.4 Emergency telephone number

Emergency telephone number			
Emergency telephone number	:	Centres Antipoison et de Toxicovigilance: ANGERS: 02 41 48 21 21 BORDEAUX: 05 56 96 40 80 LILLE: 0 825 812 822 LYON: 04 72 11 69 11 MARSEILLE 04 91 75 25 25 NANCY: 03 83 32 36 36 PARIS: 01 40 05 48 48 RENNES: 02 99 59 22 22 STRASBOURG: 03 88 37 37 37 TOULOUSE: 05 61 77 74 47 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 vapour.			
Skin corrosion, Sub-category 1B	H314: Causes severe skin burns and eye damage.			
Serious eye damage, Category 1	H318: Causes serious eye damage.			
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.			
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.			

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :		
Signal word :	Danger	
Hazard statements :	H225 H314 H317 H335 H412	Highly flammable liquid and vapour. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.
Precautionary statements :	Prevention: P210 P280 Response:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
	P303 + P361 + P3	353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	P304 + P340 + P3	
	P305 + P351 + P3	338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. 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

methacrylic acid

2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate

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.

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 components

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)	>= 50 - < 70
methacrylic acid	79-41-4 201-204-4 607-088-00-5 01-2119463884-26	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 3; H311 Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system) specific concentration limit STOT SE 3; H335 >= 1 %	>= 5 - < 10

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	1		
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 (Chronic aquatic toxicity): 1	>= 1 - < 2,5
2-Propenoic acid, 2-methyl-, 2- hydroxyethyl ester, phosphate	52628-03-2 258-053-2 01-2119980575-25	Skin Corr. 1A; H314 Eye Dam. 1; H318 Skin Sens. 1B; H317	>= 1 - < 3
alpha,alpha-dimethylbenzyl hydroperoxide	80-15-9 201-254-7 617-002-00-8 01-2119475796-19	Org. Perox. E; H242 Acute Tox. 4; H302 Acute Tox. 3; H331 Acute Tox. 4; H312 Skin Corr. 1B; H314 STOT RE 2; H373 Aquatic Chronic 2; H411 \neg specific concentration limit Skin Corr. 1B; H314 >= 10 % Skin Irrit. 2; H315 3 - < 10 %	>= 0,25 - < 1

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. Consult a physician. 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



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		mouth-to-mouth re	esuscitation.
lf inhal	ed	: If inhaled, remove Get medical atten	to fresh air. tion if symptoms occur.
In case	e of skin contact		
In case	e of eye contact	 Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with pl of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. 	
If swall	owed	If symptoms persi	

4.2 Most important symptoms and effects, both acute and delayed None known.

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	e 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 Sulphur oxides Hydrogen chloride

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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

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.	Personal precautions	Evacuate personnel to safe areas. Refer to protective measures listed in sections 7 and 8. Beware of vapours accumulating to form explosive
--	----------------------	---

6.2 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.
respective autionities.

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.



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				should avoid com product. Do not breathe va Avoid exposure - Avoid contact with For personal prot Smoking, eating a application area. Take precautiona Open drum caref To avoid spills du	obtain special instructions before use.
		on protection against l explosion	:	Take necessary a (which might cause	a naked flame or any incandescent material. action to avoid static electricity discharge se ignition of organic vapours). Use only quipment. Keep away from open flames, hot rces of ignition.
I	Hygien	e measures	:		ot eat or drink. When using do not smoke. ore breaks and at the end of workday.
7.2 C	onditio	ons for safe storage,	inc	luding anv incom	patibilities
I	Require	ements for storage and containers	:	No smoking. Kee ventilated place. carefully resealed	p container tightly closed in a dry and well- Containers which are opened must be d and kept upright to prevent leakage. ecautions. Keep in properly labelled
	Advice	on common storage	:	For incompatible SDS.	materials please refer to Section 10 of this
		information on stability	:	Stable under norr	nal conditions.
7.3 S	pecific	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					
		VME	50 ppm	FR VLE		
			205 mg/m3			
Further information	Regulatory bir	nding exposure limits	6			
		VLCT (VLE) 100 ppm FR VLE				
			410 mg/m3			
Further information	Regulatory bir	Regulatory binding exposure limits				
methacrylic acid	79-41-4	VME	20 ppm	FR VLE		
			70 mg/m3			
Further information	Indicative exp	Indicative exposure limits				
2,6-di-tert-butyl-p-	128-37-0	VME	10 mg/m3	FR VLE		
cresol			_			
Further information	Indicative exposure limits					

