

Safety Data Sheet according to (EC) No 1907/2006

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SDS No.: 464584 V003.2

Revision: 28.01.2015

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Replaces version from: 17.12.2014

LOCTITE 3295 PART A

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

1.1. Product identifier

LOCTITE 3295 PART A

Contains:

Methyl methacrylate Methacrylic acid

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

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

Intended use: Acrylic Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Limited

2 Bishop Square Business Park AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933 Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

$\textbf{Classification} \ (\textbf{CLP}) \textbf{:}$

Flammable liquids Category 2

H225 Highly flammable liquid and vapor.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure Category 3

H335 May cause respiratory irritation.

Target organ: respiratory tract irritation

Chronic hazards to the aquatic environment Category 3

H412 Harmful to aquatic life with long lasting effects.

Serious eye damage Category 1

H318 Causes serious eye damage.

Skin irritation Category 2

H315 Causes skin irritation.

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Classification (DPD):

F - Highly flammable

R11 Highly flammable.

Xi - Irritant

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

Sensitizing

R43 May cause sensitisation by skin contact.

Dangerous for the environment

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Danger

Hazard statement: H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement:

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 Avoid breathing vapours.

P280 Wear protective gloves/eye protection. P273 Avoid release to the environment.

Precautionary statement:

Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to remove. Continue rinsing.

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Label elements (DPD):

F - Highly flammable



Xi - Irritant



Risk phrases:

R11 Highly flammable.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition - No smoking.

S24 Avoid contact with skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S51 Use only in well-ventilated areas.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

Contains epoxy constituents. See information supplied by the manufacturer.

Contains:

Methyl methacrylate,

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

2.3. Other hazards

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Part A of two part adhesive

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Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Methyl methacrylate 80-62-6	201-297-1 01-2119452498-28	50- 100 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315 Skin sensitizer 1 H317
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	5-< 10 %	Acute toxicity 4; Oral H302 Acute toxicity 3; Dermal H311 Acute toxicity 4; Inhalation H332 Skin corrosion 1A H314
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	1-< 2,5 %	Skin irritation 2 H315 Skin sensitizer 1 H317 Serious eye irritation 2 H319 Chronic hazards to the aquatic environment 2 H411
Cumene hydroperoxide 80-15-9	201-254-7	0,1-< 1 %	Acute toxicity 4; Dermal H312 Specific target organ toxicity - repeated exposure 2 H373 Acute toxicity 4; Oral H302 Organic peroxides E H242 Acute toxicity 3; Inhalation H331 Skin corrosion 1B H314 Chronic hazards to the aquatic environment 2 H411
Butyl hydroxytoluene 128-37-0	204-881-4 01-2119480433-40 01-2119555270-46 01-2119565113-46	0,25-< 1 %	Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410
Trichloroethane-1,1,2 79-00-5	201-166-9	0,1-< 1 %	Carcinogenicity 2 H351 Acute toxicity 4; Dermal H312 Acute toxicity 4; Oral H302 Acute toxicity 4; Inhalation H332

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

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Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Methyl methacrylate	201-297-1	50 - 100 %	Xi - Irritant; R37/38
80-62-6	01-2119452498-28		R43
			F - Highly flammable; R11
Methacrylic acid	201-204-4	5 - < 10 %	C - Corrosive; R35
79-41-4	01-2119463884-26		Xn - Harmful; R20/21/22
			·
Reaction product: bisphenol-A-	500-033-5	1 - < 2,5 %	R43
(epichlorhydrin); epoxy resin (number	500-033-5		Xi - Irritant; R36/38
average molecular weight <= 700)	01-2119456619-26		N - Dangerous for the environment; R51/53
25068-38-6			ž
Cumene hydroperoxide	201-254-7	0,1 - < 1 %	T - Toxic; R23
80-15-9			Xn - Harmful; R21/22, R48/20/22
			C - Corrosive; R34
			O - Oxidizing; R7
			N - Dangerous for the environment; R51/53
Butyl hydroxytoluene	204-881-4	0,25 - < 1 %	N - Dangerous for the environment; R50/53
128-37-0	01-2119480433-40		,
	01-2119555270-46		
	01-2119565113-46		

For full text of the R-Phrases indicated by codes see section 16 'Other Information'. Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.

Seek medical advice.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.

Seek medical advice.

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

EYE: Irritation, conjunctivitis.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

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5.2. Special hazards arising from the substance or mixture

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Vapours should be extracted to avoid inhalation.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

For optimum shelf life store in original containers under refrigerated conditions at 2 - 8° C (35.6 - 46.4° F) Keep away from sources of ignition.

