



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

Page 1 of 21

LOCTITE 3295 PART A

SDS No. : 464584
V004.0

Revision: 21.07.2016

printing date: 12.05.2017

Replaces version from: 28.01.2015

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
Epoxy resin (number average molecular weight ≤ 700)
1-Methyltrimethylene dimethacrylate

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.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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	40- 60 %	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
1-Methyltrimethylene dimethacrylate 1189-08-8	214-711-0 01-2119969461-31	0,1- < 1 %	Skin Sens. 1B H317
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	0,1- < 1 %	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	0,1- < 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.

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

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

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

Occupational Exposure LimitsValid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	70	Time Weighted Average (TWA):		IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	140	Short Term Exposure Limit (STEL):		IR_OEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		2	Time Weighted Average (TWA):		IR_OEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		6	Short Term Exposure Limit (STEL):		IR_OEL
2,6-di-tert-Butyl-p-cresol 128-37-0 [2,6-DITERTIARY-BUTYL-PARA-CRESOL]		10	Time Weighted Average (TWA):		IR_OEL
1,1,2-Trichloroethane 79-00-5 [1,1,2-TRICHLOROETHANE]	10	45	Time Weighted Average (TWA):		IR_OEL
1,1,2-Trichloroethane 79-00-5 [1,1,2-TRICHLOROETHANE]	20	90	Short Term Exposure Limit (STEL):		IR_OEL
1,1,2-Trichloroethane 79-00-5 [1,1,2-TRICHLOROETHANE]			Skin designation:	Can be absorbed through the skin.	IR_OEL

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	sewage treatment plant (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	
Methacrylic acid 79-41-4	aqua (marine water)					0,82 mg/L	
Methacrylic acid 79-41-4	sewage treatment plant (STP)					10 mg/L	
Methacrylic acid 79-41-4	aqua (intermittent releases)					0,82 mg/L	
Methacrylic acid 79-41-4	soil					1,2 mg/kg	
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)					0,001 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	sewage treatment plant (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)					0,1 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	
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (freshwater)					0,0031 mg/L	
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)					0,00031 mg/L	
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)					0,031 mg/L	
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	Sewage treatment plant					0,35 mg/L	

.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	soil				0,0029 mg/kg		
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	sewage treatment plant (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/cm ²	
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/m ³	
Methyl methacrylate 80-62-6	Workers	dermal	Long term exposure - local effects		1,5 mg/cm ²	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects		208 mg/m ³	
Methyl methacrylate 80-62-6	general population	dermal	Acute/short term exposure - local effects		1,5 mg/cm ²	
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/m ³	
Methyl methacrylate 80-62-6	general population	dermal	Long term exposure - local effects		1,5 mg/cm ²	
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - local effects		105 mg/m ³	
Methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - local effects		88 mg/m ³	
Methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - systemic effects		29,6 mg/m ³	
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/m ³	
Methacrylic acid 79-41-4	general population	Inhalation	Long term exposure - systemic effects		6,3 mg/m ³	
Methacrylic acid 79-41-4	general population	dermal	Long term exposure - systemic effects		2,55 mg/kg bw/day	
1-Methyltrimethylene dimethacrylate 1189-08-8	Workers	inhalation	Long term exposure - systemic effects		14,5 mg/m ³	
1-Methyltrimethylene dimethacrylate 1189-08-8	Workers	dermal	Long term exposure - systemic effects		4,2 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/m ³	
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/m ³	
Reaction product: bisphenol-A-	general	dermal	Acute/short term		3,571 mg/kg bw/day	

(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	population		exposure - systemic effects		
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	dermal	Long term exposure - systemic effects		3,571 mg/kg bw/day
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
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3
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 (EN 14387)

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.
Protective eye equipment should conform to EN166.

