

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

LOCTITE AA 3295 A known as Loctite 3295 300ml Part A M/L

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SDS No.: 464584

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

1.1. Product identifier

LOCTITE AA 3295 A known as Loctite 3295 300ml Part A M/L

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 Ltd Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

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

Classification (CLP):

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.

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 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 do. Continue rinsing.

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

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 %	Flam. Liq. 2 H225 STOT SE 3 H335 Skin Irrit. 2 H315 Skin Sens. 1 H317
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	5- < 10 %	Acute Tox. 4; Oral H302 Acute Tox. 3; Dermal H311 Acute Tox. 4; Inhalation H332 Skin Corr. 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 Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Chronic 2 H411
Cumene hydroperoxide 80-15-9	201-254-7	0,1-< 1 %	Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Aquatic Chronic 2 H411 Skin Corr. 1B H314
Butyl hydroxytoluene 128-37-0	204-881-4 01-2119480433-40 01-2119555270-46 01-2119565113-46	0,25-< 1 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410
1,1,2-Trichloroethane 79-00-5	201-166-9	0,1-< 1 %	Carc. 2 H351 Acute Tox. 4; Dermal H312 Acute Tox. 4; Oral H302 Acute Tox. 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.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

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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

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100	416	Short Term Exposure Limit (STEL):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50	208	Time Weighted Average (TWA):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		2	Time Weighted Average (TWA):		EH40 WEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		6	Short Term Exposure Limit (STEL):		EH40 WEL
2,6-di-tert-Butyl-p-cresol 128-37-0 [2,6-DI-TERT-BUTYL-P-CRESOL]		10	Time Weighted Average (TWA):		EH40 WEL

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	·	•	mg/l	ppm	mg/kg	others	
Methyl methacrylate 80-62-6	aqua (freshwater)					0,94 mg/L	
Methyl methacrylate 80-62-6	aqua (marine water)					0,94 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		
Methacrylic acid 79-41-4	aqua (freshwater)					0,82 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (freshwater)					0,006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (marine water)					0,0006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (intermittent releases)					0,018 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	STP					10 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (freshwater)				0,996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (marine water)				0,0996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	soil				0,196 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	oral					11 mg/kg food	
2,6-Di-tert-butyl-p-cresol 128-37-0	soil					47,69 μg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	STP					0,17 mg/L	
2,6-Di-tert-butyl-p-cresol 128-37-0	sediment (freshwater)					99,6 μg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	oral				8,33 mg/kg		
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (marine water)					0,0199 μg/L	
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (intermittent releases)					0,00199 mg/L	,
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (freshwater)					0,000199 mg/L	
2,6-Di-tert-butyl-p-cresol 128-37-0	sediment (marine water)					9,96 µg/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		208 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		208 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	
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 79-41-4	general population	Inhalation	Long term exposure - systemic effects		6,3 mg/m3	
Methacrylic acid 79-41-4	general population	Dermal	Long term exposure - systemic effects		2,55 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Dermal	Acute/short 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	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	

25068-38-6					1
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	Workers	inhalation	Long term exposure - systemic effects	3,5 mg/m3	
2,6-Di-tert-butyl-p-cresol 128-37-0	Workers	Dermal	Long term exposure - systemic effects	0,5 mg/kg bw/day	
2,6-Di-tert-butyl-p-cresol 128-37-0	general population	inhalation	Long term exposure - systemic effects	0,86 mg/m3	
2,6-Di-tert-butyl-p-cresol 128-37-0	general population	Dermal	Long term exposure - systemic effects	0,25 mg/kg bw/day	
2,6-Di-tert-butyl-p-cresol 128-37-0	general population	oral	Long term exposure - systemic effects	0,25 mg/kg bw/day	

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

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

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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 No data available / Not applicable Melting point Flammability No data available / Not applicable No data available / Not applicable Auto-ignition temperature **Explosive limits** 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 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.

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

Acute inhalative toxicity:

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

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

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	

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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		
Cumene hydroperoxide		inhalation:	6 h/d5 d/w	rat	
80-15-9		aerosol			

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. Harmful to aquatic life with long lasting effects.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Methyl methacrylate 80-62-6	LC50	350 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute
Methyl methacrylate 80-62-6	EC50	69 mg/l	Daphnia	48 h	Daphnia magna	Toxicity Test) OECD Guideline 202 (Daphnia sp.
Methyl methacrylate	NOEC	100 mg/l	Algae	4 d	Selenastrum capricornutum	Acute Immobilisation Test) OECD Guideline
80-62-6		C			(new name: Pseudokirchnerella subcapitata)	201 (Alga, Growth Inhibition Test)
	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid 79-41-4	LC50	85 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Methacrylic acid 79-41-4	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute
						Toxicity Test, Freshwater Daphnids)
Methacrylic acid 79-41-4	NOEC	8,2 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	45 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	LC50	1,750000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
25068-38-6	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)
23008-36-0	EC50	9,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	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 Immobilisation
Butyl hydroxytoluene 128-37-0	NOEC	0,316 mg/l	chronic Daphnia	21 d	Daphnia magna	Test) OECD 211 (Daphnia magna, Reproduction Test)

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.