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
2-Propenoic acid, 2- methyl-, 2- hydroxyethyl ester, phosphate	Workers	Inhalation	Long-term systemic effects	7,04 mg/m3
	Workers	Dermal	Long-term systemic effects	1 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	1,74 mg/m3
	Consumers	Dermal	Long-term systemic effects	0,5 mg/kg bw/day
methacrylic acid	Workers	Inhalation	Long-term systemic effects	29,6 mg/m3
	Workers	Inhalation	Long-term local effects	88 mg/m3
	Workers	Dermal	Long-term systemic effects	4,25 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	6,3 mg/m3
	Consumers	Inhalation	Long-term local effects	6,55 mg/m3
	Consumers	Dermal	Long-term systemic effects	2,55 mg/kg



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fumed, crystfree effects		bw/day		
Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/200		4 mg/m3		
	Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:			
Substance name Environmental Compartment Value	ubstance name	Value		

Substance name		Environmental Compartment	Value			
2,6-di-tert-butyl-p-cre	sol	Fresh water	0,199 μg/l			
Remarks: Assessn		nent Factors				
	1	Marine water	0,02 µg/l			
	Assessm	nent Factors	K			
	I	Sewage treatment plant	0,17 mg/l			
	Assessm	nent Factors	I			
		Fresh water sediment	0,0996 mg/kg dry weight (d.w.)			
	Equilibriu	Equilibrium method				
		Marine sediment	0,00996 mg/kg dry weight (d.w.)			
	Equilibrium method					
		Soil	0,04769 mg/kg dry weight (d.w.)			
	Equilibriu	um method				
	1	Oral	8,33 mg/kg			
2-Propenoic acid, 2-methyl-, 2- hydroxyethyl ester, phosphate		Fresh water	0,068 mg/l			
Assessi	Assessm	nent Factors	i			
		Marine water	0,007 mg/l			
	Assessm	nent Factors	I			
		Sewage treatment plant	0,546 mg/l			
	Assessm	nent Factors	I			
		Fresh water sediment	0,481 mg/kg dry weight (d.w.)			
	Equilibriu	um method				
		Marine sediment	0,048 mg/kg dry weight (d.w.)			
	Equilibriu	um method				
		Soil	0,056 mg/kg dry weight (d.w.)			
	Equilibriu	um method	1			
methacrylic acid	I	Fresh water	0,82 mg/l			



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Assessme	Assessment Factors		
	Marine water	0,82 mg/l	
Assessme	ent Factors		
	Freshwater - intermittent	0,82 mg/l	
Assessme	ent Factors		
	Sewage treatment plant	10 mg/l	
Assessme	ent Factors		
	Soil	1,2 mg/kg	
Equilibriur	n method		

8.2 Exposure controls

Personal protective equipme	t
Eye protection	 Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Hand protection	
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.
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	: In the case of vapour formation use a respirator with an approved filter.
	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines
Filter type	: Organic vapour type (A)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: paste	
Colour	: off-white	
Odour	: like methacrylic acid	
Odour Threshold	: No data is available on the product itse	∍lf.