7.3. Specific end use(s)

Acrylic Adhesive

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Туре	Category	Remarks
METHYL METHACRYLATE	100	416	Short Term Exposure		EH40 WEL
80-62-6			Limit (STEL):		
METHYL METHACRYLATE	50	208	Time Weighted Average		EH40 WEL
80-62-6			(TWA):		
METHACRYLIC ACID	40	143	Short Term Exposure		EH40 WEL
79-41-4			Limit (STEL):		
METHACRYLIC ACID	20	72	Time Weighted Average		EH40 WEL
79-41-4			(TWA):		
PARAFFIN WAX, FUME		2	Time Weighted Average		EH40 WEL
8002-74-2			(TWA):		
PARAFFIN WAX, FUME		6	Short Term Exposure		EH40 WEL
8002-74-2			Limit (STEL):		
2,6-DI-TERT-BUTYL-P-CRESOL		10	Time Weighted Average		EH40 WEL
128-37-0			(TWA):		

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$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Methyl methacrylate	aqua					0,94 mg/L	
80-62-6	(freshwater)						
Methyl methacrylate	aqua (marine					0,094 mg/L	
80-62-6 Methyl methacrylate	water)					0,94 mg/L	
80-62-6	aqua (intermittent					0,94 mg/L	
00 02 0	releases)						
Methyl methacrylate	STP					10 mg/L	
80-62-6							
Methyl methacrylate	sediment				5,74 mg/kg		
80-62-6	(freshwater)				1 47 4		
Methyl methacrylate 80-62-6	soil				1,47 mg/kg		
Methacrylic acid	aqua					0,82 mg/L	
79-41-4	(freshwater)					0,02 mg/L	
Reaction product: bisphenol-A-	aqua					0,006 mg/L	
(epichlorhydrin); epoxy resin (number	(freshwater)						
average molecular weight <= 700)							
25068-38-6						0.0005 7	
Reaction product: bisphenol-A-	aqua (marine					0,0006 mg/L	
(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	water)						
25068-38-6							
Reaction product: bisphenol-A-	aqua					0,018 mg/L	
(epichlorhydrin); epoxy resin (number	(intermittent					'	
average molecular weight <= 700)	releases)						
25068-38-6							
Reaction product: bisphenol-A-	STP					10 mg/L	
(epichlorhydrin); epoxy resin (number average molecular weight <= 700)							
25068-38-6							
Reaction product: bisphenol-A-	sediment				0,996		
(epichlorhydrin); epoxy resin (number	(freshwater)				mg/kg		
average molecular weight <= 700)							
25068-38-6	11				0.0005		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number	sediment (marine water)				0,0996 mg/kg		
average molecular weight <= 700)	(marme water)				mg/kg		
25068-38-6							
Reaction product: bisphenol-A-	soil				0,196		
(epichlorhydrin); epoxy resin (number					mg/kg		
average molecular weight <= 700)							
25068-38-6 Reaction product: bisphenol-A-	oral					11 mg/kg	
(epichlorhydrin); epoxy resin (number	orai					food	
average molecular weight <= 700)						1000	
25068-38-6							
2,6-Di-tert-butyl-p-cresol	soil				1,04 mg/kg		
128-37-0							
2,6-Di-tert-butyl-p-cresol	STP					100 mg/L	
128-37-0 2,6-Di-tert-butyl-p-cresol	sediment				1,29 mg/kg		
128-37-0	(freshwater)				1,29 mg/kg		
2,6-Di-tert-butyl-p-cresol	oral				16,7 mg/kg		
128-37-0				1	,		
2,6-Di-tert-butyl-p-cresol	aqua (marine					0,4 μg/L	
128-37-0	water)						
2,6-Di-tert-butyl-p-cresol	aqua			1		4 μg/L	
128-37-0	(intermittent releases)			1			
2,6-Di-tert-butyl-p-cresol	aqua		+	+		4 μg/L	
128-37-0	(freshwater)			1		. μς/ Ε	
2,6-Di-tert-butyl-p-cresol	aqua	1	0,000199				
128-37-0	(freshwater)		mg/l				

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Derived No-Effect Level (DNEL):