Hazardous components	LogKow	Bioconcentration	Exposure	Species	Temperature	Method
CAS-No.		factor (BCF)	time			
Methyl methacrylate	1,38					
80-62-6						
Methacrylic acid	0,93				22 °C	OECD Guideline 107
79-41-4						(Partition Coefficient (n-
						octanol / water), Shake
						Flask Method)
Cumene hydroperoxide		9,1		calculation		OECD Guideline 305
80-15-9						(Bioconcentration: Flow-
						through Fish Test)
Cumene hydroperoxide	2,16					
80-15-9						
Butyl hydroxytoluene		330 - 1.800	8 weeks	Cyprinus carpio		OECD Guideline 305 C
128-37-0						(Bioaccumulation: Test for
						the Degree of
						Bioconcentration in Fish)
Butyl hydroxytoluene	5,1					
128-37-0						

12.5. Results of PBT and vPvB assessment

Hazardous components	DDT/DD
Hazardous components	rdi/vrvd
CAGN	
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

SECTION 14: Transport information

14.1. UN number

ADR	1133
RID	1133
ADN	1133
IMDG	1133
IATA	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADN	ADHESIVES
IMDG	ADHESIVES
IATA	Adhesives

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packaging group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	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
ADN	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:

- 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.

Label elements (DPD):

F - Highly flammable

Tinging naminable



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)

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

LOCTITE AA 3295 B known as Loctite 3295 300ml Part B M/L

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SDS No.: 173210

V004.4

Revision: 02.06.2015

printing date: 17.02.2016

Replaces version from: 04.02.2015

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

1.1. Product identifier

LOCTITE AA 3295 B known as Loctite 3295 300ml Part B M/L

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 Ltd Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

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

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 water.

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

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

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

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

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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 %	Flam. Liq. 2
Diethyl-phenyl-propyl-dihydropyridine 34562-31-7	252-091-3	5-< 10 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Irrit. 2; Dermal H315 Eye Irrit. 2 H319 Aquatic Chronic 4 H413
Diethylol-p-toluidine 3077-12-1	221-359-1	1-< 5%	Acute Tox. 4; Oral H302 Eye Dam. 1 H318
Triphenylphosphine 603-35-0	210-036-0	0,1-< 1 %	Acute Tox. 4; Oral H302 Skin Sens. 1; Dermal H317 Aquatic Chronic 4 H413
2-Ethylhex-2-enal 645-62-5	211-448-3	0,1-< 1 %	Flam. Liq. 3 H226 Skin Irrit. 2; Dermal H315 Skin Sens. 1; Dermal H317
Benzoquinone p- 106-51-4	203-405-2	0,01-< 0,1 %	Acute Tox. 3; Inhalation H331 Acute Tox. 3; Oral H301 Eye Irrit. 2 H319 STOT SE 3 H335 Skin Irrit. 2 H315 Aquatic Acute 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.

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.

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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

$\textbf{6.1.} \ \textbf{Personal precautions, protective equipment and emergency procedures}$

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.

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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 $2 - 8^{\circ}\text{C}$ (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 [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100	416	Short Term Exposure Limit (STEL):	Category / Remarks	EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50	208	Time Weighted Average (TWA):		EH40 WEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		2	Time Weighted Average (TWA):		EH40 WEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		6	Short Term Exposure Limit (STEL):		EH40 WEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	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)				0,94 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		

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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		208 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		208 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.

Eye protection:

Wear protective glasses.

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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

Melting point

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

No data available / Not applicable

No data available / Not applicable

Vapor density

No data available / Not applicable

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.

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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.

Eve irritation:

Causes serious eye damage.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
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 CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
2-Ethylhex-2-enal	Acute	20,1 mg/l	Aerosol			Expert judgement
645-62-5	toxicity					
	estimate					
	(ATE)					
2-Ethylhex-2-enal	LCLo	4 mg/l	Vapor.		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 CAS-No.	Result	Exposure time	Species	Method
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating			
Triphenylphosphine 603-35-0	not irritating	20 h	rabbit	BASF Test
2-Ethylhex-2-enal	irritating	20 h	rabbit	BASF Test

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Serious eye damage/irritation:

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

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.

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Hazardous components CAS-No.	Value type	Value	Acute Toxicity	Exposure time	Species	Method
CAS-NO.	type		Study	tille		
Methyl methacrylate 80-62-6	LC50	350 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Methyl methacrylate 80-62-6	EC50	69 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Methyl methacrylate 80-62-6	NOEC	100 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline
	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline
Diethylol-p-toluidine 3077-12-1	LC50	> 100 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Triphenylphosphine 603-35-0	LC50	> 10.000 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
2-Ethylhex-2-enal 645-62-5	LC50	10 - 22 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
2-Ethylhex-2-enal 645-62-5	EC50	20 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
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	LC50	< 1 mg/l	Fish		Subsproutus)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Benzoquinone p- 106-51-4	EC50	< 1 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Benzoquinone p- 106-51-4	EC50	6 mg/l	Algae		Scenedesmus sp.	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability: The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of	Degradability	Method
Methyl methacrylate 80-62-6	readily biodegradable	application 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.

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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 (noctanol / 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

SECTION 14: Transport information

14.1. **UN number**

ADR	1133
RID	1133
ADN	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADN	ADHESIVES

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3

14.4. Packaging group

ADR	I
RID	I
ADN	I

14.1. **UN** number

ADR	1133
RID	1133
ADN	1133
IMDG	1133
IATA	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADN	ADHESIVES
IMDG	ADHESIVES
IATA	Adhesives

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packaging group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. **Environmental hazards**

ADR	not applicable
RID	not applicable
ADN	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 ADN 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:

- 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.

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.

Methyl methacrylate

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.