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рН		:	substance/mi	xture is non-soluble (in water)
Meltir	ng point/freezing point	:	No data is ava	ailable on the product itself.
Boilin	g point	:	No data is ava	ailable on the product itself.
Flash	point	:	10 °C Method: estin	nated
Evap	oration rate	:	No data is ava	ailable on the product itself.
Flam	mability (solid, gas)	:	No data is ava	ailable on the product itself.
Burni	ng rate	:	No data is ava	ailable on the product itself.
	r explosion limit / Upper nability limit	:	No data is ava	ailable on the product itself.
	r explosion limit / Lower nability limit	:	No data is ava	ailable on the product itself.
Vapo	ur pressure	:	No data is ava	ailable on the product itself.
Relat	ive vapour density	:	No data is ava	ailable on the product itself.
Relat	ive density	:	No data is ava	ailable on the product itself.
Dens	ity	:	1,02 - 1,05 g/	cm3
	bility(ies) ater solubility	:	insoluble	
So	lubility in other solvents	:	No data is ava	ailable on the product itself.
	ion coefficient: n- ol/water	:	No data is ava	ailable on the product itself.
Auto-	ignition temperature	:	No data is ava	ailable on the product itself.
Deco	mposition temperature	:	No data is ava	ailable on the product itself.
Visco Vis	sity cosity, dynamic	:	40 - 70 Pas	
Explo	sive properties	:	No data is ava	ailable on the product itself.
Oxidi	zing properties	:	No data is ava	ailable on the product itself.
	0			

9.2 Other information

No data available



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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 : None known.

10.6 Hazardous decomposition products

No hazardous decomposition products are known. Hazardous decomposition : carbon dioxide products carbon monoxide

SECTION 11: Toxicological information

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

Acute toxicity	
Acute oral toxicity - Product	: Acute toxicity estimate : > 2 000 mg/kg Method: Calculation method
Acute inhalation toxicity - Product	: Acute toxicity estimate : > 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity - Product	: Acute toxicity estimate : > 2 000 mg/kg Method: Calculation method
Acute toxicity (other routes of administration)	: No data available
Skin corrosion/irritation	
Product:	
Method: OECD Test Guideline	431

Method: OECD Test Guideline 43¹ Result: Causes burns. GLP: yes

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Serious eye damage/eye irritation

Components:

methacrylic acid: Species: Rabbit Assessment: Risk of serious damage to eyes. Method: Draize Test Result: Irreversible effects on the eye GLP: no

2,6-di-tert-butyl-p-cresol: Species: Rabbit Assessment: No eye irritation Method: OECD Test Guideline 405 Result: No eye irritation

2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate: Result: Corrosive

alpha,alpha-dimethylbenzyl hydroperoxide: Assessment: Risk of serious damage to eyes. Result: Irreversible effects on the eye

Respiratory or skin sensitisation

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.

methacrylic acid: Test Type: Buehler Test Exposure routes: Skin Species: Guinea pig Assessment: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 406 Result: Did not cause sensitisation on laboratory animals.

2,6-di-tert-butyl-p-cresol: Exposure routes: Skin Species: Humans Result: Does not cause skin sensitisation.

2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate: Test Type: Local lymph node assay (LLNA) Species: Mouse Method: OECD Test Guideline 429 Result: The product is a skin sensitiser, sub-category 1B. GLP: yes

Assessment:

No data available

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	n cell mutagenicity		
	ponents: yl methacrylate:		
	stoxicity in vitro	Test system: Sa	obial mutagenesis assay (Ames test) almonella typhimurium Test Guideline 471 e
	acrylic acid: otoxicity in vitro		rse mutation assay almonella typhimurium
			ation: with and without metabolic activation Test Guideline 471
	i-tert-butyl-p-cresol: toxicity in vitro		rse mutation assay
		Metabolic activa Result: negative	ation: with and without metabolic activation
			pmosome aberration test in vitro ation: with and without metabolic activation
	penoic acid, 2-methyl toxicity in vitro	-, 2-hydroxyethyl ester, : Test Type: Ame	
Genc		Test system: Sa Metabolic activa	almonella tryphimurium and E. coli ation: with and without metabolic activation Test Guideline 471
		Test system: Cl Metabolic active	tro mammalian cell gene mutation test ninese hamster ovary cells ation: with and without metabolic activation Test Guideline 476
		Test system: He Metabolic active	omosome aberration test in vitro uman lymphocytes ation: with and without metabolic activation Test Guideline 473