Name on list	Application	Route of	Health Effect	Exposure Time	Value	Remarks
Mothyl mothographe	Area Workers	Exposure Dermal	Acute/short term	1 ime	1.5 ma/am2	
Methyl methacrylate 80-62-6	Workers	Demiai	exposure - local		1,5 mg/cm2	
Methyl methacrylate	Workers	Dermal	Long term		13,67 mg/kg bw/day	
80-62-6			exposure - systemic effects			
Methyl methacrylate	Workers	Inhalation	Long term		210 mg/m3	
80-62-6			exposure - systemic effects			
Methyl methacrylate 80-62-6	Workers	Dermal	Long term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects		210 mg/m3	
Methyl methacrylate 80-62-6	general population	Dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate	general	Dermal	Long term	+	8,2 mg/kg bw/day	
80-62-6	population		exposure - systemic effects		-, <i>g</i> g · · · · · · · · · · · · · · · · · ·	
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - systemic effects		74,3 mg/m3	
Methyl methacrylate 80-62-6	general population	Dermal	Long term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate	general	Inhalation	Long term		105 mg/m3	
80-62-6	population		exposure - local effects			
Methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - local effects		88 mg/m3	
Methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - systemic effects		29,6 mg/m3	
Methacrylic acid 79-41-4	Workers	Dermal	Long term exposure - systemic effects		4,25 mg/kg bw/day	
Methacrylic acid 79-41-4	general population	Inhalation	Long term exposure - local effects		6,55 mg/m3	
Methacrylic acid	general	Inhalation	Long term	+	6,3 mg/m3	
79-41-4	population	minatation	exposure - systemic effects		0,5 mg/m5	
Methacrylic acid 79-41-4	general	Dermal	Long term exposure -		2,55 mg/kg bw/day	
/9-41-4	population		systemic effects			
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number	Workers	Dermal	Acute/short term exposure -		8,33 mg/kg bw/day	
average molecular weight <= 700) 25068-38-6			systemic effects			
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Dermal	Long term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Long term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Acute/short term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700)	general population	Dermal	Long term exposure - systemic effects		3,571 mg/kg bw/day	

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25068-38-6					
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Inhalation	Acute/short term exposure - systemic effects	0,75 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Inhalation	Long term exposure - systemic effects	0,75 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Acute/short term exposure - systemic effects	0,75 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Long term exposure - systemic effects	0,75 mg/kg bw/day	
2,6-Di-tert-butyl-p-cresol 128-37-0	general population	Inhalation	Long term exposure - systemic effects	1,74 mg/m3	
2,6-Di-tert-butyl-p-cresol 128-37-0	Workers	Dermal	Long term exposure - systemic effects	8,3 mg/kg bw/day	
2,6-Di-tert-butyl-p-cresol 128-37-0	general population	Dermal	Long term exposure - systemic effects	5 mg/kg bw/day	
2,6-Di-tert-butyl-p-cresol 128-37-0	Workers	Inhalation	Long term exposure - systemic effects	5,8 mg/m3	

Biological Exposure Indices:

None

8.2. Exposure controls:

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid yellow Odor mild

Odour threshold No data available / Not applicable

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pH No data available / Not applicable

 $\begin{array}{ll} \mbox{Initial boiling point} & > 75 \ ^{\circ}\mbox{C} \ (> 167 \ ^{\circ}\mbox{F}) \\ \mbox{Flash point} & < 21 \ ^{\circ}\mbox{C} \ (< 69.8 \ ^{\circ}\mbox{F}) \end{array}$

Decomposition temperature No data available / Not applicable

Vapour pressure < 53 mbar Density 1,05 g/cm3

Bulk density No data available / Not applicable Viscosity 13.000,0 - 19.000,0 mPa.s

(Brookfield; Instrument: RVT; 25 °C (77 °F);

Spindle No: 6)

Viscosity (kinematic) No data available / Not applicable Explosive properties No data available / Not applicable

Solubility (qualitative) Not miscible

(Solvent: Water)

Solidification temperature No data available / Not applicable Melting point No data available / Not applicable Flammability No data available / Not applicable Auto-ignition temperature No data available / Not applicable **Explosive limits** No data available / Not applicable No data available / Not applicable Partition coefficient: n-octanol/water No data available / Not applicable Evaporation rate No data available / Not applicable Vapor density No data available / Not applicable Oxidising properties

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with strong acids. Reacts with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:

May cause respiratory irritation.

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Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested. Causes skin irritation.

Eye irritation:

Causes serious eye damage.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Methacrylic acid 79-41-4	LD50	1.320 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LD50	> 2.000 mg/kg	oral		rat	
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	
Butyl hydroxytoluene 128-37-0	LD50	> 5.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Methacrylic acid	LC50	4,7 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute
79-41-4						Inhalation Toxicity)

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	500 mg/kg	dermal			Expert judgement
Methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg			rabbit	Dermal Toxicity Screening
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LD50	23.000 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Methacrylic acid 79-41-4	Category 1A (corrosive)	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

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Serious eye damage/irritation:

Hazardous components	Result	Exposure	Species	Method
CAS-No.		time		
Reaction product:	not irritating		rabbit	OECD Guideline 405 (Acute
bisphenol-A-				Eye Irritation / Corrosion)
(epichlorhydrin); epoxy				
resin (number average				
molecular weight <= 700)				
25068-38-6				

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Methyl methacrylate 80-62-6	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	Buehler test
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Methyl methacrylate 80-62-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)			OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Methyl methacrylate 80-62-6	NOAEL=1000 ppm	inhalation	14 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
Methyl methacrylate 80-62-6	LOAEL=2000 ppm	inhalation	14 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

