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

1.1 Product identifier

Trade name : ARALDITE® 2050 A

Unique Formula Identifier (UFI) : HWQ5-U0PN-600Q-EU90

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

Use of the Substance/Mixture : Adhesives

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 number

Emergency telephone number : 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

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.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove 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	Concentration (% 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 % Skin Corr. 1A; H314 >= 10 % Skin Irrit. 2; H315 1 - < 10 % Eye Dam. 1; H318 >= 3 % Eye Irrit. 2A; H319 1 - < 3 % Acute Tox. 3; H311 >= 25 % Acute Tox. 4; H312 10 - < 25 %	>= 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	>= 1 - < 2,5
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	52628-03-2 258-053-2 01-2119980575-25	Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1B; H317	>= 1 - < 3
α, α-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 specific concentration limit Skin Corr. 1B; H314 >= 10 % Skin Irrit. 2; H315 3 - < 10 % Eye Dam. 1; H318 3 - < 10 % Eye Irrit. 2; H319 1 - < 3 % STOT SE 3; H335 < 10 % Acute toxicity estimate Acute oral toxicity: 382 mg/kg	>= 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 mouth-to-mouth resuscitation.

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case 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 plenty 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 swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
Causes severe burns.

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 Sulphur oxides Hydrogen chloride

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.

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. To avoid spills during handling keep bottle on a metal tray. 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 SDS.
Storage class (TRGS 510)	:	3
Further information on storage stability	:	Stable under normal conditions.
Recommended storage temperature	:	2 - 8 °C

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			
		STEL	100 ppm	2009/161/EU
	Further information: Indicative			
		AGW	50 ppm 210 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK	50 ppm 210 mg/m3	DE DFG MAK
	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			
methacrylic acid	79-41-4	AGW	50 ppm 180 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK	50 ppm 180 mg/m3	DE DFG MAK
	Further information: Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			
2,6-di-tert-butyl-p-cresol	128-37-0	AGW (Vapour and aerosols, inhalable fraction)	10 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (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 fraction)	10 mg/m3	DE DFG MAK
	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			
Silicon, amorphous	112945-52-5	AGW (Inhalable fraction)	4 mg/m3 (Silica)	DE TRGS 900
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK (measured as the alveolate	0,02 mg/m3	DE DFG MAK

		fraction)		
	Further information: 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
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 bw/day
Silicon, amorphous	Workers	Inhalation	Long-term systemic effects	4 mg/m3

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	
	Marine 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	
	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
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	Fresh water	0,068 mg/l
	Remarks:Assessment Factors	
	Marine water	0,007 mg/l
	Remarks:Assessment Factors	
	Sewage treatment plant	0,546 mg/l
	Remarks:Assessment Factors	
	Fresh water sediment	0,481 mg/kg dry weight (d.w.)
	Remarks:Equilibrium method	
	Marine sediment	0,048 mg/kg dry weight (d.w.)
	Remarks:Equilibrium method	
	Soil	0,056 mg/kg dry weight (d.w.)
	Remarks:Equilibrium method	
methacrylic acid	Fresh water	0,82 mg/l
	Remarks:Assessment Factors	
	Marine water	0,82 mg/l
	Remarks:Assessment Factors	
	Freshwater - intermittent	0,82 mg/l
	Remarks:Assessment Factors	
	Sewage treatment plant	10 mg/l
	Remarks:Assessment Factors	
	Soil	1,2 mg/kg
	Remarks:Equilibrium method	

8.2 Exposure controls

Personal protective equipment

Eye/face 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 : 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.

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 : Organic vapour type (A)

Combined particulates and organic vapour type (A-P)

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 itself.
Melting point/freezing point	:	No data is available on the product itself.
Boiling point	:	No data is available on the product itself.
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: estimated
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	:	40 - 70 Pas

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.
Density	:	1,02 - 1,05 g/cm3
Relative density	:	No data is available on the product itself.
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 : None known.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.
No decomposition if stored and applied as directed.