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Components:

methacrylic acid:	
-	Test Type: in vivo assay Test species: Rat (male) Cell type: Somatic Application Route: Inhalation Exposure time: 2 h Dose: 0.4, 1.6, 2.8 and 4 mg/L Method: OECD Test Guideline 475 Result: Not classified due to inconclusive data. GLP: no
	Test Type: dominant lethal test Test species: Mouse (male) Application Route: Inhalation Exposure time: 6 h Dose: 0.405, 4.05 and 36.45 mg/L Method: OECD Test Guideline 478 Result: negative GLP: no
2,6-di-tert-butyl-p-cresol: 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
Germ cell mutagenicity- : Assessment	No data available
Carcinogenicity	
Components: methyl methacrylate: Species: Rat, male and female Application Route: Oral Exposure time: 2 Years Dose: 6, 60, 2000 ppm Frequency of Treatment: once da No observed adverse effect level: Result: negative	
methacrylic acid: Species: Rat, male and female	

Species: Rat, male and female Application Route: inhalation (vapour) Exposure time: 102 weeks Frequency of Treatment: 5 days/week

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No observed adverse effect level: >= 2,05 mg/kg body weight Method: OECD Test Guideline 451

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Species: Mouse, male and female Application Route: inhalation (vapour) Exposure time: 102 weeks Dose: ca. 2.05 and 4.1 mg/L Frequency of Treatment: 5 days/week Lowest observed adverse effect level: ca. 2,05 mg/l Method: OECD Test Guideline 451

2,6-di-tert-butyl-p-cresol: Species: Rat, male and female Application Route: Oral Result: negative

Carcinogenicity -Assessment : No data available

Reproductive toxicity

Components:

methacrylic acid:

Effects on fertility :	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Dose: 0, 50, 150, 450 mg/kg/day General Toxicity - Parent: No observed adverse effect level: 50 mg/kg body weight Fertility: No observed adverse effect level F1: 400 mg/kg body weight Symptoms: Reduced body weight Method: OECD Test Guideline 416 GLP: yes
2,6-di-tert-butyl-p-cresol:	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Dose: 25/100/500 mg/kg bw/day General Toxicity - Parent: No observed adverse effect level: 100 mg/kg body weight General Toxicity F1: No observed adverse effect level: 25 mg/kg body weight Result: negative
Components: methyl methacrylate:	

meunyi meulaciyiale.	
Effects on foetal	: Species: Rat
development	Application Route: Inhalation
	Dose: 99, 304, 1178 ppm
	Teratogenicity: No observed adverse effect concentration F1:
	8 300 mg/m ³
	Embryo-foetal toxicity: No observed adverse effect

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Version 1.0	Revision Date: 17.02.2021	SDS Number: 400000011295	Date of last issue: - Date of first issue: 17.02.2021
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		Method: OECE	⁻ 1: 8 300 mg/m³) Test Guideline 414 togenic effects
metha	acrylic acid:	Test Type: Pre	-patal
		Species: Rat, f Application Ro Dose: 0, 50, 10 Duration of Sin Frequency of 1 General Toxici 200 ppm Developmenta 300 ppm Embryo-foetal concentration I Method: OECE Result: No effe development w Test Type: Pre Species: Rabb Application Ro Dose: 50, 150, Duration of Sin Frequency of 1 General Toxici 50 mg/kg body	emale ute: Inhalation 00, 200 or 300 ppm igle Treatment: 14 d Treatment: 7 days/week ty Maternal: No observed adverse effect level: I Toxicity: No observed adverse effect level: >= toxicity: No observed adverse effect F1: 300 ppm 0 Test Guideline 414 ects on fertility and early embryonic vere detected. -natal it, male and female ute: Oral 450 milligram per kilogram igle Treatment: 23 d Treatment: 7 days/week ty Maternal: No observed adverse effect level: weight
		450 mg/kg boo	cts on fertility and early embryonic
2,6-d	i-tert-butyl-p-cresol:		
		General Toxici 240 mg/kg boo Developmenta 800 mg/kg boo	e, female ute: Oral gle Treatment: 7 d ty Maternal: No observed adverse effect level: ly weight I Toxicity: No observed adverse effect level:
2-Pro	penoic acid, 2-methyl	General Toxici 300 mg/kg boo Developmenta mg/kg body we	-natal emales ute: Oral /1000 mg/kg bw/day ty Maternal: No observed adverse effect level: ly weight I Toxicity: No-observed-effect level: 1 000