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12.1. Toxicity

Ecotoxicity:

Do not empty into drains / surface water / ground water. Harmful to aquatic life with long lasting effects. V003.2

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Methyl methacrylate	LC50	350 mg/l	Fish		Leuciscus idus	OECD Guideline
80-62-6 Methyl methacrylate 80-62-6	EC50	69 mg/l	Daphnia	48 h	Daphnia magna	203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute
Methyl methacrylate 80-62-6	NOEC	100 mg/1	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	Immobilisation Test) OECD Guideline
	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline 201 (Alga, Growth
Methacrylic acid 79-41-4	LC50	> 100 - 180 mg/l	Fish	96 h	subcapitata) Brachydanio rerio (new name: Danio rerio)	Inhibition Test) OECD Guideline 203 (Fish, Acute Toxicity Test)
Methacrylic acid 79-41-4	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Methacrylic acid 79-41-4	EC10	8,2 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	> 8,2 mg/l	Algae			OECD Guideline 201 (Alga, Growth
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LC50	1,750000 mg/l	Fish	96 h	Oncorhynchus mykiss	Inhibition Test) OECD Guideline 203 (Fish, Acute Toxicity Test)
23008-38-0	LC50	1,75 mg/l	Fish	96 h	Oncorhynchus mykiss (reported as Salmo gairdneri)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	2,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
25006-56-0	EC50	9,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	Inhibition Test) OECD 211 (Daphnia magna, Reproduction Test)
25068-38-6 Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Test) OECD Guideline 201 (Alga, Growth
Butyl hydroxytoluene 128-37-0	EC50	0,48 mg/l	Daphnia	48 h	Daphnia magna	Inhibition Test) OECD Guideline 202 (Daphnia sp. Acute
Butyl hydroxytoluene 128-37-0	NOEC	0,316 mg/l	chronic Daphnia	21 d	Daphnia magna	Immobilisation Test) OECD 211 (Daphnia magna, Reproduction Test)

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12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Methyl methacrylate 80-62-6	readily biodegradable	aerobic	95 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)
Methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6		aerobic	5 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Butyl hydroxytoluene 128-37-0		aerobic	4,5 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
Methyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-62-6	Bioaccumulative (vPvB) criteria.
Methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.
Reaction product: bisphenol-A-(epichlorhydrin);	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
epoxy resin (number average molecular weight	Bioaccumulative (vPvB) criteria.
<= 700)	
25068-38-6	
Butyl hydroxytoluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
128-37-0	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

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SECTION 14: Transport information

14.1. UN number

ADR	1133
RID	1133
ADNR	1133
IMDG	1133
IATA	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADNR	ADHESIVES
IMDG	ADHESIVES
IATA	Adhesives

14.3. Transport hazard class(es)

ADR	3
RID	3
ADNR	3
IMDG	3
IATA	3

14.4. Packaging group

ADR	II
RID	II
ADNR	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	Special provision 640D
	Tunnelcode: (D/E)
RID	Special provision 640D
ADNR	Special provision 640D
IMDG	not applicable
IATA	not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content (1999/13/EC) < 55 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

R11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

R23 Toxic by inhalation.

R34 Causes burns.

R35 Causes severe burns.

R36/38 Irritating to eyes and skin.

R37/38 Irritating to respiratory system and skin.

R43 May cause sensitisation by skin contact.

R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R7 May cause fire.

H225 Highly flammable liquid and vapor.

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.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



Safety Data Sheet according to (EC) No 1907/2006

Page 1 of 15

SDS No.: 173210

V004.3

Revision: 04.02.2015

printing date: 19.03.2015

Replaces version from: 10.09.2014

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

1.1. Product identifier

LOCTITE AA 3295 B known as LOCTITE 3295 PART B

LOCTITE AA 3295 B known as LOCTITE 3295 PART B

Contains:

Methyl methacrylate Diethylol-p-toluidine Triphenylphosphine 2-Ethylhex-2-enal

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

Intended use: Acrylic Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Limited

2 Bishop Square Business Park AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933 Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

$\textbf{Classification} \ (\textbf{CLP}) \textbf{:}$

Flammable liquids Category 2

H225 Highly flammable liquid and vapor.

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye damage Category 1

H318 Causes serious eye damage.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure Category 3

H335 May cause respiratory irritation. Target organ: respiratory tract irritation

Classification (DPD):

F - Highly flammable

R11 Highly flammable.

Sensitizing

R43 May cause sensitisation by skin contact.

Xi - Irritant

R36/37/38 Irritating to eyes, respiratory system and skin.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Danger

Hazard statement: H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

Precautionary statement:

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 Avoid breathing mist/vapours.

P280 Wear protective gloves/eye protection.