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

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal 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: 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

methacrylic acid:

Acute oral toxicity : LD50 (Rat, male): 1 320 mg/kg
Method: OECD Test Guideline 401
GLP: no
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat, male and female): 7,1 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: yes
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): 500 - 1 000 mg/kg
GLP: no
Assessment: The component/mixture is toxic after single contact with skin.

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

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

Acute oral toxicity : LD50 (Rat, female): > 2 000 mg/kg
Method: OECD Test Guideline 425
GLP: yes
Assessment: The component/mixture is low toxic after single ingestion.

α, α-dimethylbenzyl hydroperoxide:

Acute oral toxicity : LD50 (Rat): 382 mg/kg

Acute toxicity estimate: 382 mg/kg
Method: Calculation method

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : Assessment: The component/mixture is moderately toxic after single contact with skin.

Skin corrosion/irritation

Causes severe burns.

Product:

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

Components:

methyl methacrylate:

Species : Rabbit
Method : OPPTS 870.2500
Result : Skin irritation

methacrylic acid:

Species : Rabbit
Assessment : Causes severe burns.
Method : OECD Test Guideline 404
Result : Extremely corrosive and destructive to tissue.
GLP : yes

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

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

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

Species	:	Rabbit
Exposure time	:	4 h
Assessment	:	Causes burns.
Method	:	OECD Test Guideline 404
Result	:	Causes burns.
GLP	:	yes

α, α-dimethylbenzyl hydroperoxide:

Result	:	Causes burns.

Serious eye damage/eye irritation

Causes serious eye damage.

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

α, α-dimethylbenzyl hydroperoxide:

Assessment	:	Risk of serious damage to eyes.
Result	:	Irreversible effects on the eye

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.

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

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

methacrylic acid:

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

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

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella tryphimurium and E. coli
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Test Type: Chromosome aberration test in vitro
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes

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

methacrylic acid:

Species	:	Rat, male and female
Application Route	:	inhalation (vapour)
Exposure time	:	102 weeks
Frequency of Treatment	:	5 days/week
NOAEL	:	>= 2,05 mg/kg body weight
Method	:	OECD Test Guideline 451

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
LOAEL	:	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

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/m³ Embryo-foetal toxicity: NOAEC F1: 8 300 mg/m³ Method: OECD Test Guideline 414 Result: No teratogenic effects

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: NOAEL: 50 mg/kg body weight Fertility: NOAEL F1: 400 mg/kg body weight Symptoms: Reduced body weight Method: OECD Test Guideline 416 GLP: yes

Effects on foetal development	:	Test Type: Pre-natal Species: Rat, female Application Route: Inhalation Dose: 0, 50, 100, 200 or 300 ppm Duration of Single Treatment: 14 d Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEL: 200 ppm Developmental Toxicity: NOAEL: >= 300 ppm Embryo-foetal toxicity: NOAEC F1: 300 ppm Method: OECD Test Guideline 414 Result: No effects on fertility and early embryonic development were detected. Test Type: Pre-natal Species: Rabbit, male and female Application Route: Oral Dose: 50, 150, 450 milligram per kilogram Duration of Single Treatment: 23 d Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEL: 50 mg/kg body weight Developmental Toxicity: NOAEL F1: 450 mg/kg body weight Result: No effects on fertility and early embryonic development were detected.

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

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

Effects on foetal development	:	Test Type: Pre-natal Species: Rat, females Application Route: Oral Dose: 100/300/1000 mg/kg bw/day General Toxicity Maternal: NOAEL: 300 mg/kg body weight Developmental Toxicity: NOEL: 1 000 mg/kg body weight Method: OECD Test Guideline 414 GLP: yes

STOT - single exposure

May cause respiratory irritation.

Components:

methyl methacrylate:

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

methacrylic acid:

Exposure routes	:	Inhalation
Target Organs	:	Respiratory Tract
Assessment	:	The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

STOT - repeated exposure

Not classified due to lack of data.