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		GLP: yes		
	oductive toxicity - ssment	: No data availal	ble	
STO	T - single exposure			
meth Expo Targe	ponents: yl methacrylate: sure routes: Inhalatior et Organs: Respiratory ssment: May cause re	/ Tract		
Expo Targe Asse		/ Tract	ed as specific target organ to n.	xicant, single
STO	T - repeated exposur	e		

alpha, alpha-dimethylbenzyl hydroperoxide: Exposure routes: Inhalation Target Organs: Lungs Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

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

methacrylic acid: Species: Rat, male and female NOEC: 352 - 1232 Application Route: inhalation (vapour) Test atmosphere: vapour Exposure time: 90 dNumber of exposures: 6 h Dose: 70/352/1232 mg/m3 Subsequent observation period: 5 days/week Method: OECD Test Guideline 413 GLP: yes

2,6-di-tert-butyl-p-cresol: Species: Pig, male and female NOAEL: >= 61 mg/kg



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Application Route: oral (feed) Exposure time: daily Method: Chronic toxicity

2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate: Species: Rat, male and female NOEL: 100 mg/kg Application Route: oral (gavage) Exposure time: 28 d Number of exposures: 7 days/week Dose: 0, 100, 300, or 1000 MKD Method: OECD Test Guideline 407 GLP: yes Target Organs: Kidney, Stomach

Repeated dose toxicity - : No data available Assessment

Aspiration toxicity

No data available

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

- General Information: No data available
- Inhalation: No data available
- Skin contact: No data available
- Eye contact: No data available
- Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

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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 (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
methacrylic acid:		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 85 mg/l End point: mortality Exposure time: 96 h Test Type: flow-through test Test substance: Fresh water Method: Fish Acute Toxicity Test GLP: yes Remarks: Toxic to aquatic organisms.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 130 mg/l End point: Immobilization Exposure time: 48 h Test Type: flow-through test Analytical monitoring: yes Test substance: Fresh water Method: Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids

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Version Revision Date: Date of last issue: -SDS Number: 40000011295 1.0 17.02.2021 Date of first issue: 17.02.2021 Print Date 11.12.2023 GLP: yes Toxicity to algae/aquatic : ErC50 (Selenastrum capricornutum (green algae)): 45 mg/l Exposure time: 72 h plants Test Type: static test Analytical monitoring: yes Test substance: Fresh water Method: OECD Test Guideline 201 GLP: ves NOEC (Selenastrum capricornutum (green algae)): 8,2 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Test substance: Fresh water Method: OECD Test Guideline 201 GLP: yes Toxicity to microorganisms : EC50 (Pseudomonas putida): 270 mg/l Exposure time: 16,5 h Test Type: static test Analytical monitoring: no Test substance: Fresh water Method: DIN 38 412 Part 8 GLP: yes : NOEC: 10 mg/l Toxicity to fish (Chronic Exposure time: 35 d toxicity) Species: Brachydanio rerio (zebrafish) Test Type: flow-through test Analytical monitoring: yes Test substance: Fresh water Method: OECD Test Guideline 210 GLP: yes Toxicity to daphnia and other : NOEC: 53 mg/l aquatic invertebrates Exposure time: 21 d Species: Daphnia magna (Water flea) (Chronic toxicity) Test Type: flow-through test Analytical monitoring: yes Test substance: Fresh water Method: OECD Test Guideline 211 GLP: yes 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 : EC50 (Daphnia magna (Water flea)): 0,48 mg/l aquatic invertebrates End point: Immobilization Exposure time: 48 h Test Type: static test Test substance: Fresh water