Precautionary statement:

Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to remove. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Label elements (DPD):

Xi - Irritant



F - Highly flammable



Risk phrases:

R11 Highly flammable.

R36/37/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitisation by skin contact.

Safety phrases:

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe vapour.

S24 Avoid contact with skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of water and soap.

S37 Wear suitable gloves.

S51 Use only in well-ventilated areas.

Contains:

Methyl methacrylate

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Part B of a two part adhesive

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Methyl methacrylate 80-62-6	201-297-1 01-2119452498-28	50- 100 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315 Skin sensitizer 1 H317
Diethyl-phenyl-propyl-dihydropyridine 34562-31-7	252-091-3	5-< 10 %	Acute toxicity 4; Oral H302 Acute toxicity 4; Dermal H312 Skin irritation 2; Dermal H315 Serious eye irritation 2 H319 Chronic hazards to the aquatic environment 4 H413
Diethylol-p-toluidine 3077-12-1	221-359-1	1-< 5%	Acute toxicity 4; Oral H302 Serious eye damage 1 H318
Triphenylphosphine 603-35-0	210-036-0	0,1-< 1 %	Acute toxicity 4; Oral H302 Skin sensitizer 1; Dermal H317 Chronic hazards to the aquatic environment 4 H413
2-Ethylhex-2-enal 645-62-5	211-448-3	0,1-< 1 %	Flammable liquids 3 H226 Skin irritation 2; Dermal H315 Skin sensitizer 1; Dermal H317
Benzoquinone p- 106-51-4	203-405-2	0,01-< 0,1 %	Acute toxicity 3; Inhalation H331 Acute toxicity 3; Oral H301 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315 Acute hazards to the aquatic environment 1 H400 M factor: 10 M factor (Chron Aquat Tox): 10

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Methyl methacrylate	201-297-1	50 - 100 %	Xi - Irritant; R37/38
80-62-6	01-2119452498-28		R43
			F - Highly flammable; R11
Diethyl-phenyl-propyl-dihydropyridine	252-091-3	5 - < 10 %	Xn - Harmful; R21/22
34562-31-7			Xi - Irritant; R36/38
			R53
Diethylol-p-toluidine	221-359-1	1 - < 5 %	Xn - Harmful; R22
3077-12-1			Xi - Irritant; R41
Triphenylphosphine	210-036-0	0,1 - < 1 %	R53
603-35-0			Xn - Harmful; R22
			Xi - Irritant; R43
2-Ethylhex-2-enal	211-448-3	0,1 - < 1 %	Xi - Irritant; R38, R43
645-62-5			R52/53
Benzoquinone p-	203-405-2	0,01 - < 0,1 %	T - Toxic; R23/25
106-51-4			Xi - Irritant; R36/37/38
			N - Dangerous for the environment; R50

For full text of the R-Phrases indicated by codes see section 16 'Other Information'. Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

EYE: Irritation, conjunctivitis.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Vapours should be extracted to avoid inhalation.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

For optimum shelf life store in original containers under refrigerated conditions at $2 - 8^{\circ}$ C (35.6 - 46.4 °F) Keep away from sources of ignition.

7.3. Specific end use(s)

Acrylic Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
METHYL METHACRYLATE	100	416	Short Term Exposure		EH40 WEL
80-62-6			Limit (STEL):		
METHYL METHACRYLATE	50	208	Time Weighted Average		EH40 WEL
80-62-6			(TWA):		
PARAFFIN WAX, FUME		2	Time Weighted Average		EH40 WEL
8002-74-2			(TWA):		
PARAFFIN WAX, FUME		6	Short Term Exposure		EH40 WEL
8002-74-2			Limit (STEL):		

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value			Remarks	
			mg/l	ppm	mg/kg	others	
Methyl methacrylate 80-62-6	aqua (freshwater)					0,94 mg/L	
Methyl methacrylate 80-62-6	aqua (marine water)					0,094 mg/L	
Methyl methacrylate 80-62-6	aqua (intermittent releases)					0,94 mg/L	
Methyl methacrylate 80-62-6	STP					10 mg/L	
Methyl methacrylate 80-62-6	sediment (freshwater)				5,74 mg/kg		
Methyl methacrylate 80-62-6	soil				1,47 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Methyl methacrylate 80-62-6	Workers	Dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	Workers	Dermal	Long term exposure - systemic effects		13,67 mg/kg bw/day	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - systemic effects		210 mg/m3	
Methyl methacrylate 80-62-6	Workers	Dermal	Long term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects		210 mg/m3	
Methyl methacrylate 80-62-6	general population	Dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	general population	Dermal	Long term exposure - systemic effects		8,2 mg/kg bw/day	
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - systemic effects		74,3 mg/m3	
Methyl methacrylate 80-62-6	general population	Dermal	Long term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - local effects		105 mg/m3	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