Components:

α, α-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 mg/m3
Application Route	:	inhalation (vapour)
Test atmosphere	:	vapour
Exposure time	:	90 d
Number 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

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

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 (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
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Selenastrum capricornutum (green algae)): 45 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 201
GLP: yes

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

Toxicity to fish (Chronic toxicity) : NOEC: 10 mg/l
Exposure time: 35 d
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 aquatic invertebrates (Chronic toxicity) : NOEC: 53 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
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 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

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

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

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

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 112 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 68 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (algae)): > 120 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes NOEC (Pseudokirchneriella subcapitata (algae)): > 30 mg/l Exposure time: 72 h

Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

α, α-dimethylbenzyl hydroperoxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3,9 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: no
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 18,84 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 3,1 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201

12.2 Persistence and degradability

Components:

methyl methacrylate:

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

methacrylic acid:

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

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

Biodegradability : Result: Not biodegradable

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

Biodegradability : Test Type: aerobic
Inoculum: activated sludge, non-adapted
Concentration: 54,6 mg/l
Result: Readily biodegradable.
Biodegradation: 91,8 %

Related to: Dissolved organic carbon (DOC)
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

α, α-dimethylbenzyl hydroperoxide:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Components:

methyl methacrylate:

Bioaccumulation : Bioconcentration factor (BCF): 3

Partition coefficient: n-octanol/water : log Pow: 1,38

methacrylic acid:

Partition coefficient: n-octanol/water : log Pow: 0,93 (22 °C)
pH: 2,2

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

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 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	:	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 2924
ADR	:	UN 2924
RID	:	UN 2924
IMDG	:	UN 2924
IATA	:	UN 2924

14.2 UN proper shipping name

ADN	:	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE, METHACRYLIC ACID)
ADR	:	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE, METHACRYLIC ACID)
RID	:	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE, METHACRYLIC ACID)
IMDG	:	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE, METHACRYLIC ACID)
IATA	:	Flammable liquid, corrosive, n.o.s. (METHYL METHACRYLATE, METHACRYLIC ACID)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADN	:	3	8
ADR	:	3	8
RID	:	3	8
IMDG	:	3	8
IATA	:	3	8

14.4 Packing group

ADN

Packing group	:	II
Classification Code	:	FC
Hazard Identification Number	:	338
Labels	:	3 (8)

ADR

Packing group	:	II
Classification Code	:	FC
Hazard Identification Number	:	338
Labels	:	3 (8)
Tunnel restriction code	:	(D/E)

RID

Packing group	:	II
Classification Code	:	FC
Hazard Identification Number	:	338
Labels	:	3 (8)

IMDG

Packing group	:	II
Labels	:	3 (8)
EmS Code	:	F-E, S-C

IATA (Cargo)

Packing instruction (cargo aircraft)	:	363
Packing instruction (LQ)	:	Y340
Packing group	:	II
Labels	:	Flammable Liquids, Corrosive

IATA (Passenger)

Packing instruction (passenger aircraft)	:	352
Packing instruction (LQ)	:	Y340
Packing group	:	II
Labels	:	Flammable Liquids, Corrosive

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.

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) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
Number on list 75, 3

If you intend to use this product as tattoo ink, please contact your vendor.

cumene (Number on list 28)

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

Water hazard class (Germany) : WGK 1 slightly hazardous to water
Classification according to AwSV, Annex 1 (5.2)

Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

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
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

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 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 abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Flam. Liq.	:	Flammable liquids
Org. Perox.	:	Organic peroxides
Skin Corr.	:	Skin corrosion
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	:	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

Further information

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 2	H225	Based on product data or assessment
Skin Corr. 1B	H314	Based on product data or assessment
Eye Dam. 1	H318	Based on product data or assessment
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

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.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and

behaviour should be determined by the user and made known to handlers, processors and end users.