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		Method: OECD	Test Guideline 202
	xicity to algae/aquatic ants	mg/l Exposure time: Test Type: static Test substance:	c test
		mg/l Exposure time: Test Type: static Test substance:	c test
То	xicity to microorganisms	: ErC50 (activated Exposure time: : Test Type: station	24 h
	xicity to fish (Chronic kicity)	Test substance:	30 d s latipes (Orange-red killifish)
		NOEC: >= 23,8 Exposure time: Species: Fish Test substance:	70 d
aq	xicity to daphnia and other uatic invertebrates hronic toxicity)	Exposure time: 2 Species: Daphn Test substance:	21 d ia magna (Water flea)
		Test substance:	21 d ia magna (Water flea)
	Factor (Chronic aquatic kicity)	: 1	
2-1	Propenoic acid, 2-methyl-, 2 xicity to fish	: LC50 (Oncorhyr Exposure time: S Test Type: static Analytical monit	nchus mykiss (rainbow trout)): > 112 mg/l 96 h c test
	xicity to daphnia and other uatic invertebrates	: LC50 (Daphnia Exposure time: 4	magna (Water flea)): 68 mg/l 48 h



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		Test Type: stat Analytical mon Method: OECE GLP: yes	
To» plai	kicity to algae/aquatic nts	Exposure time Test Type: stat Analytical mon	tic test
		Exposure time Test Type: stat Analytical mon	tic test
alpl	ha,alpha-dimethylbenzyl h	ydroperoxide:	
To>	kicity to fish	Exposure time Test Type: sen Analytical mon	ni-static test
	kicity to daphnia and other latic invertebrates	Exposure time Test Type: stat Analytical mon	tic test
	kicity to algae/aquatic nts	Exposure time Test Type: stat Analytical mon	tic test
12.2 Pe	rsistence and degradabi	ity	
	mponents:		
	thyl methacrylate:		
Bio	degradability	: Result: Readily	/ biodegradable.

Biodegradation: > 60 % Exposure time: 28 d
 Test Type: aerobic Inoculum: activated sludge Concentration: 3 mg/l Result: Readily biodegradable. Biodegradation: 86 % Exposure time: 28 d Method: OECD Test Guideline 301D



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		GLP: yes	
26-0	di-tert-butyl-p-cresol:		
	egradability	: Result: Not bio	degradable
2 Dr	ananaia agid 2 mathul	2 budrowyothyl optor	-
	openoic acid, 2-methyl- egradability	: Test Type: aer Inoculum: activ Concentration: Result: Readily Biodegradation Related to: Dis Exposure time	obic vated sludge, non-adapted 54,6 mg/l v biodegradable. n: 91,8 % solved organic carbon (DOC)
alph	a,alpha-dimethylbenzyl	hydroperoxide:	
	egradability		dily biodegradable.
	accumulative potentia	I	
-	ponents:		
	nyl methacrylate: ccumulation	: Bioconcentration	on factor (BCF): 3
octa	tion coefficient: n- nol/water nacrylic acid :	: log Pow: 1,38	
Parti	tion coefficient: n- nol/water	: log Pow: 0,93 (pH: 2,2	(22 °C)
	di-tert-butyl-p-cresol: ccumulation	: Species: Cypri Exposure time Bioconcentratio Method: flow-th	28 d on factor (BCF): 330 - 1 800
	tion coefficient: n- nol/water	: log Pow: 5,2	
12.4 Mob	oility in soil		
2,6-c Distr	ponents: di-tert-butyl-p-cresol : ibution among	: Koc: 8183	
	ronmental compartmen		
	ults of PBT and vPvB	assessment	
	<u>luct:</u> essment	· This substance	mixture contains no componente considerad
ASSE	5551110111	to be either per	e/mixture contains no components considered rsistent, bioaccumulative and toxic (PBT), or and very bioaccumulative (vPvB) at levels of

0.1% or higher..