Respiratory protection:

Use only in well-ventilated areas.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eve protection:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid

blue

Odor mild

Odour threshold No data available / Not applicable

pH No data available / Not applicable

Initial boiling point > 75 °C (> 167 °F) Flash point < 21 °C (< 69.8 °F)

Decomposition temperature No data available / Not applicable

Vapour pressure < 53 mbar Density 1,05 g/cm3

()

Bulk density

No data available / Not applicable
Viscosity

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable

Solubility (qualitative) Not miscible

(Solvent: Water)

Solidification temperature

Mo data available / Not applicable
Melting point

No data available / Not applicable
Flammability

No data available / Not applicable
Auto-ignition temperature

No data available / Not applicable

Explosive limits

lower 2,1 %(V) upper 12,5 %(V)

Partition coefficient: n-octanol/water

Evaporation rate

Vapor density

Oxidising properties

No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with strong acids. Reacts with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:

May cause respiratory irritation.

Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious eye damage.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Triphenylphosphine 603-35-0	LD50	700 mg/kg	oral		rat	BASF Test
2-Ethylhex-2-enal 645-62-5	LD50	4.675 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
2-Ethylhex-2-enal	Acute	20,1 mg/l	inhalation			Expert judgement
645-62-5	toxicity					
	estimate					
	(ATE)					
2-Ethylhex-2-enal	LCLo	4 mg/l			rat	BASF Test
645-62-5						

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Triphenylphosphine	LD50	> 4.000 mg/kg	dermal		rabbit	BASF Test
603-35-0						

Skin corrosion/irritation:

Hazardous components	Result	Exposure	Species	Method
CAS-No.		time		
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating			
Triphenylphosphine 603-35-0	not irritating	20 h	rabbit	BASF Test
2-Ethylhex-2-enal 645-62-5	irritating	20 h	rabbit	BASF Test

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating			
Triphenylphosphine 603-35-0	not irritating	24 h	rabbit	BASF Test
2-Ethylhex-2-enal 645-62-5	not irritating		rabbit	BASF Test

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Methyl methacrylate 80-62-6	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Triphenylphosphine 603-35-0	sensitising	Guinea pig maximisat ion test	guinea pig	EU Method B.6 (Skin Sensitisation)
2-Ethylhex-2-enal 645-62-5	sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Methyl methacrylate 80-62-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Triphenylphosphine 603-35-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
2-Ethylhex-2-enal 645-62-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Repeated dose toxicity

Hazardous components	Result	Route of	Exposure time /	Species	Method
CAS-No.		application	Frequency of		
			treatment		
Methyl methacrylate	LOAEL=2000 ppm	inhalation	14 weeks6 hrs/day, 5	mouse	Dose Range Finding Study
80-62-6			days/wk		
Methyl methacrylate	NOAEL=1000 ppm	inhalation	14 weeks6 hrs/day, 5	mouse	Dose Range Finding Study
80-62-6			days/wk		

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SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Ecotoxicity:

Do not empty into drains / surface water / ground water.

Methyl methacrylate	Hazardous components CAS-No.	Value	Value	Acute	Exposure	Species	Method
Methyl methacrylate	CAS-No.	type			time		
Methyl methacrylate	Methyl methacrylate	LC50	350 mg/l			Leuciscus idus	OECD Guideline
Methyl methacrylate 80-62-6 Methyl	80-62-6						` ′
Methyl methacrylate 80-62-6 Methyl methacrylate 80-62-6 Methyl methacrylate 80-62-6 BCS0 170 mg/l Algae 4 d Selenastrum capricormutum (new name: Pseudokirchnerella subcapitata) Sel	Mad a di	EGSO	60 "		40.1	D 1 :	
Methyl methacrylate 80-62-6 Methyl methacrylate 80-62-6 Methyl methacrylate 80-62-6 Methyl methacrylate 80-62-6 Diethylol-p-toluidine 3077-12-1 Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 Diethylol-p-toluidine 3077-12-1 EC50 10 - 22 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 Din 38412-15 D		EC50	69 mg/1	Dapnnia	48 n	Dapnnia magna	
Methyl methacrylate 80-62-6 Methyl methacrylate 80-62-6 BC50	80-02-0						` 1 I
Methyl methacrylate 80-62-6 Selenastrum capricomutum (new name: Pseudokirchnerella subcapitata) Diethylol-p-toluidine 3077-12-1 Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylhex-2-enal 645-62-5 EC50 20 mg/l Daphnia Daphnia 645-62-5 EC50 27,7 mg/l Algae Tibhologian Daphnia Daphnia Daphnia Daphnia Daphnia Daphnia magna Daphnia Daphnia magna Daphnia Daphnia magna Daphnia magna Daphnia Daphnia magna Daphnia Daphnia magna Daphnia magna Daphnia Daphnia magna Daphnia Daphnia magna Daphnia magna Daphnia Daphnia magna Daphnia paphnia pa							
Benzoquinone p- CSO Benzoquinone p- ECSO Benzoquinone p- ECSO 170 mg/l Algae							,
Diethylol-p-toluidine 3077-12-1 C50 > 100 mg/l Fish 96 h Brachydanio rerio (new name: Danio rerio) OECD Guideline 203 (Fish, Acute Toxicity Test) Daphnia 643-62-5 EC50 27,7 mg/l Algae Fish Daphnia Benzoquinone p- 106-51-4 Benzoquinone p- EC50 6 mg/l Algae Benzoquinone p- EC50 6 mg/l Algae Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. OECD Guideline 201 (Alga, Growth Inhibition Test) OECD Guideline 202 (Fish, Acute Toxicity for Daphnia 203 (Fish, Acute Toxicity for Daphnia 203 (Fish, Acute Toxicity for Daphnia 203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) OECD Guideline 202 (DECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) OECD Guideline 202 (DECD Guideline 202 (DE		NOEC	100 mg/l	Algae	4 d		
Diethylol-p-toluidine 3077-12-1	80-62-6					`	\ U /
Diethylol-p-toluidine 3077-12-1 Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylbex-2-enal 645-62-5 2-Ethylbex-2-enal 645-62-5 2-Ethylbex-2-enal 645-62-5 Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylbex-2-enal 645-62-5 2-Ethylbex-2-enal 645-62-5 Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylbex-2-enal 645-62-5 Diethylol-p-toluidine 3077-12-1 EC50 10 - 22 mg/l Fish 96 h Leuciscus idus DIN 38412-15 DIN 38412-15 Din's 38412-15 Diethylol-p-toluidine 3077-12-1 Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) Diethylol-p-toluidine 3077-12-1 EC50 20 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) Diethylol-p-toluidine 307-12-1 EU Method C.2 (Acute Toxicity for Daphnia) Daphnia magna 508-06-06-06-06-06-06-06-06-06-06-06-06-06-		EC50	170 mg/l	Algaa	4 d		
Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 EC50 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 EC50 27,7 mg/l Algae Benzoquinone p- 106-51-4 Benzoquinone p- 106		ECSU	170 Hig/1	Aigae	4 u		
Diethylol-p-toluidine 3077-12-1 Triphenylphosphine 603-35-0 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 EC50 27,7 mg/l Algae 72 h Scenedesmus subspicatus (new name: Danio rerio (new name: Danio rerio) IN 38412-15 EU Method C.2 (Acute Toxicity for Daphnia) EU Method C.2 (Acute Toxicity for Daphnia) Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Scenedesmus subspicatus (new name: Desmodesmus subspicatus) EC50 27,7 mg/l Algae Fish 96 h Leuciscus idus Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) Fish OECD Guideline 203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) Decomplication Test) OECD Guideline 205 (Daphnia sp. Acute Immobilisation Test) OECD Guideline 206 (Daphnia sp. Acute Immobilisation Test)						`	
Triphenylphosphine	Diethylol-p-toluidine	LC50	> 100 mg/l	Fish	96 h		
Triphenylphosphine 603-35-0 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-	3077-12-1		-			Danio rerio)	
Company							
645-62-5 2-Ethylhex-2-enal 645-62-5 2-Ethylhex-2-enal 645-62-5 EC50 2 - Ethylhex-2-enal 645-62-5 EC10 6,6 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) EC50 27,7 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Scenedesmus subspicatus) OECD Guideline 203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) Benzoquinone p- 106-51-4 Algae Scenedesmus sp. OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)		LC50	> 10.000 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
2-Ethylhex-2-enal 645-62-5 EC10 6,6 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) EC50 27,7 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Benzoquinone p- 106-51-4 Benzoquinone p- 106-51-4 Benzoquinone p- 106-51-4 Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. CAcute Toxicity for Daphnia) CAcute Toxicity for Daphnia) OECD Guideline 203 (Fish, Acute Toxicity Test) OECD Guideline 203 (Paphnia sp. Acute Immobilisation Test) OECD Guideline 205 (Daphnia sp. Acute Immobilisation Test) OECD Guideline 205 (Daphnia sp. Acute Immobilisation Test) OECD Guideline 205 (Daphnia sp. Acute Immobilisation Test)		LC50	10 - 22 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
2-Ethylhex-2-enal 645-62-5 EC10 6,6 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) EC50 27,7 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Benzoquinone p- 106-51-4 Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. OECD Guideline	2-Ethylhex-2-enal	EC50	20 mg/l	Daphnia	48 h	Daphnia magna	
2-Ethylhex-2-enal 645-62-5 EC10 6,6 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) EC50 27,7 mg/l Algae 72 h Scenedesmus subspicatus (new name: Desmodesmus subspicatus) Scenedesmus subspicatus) OECD Guideline 203 (Fish, Acute Toxicity Test) Daphnia magna Desmodesmus subspicatus OECD Guideline 203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) Acute Immobilisation Test) OECD Guideline 205 Genedesmus sp. OECD Guideline 206 Gouldeline 207 Genedesmus sp. OECD Guideline 208 Genedesmus sp. OECD Guideline 209 Genedesmus sp. OECD Guideline 209 Genedesmus sp. OECD Guideline	645-62-5						
Benzoquinone p- 106-51-4 Benzoquinone p- Benzoq	2 Edually 2 1	EC10	C C /1	A 1	70 1	C1	Daphnia)
Benzoquinone p- 106-51-4 Benzoquinone p-	3	ECIO	0,0 mg/1	Algae	/2 n	1 `	
Benzoquinone p- 106-51-4 Benzoquinone p- EC50 C1 mg/l Daphnia Daphnia Daphnia magna Daphnia magna Daphnia magna DeCD Guideline 202 (Daphnia sp. Acute Immobilisation Test) DeCD Guideline CDCD Guideline	043-02-3						
Benzoquinone p- 106-51-4 Benzoquinone p- Benzoquinone		EC50	27,7 mg/l	Algae	72 h		
Benzoquinone p- 106-51-4 Benzoquinone p- Benzoquinone							
Benzoquinone p- 106-51-4 Benzoquinone p- 106-51-4 Benzoquinone p- 106-51-4 EC50 C1 mg/l Daphnia Daphnia magna Daphnia magna Daphnia magna Daphnia magna OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) Benzoquinone p- EC50 Benzoquinone p- EC50 Algae Scenedesmus sp. OECD Guideline		ļ				subspicatus)	
Benzoquinone p- 106-51-4 EC50		LC50	< 1 mg/l	Fish			
Benzoquinone p- 106-51-4 Benzoquinone p- 106-51-4 Benzoquinone p- Benzoquino	106-51-4						
106-51-4 202 (Daphnia sp. Acute Immobilisation Test) Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. OECD Guideline	Benzoguinone n-	FC50	< 1 mg/l	Danhnia		Danhnia maona	
Acute Immobilisation Test) Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. OECD Guideline	1 1	Leso	\ T IIIg/T	Dupinnu		Dupiniu mugiu	
Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. Test) OECD Guideline							, I I
Benzoquinone p- EC50 6 mg/l Algae Scenedesmus sp. OECD Guideline							
8 8		FG50	6 11				,
100-31-4		EC50	6 mg/l	Algae		Scenedesmus sp.	
Inhibition Test)	100-31-4						