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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

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	 The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of contents/ container to an approved waste disposal plant.
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

ΙΑΤΑ	
14.1 UN number or ID number	: UN 2924
14.2 UN proper shipping name	: Flammable liquid, corrosive, n.o.s.
	(METHYL METHACRYLATE, METHACRYLIC ACID)
14.3 Transport hazard class(es)	: 3
Subsidiary risk	: 8
14.4 Packing group	: 11
Labels	: Flammable Liquids, Corrosive
Packing instruction (cargo aircraft)	: 363
Packing instruction (passenger aircraft)	: 352



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IMI	DG		
	1 UN number or ID mber	: UN 2924	
14. nar	2 UN proper shipping ne	: FLAMMABLE LI	QUID, CORROSIVE, N.O.S.
		(METHYL METH	HACRYLATE, METHACRYLIC ACID)
cla	3 Transport hazard ss(es)	: 3	
	osidiary risk	: 8	
	4 Packing group	:	
	oels S Code	: 3 (8) : F-E, S-C	
	5 Environmental hazards		
	rine pollutant	: no	
AD	R		
14.	1 UN number or ID mber	: UN 2924	
	2 UN proper shipping	: FLAMMABLE LI	QUID, CORROSIVE, N.O.S.
		(METHYL MET	HACRYLATE, METHACRYLIC ACID)
	3 Transport hazard ss(es)	: 3	
	osidiary risk	: 8	
	4 Packing group	: 11	
	pels	: 3 (8)	
	5 Environmental hazards		
EN	vironmentally hazardous	: no	
RIC) 1 UN number or ID		
	nber	: UN 2924	
	2 UN proper shipping	· FLAMMABLE LI	QUID, CORROSIVE, N.O.S.
nar			
		(METHYL MET	HACRYLATE, METHACRYLIC ACID)
14.	3 Transport hazard	: 3	
	ss(es)		
	osidiary risk	: 8	
	4 Packing group	: · 2 (9)	
1.05	MAIL.		

SDS Number:

14.7 Maritime transport in bulk according to IMO instruments

: 3 (8)

: no

Not applicable for product as supplied.

SECTION 15: Regulatory information

14.5 Environmental hazards Environmentally hazardous

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

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



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REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. P5c FLAMMABLE LIQUIDS

Occupational Illnesses (R-: 65, 82, 36, 25, 12 461-3, France)

Installations classified for the : 4331 protection of the environment (Environment Code R511-9)

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

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

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	: Not in compliance with the inventory		
ENCS	: On the inventory, or in compliance with the inventory		
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



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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

I un text of II-Statements		
H225	:	Highly flammable liquid and vapour.
H242	:	Heating may cause a fire.
H302	:	Harmful if swallowed.
H311	:	Toxic in contact with skin.
H312	:	Harmful in contact with skin.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H331	:	Toxic if inhaled.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H373	:	May cause damage to organs through prolonged or repeated
		exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H411	:	Toxic to aquatic life with long lasting effects.
Full text of other abbreviation	ns	
Acute Tox.		Acute toxicity
Aquatic Acute	÷	Short-term (acute) aquatic hazard
Aquatic Chronic		Chronic aquatic toxicity
Eye Dam.		Serious eye damage
Flam. Liq.		Flammable liquids
Org. Perox.	÷	Organic peroxides
Skin Corr.	:	
Skin Irrit.		Skin irritation
Skin Sens.		Skin sensitisation
STOT RE		Specific target organ toxicity - repeated exposure
STOT SE		Specific target organ toxicity - single exposure
2009/161/EU	:	
	-	a third list of indicative occupational exposure limit values in
		implementation of Council Directive 98/24/EC and amending
		Commission Directive 2000/39/EC
FR VLE	:	France. Occupational Exposure Limits (INRS)
2009/161/EU / TWA	:	Limit Value - eight hours
2009/161/EU / STEL	:	Short term exposure limit
FR VLE / VME	:	Time Weighted Average
FR VLE / VLCT (VLE)		Short Term Exposure Limit

Further information

Classification of the mixture:

Classification procedure:



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Flam. I	_iq. 2	H225	Based on product data or assessment
Skin C	orr. 1B	H314	Based on product data or assessment
Eye Da	am. 1	H318	Based on product data or assessment
Skin S	ens. 1	H317	Calculation method
STOT	SE 3	H335	Calculation method
Aquatio	c Chronic 3	H412	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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