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components	Result	Route of	Degradability	Method
CAS-No.		application		

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Methyl methacrylate 80-62-6	readily biodegradable	aerobic	95 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)
Diethylol-p-toluidine 3077-12-1			> 48 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Triphenylphosphine 603-35-0			< 20 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
2-Ethylhex-2-enal 645-62-5	readily biodegradable	aerobic	75 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Benzoquinone p- 106-51-4		aerobic	23 - 61 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Methyl methacrylate 80-62-6	1,38					
Triphenylphosphine 603-35-0	5,7					
2-Ethylhex-2-enal 645-62-5	2,38				23 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Benzoquinone p- 106-51-4	0,2					

12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
Methyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-62-6	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

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SECTION 14: Transport information

14.1. **UN number**

ADR	1133
RID	1133
ADNR	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADNR	ADHESIVES

14.3. Transport hazard class(es)

ADR	3
RID	3
ADNR	3

14.4. Packaging group

ADR	II
RID	II
ADNR	II

14.1. **UN** number

ADR	1133
RID	1133
ADNR	1133
IMDG	1133
IATA	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADNR	ADHESIVES
IMDG	ADHESIVES
IATA	Adhesives

14.3. Transport hazard class(es)

ADR	3
RID	3
ADNR	3
IMDG	3
IATA	3

14.4. Packaging group

ADR	II
RID	II
ADNR	II
IMDG	II
IATA	II

14.5. **Environmental hazards**

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

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ADR Special provision 640D

Tunnelcode: (D/E)

Tunnelcode: (D/E)

RID Special provision 640D ADNR Special provision 640D

IMDG not applicable IATA not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content < 60 % (1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

R11 Highly flammable.

R21/22 Harmful in contact with skin and if swallowed.

R22 Harmful if swallowed.

R23/25 Toxic by inhalation and if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R36/38 Irritating to eyes and skin.

R37/38 Irritating to respiratory system and skin.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R50 Very toxic to aquatic organisms.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R53 May cause long-term adverse effects in the aquatic environment.

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H413 May cause long lasting harmful effects to aquatic life.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.