Skin protection:
Wear suitable protective clothing.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

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
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/cm ³
()	
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
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	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

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 (EC) No 1272/2008. 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 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)
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 5.000 mg/kg	oral		rat	
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	LD50	> 5.000 mg/kg	oral		rat	Not specified
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 79-41-4	LC50	> 3,6 mg/l	aerosol	4 h	rat	OECD Guideline 403 (Acute 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
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 3.000 mg/kg	dermal		rabbit	
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	LD50	23.000 mg/kg	dermal		rabbit	
Cumene hydroperoxide 80-15-9	LD50	1.200 - 1.520 mg/kg	dermal			OECD Guideline 402 (Acute Dermal Toxicity)
Butyl hydroxytoluene 128-37-0	LD50	> 2.000 mg/kg	dermal		rat	

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)
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
Butyl hydroxytoluene 128-37-0	slightly irritating	24 h	rabbit	

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Methacrylic acid 79-41-4	Category I		rabbit	Draize Test
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Butyl hydroxytoluene 128-37-0	slightly irritating		rabbit	Draize 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)
Methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
1-Methyltrimethylene dimethacrylate 1189-08-8	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
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)
Butyl hydroxytoluene 128-37-0	not sensitising	Draize Test	guinea pig	Draize Test

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		
Methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Methacrylic acid 79-41-4	negative	inhalation		mouse	OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
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	
Butyl hydroxytoluene 128-37-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
	negative	in vitro mammalian chromosome aberration test	with and without		
	negative	mammalian cell gene mutation assay	with and without		
Butyl hydroxytoluene 128-37-0	negative	oral: feed		rat	

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure time Frequency of treatment	Route of application	Method
Butyl hydroxytoluene 128-37-0		rat	male	2 y daily	oral: feed	

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Butyl hydroxytoluene 128-37-0	NOAEL P = 500 mg/kg	Two generation study oral: feed		rat	

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 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
Methyl methacrylate 80-62-6	NOAEL=1000 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	
Butyl hydroxytoluene 128-37-0	NOAEL=25 mg/kg	oral: feed	daily	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 (EC) No 1272/2008. 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 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	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl methacrylate 80-62-6	NOEC	100 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl methacrylate 80-62-6	EC0	100 mg/l	Bacteria	30 min		
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)
Methacrylic acid 79-41-4	EC50	45 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid 79-41-4	EC10	100 mg/l	Bacteria	17 h		
1-Methyltrimethylene dimethacrylate 1189-08-8	LC50	32,5 mg/l	Fish	48 h		DIN 38412-15
1-Methyltrimethylene dimethacrylate 1189-08-8	EC50	9,79 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	2,11 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	20 mg/l	Bacteria	28 d	activated sludge, domestic	not specified
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	5,09 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	LC50	1,75 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	EC50	9,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
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)
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 Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		
Butyl hydroxytoluene	EC50	0,48 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline

128-37-0							202 (Daphnia sp. Acute Immobilisation Test)
Butyl hydroxytoluene 128-37-0	EC0	500 mg/l	Bacteria	30 min			
Butyl hydroxytoluene 128-37-0	NOEC	0,316 mg/l	chronic Daphnia	21 d	Daphnia magna		OECD 211 (Daphnia magna, Reproduction Test)
1,1,2-Trichloroethane 79-00-5	LC50	136 mg/l	Fish	96 h	Pimephales promelas		OECD Guideline 203 (Fish, Acute Toxicity Test)
1,1,2-Trichloroethane 79-00-5	EC50	160 mg/l	Daphnia	48 h	Daphnia magna		other guideline:
1,1,2-Trichloroethane 79-00-5	EC50	213 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)		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 application	Degradability	Method
Methyl methacrylate 80-62-6	readily biodegradable	aerobic	95 %	EU Method C.4-B (Determination of the "Ready" Biodegradability Modified OECD Screening Test)
Methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	readily biodegradable	aerobic	84 %	OECD Guideline 310 (Ready Biodegradability CO2 in Sealed Vessels (Headspace Test)
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))
1,1,2-Trichloroethane 79-00-5	Not readily biodegradable.	aerobic	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 CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
---------------------------------	--------	----------------------------------	------------------	---------	-------------	--------

Methyl methacrylate 80-62-6	1,38					
Methacrylic acid 79-41-4	0,93				22 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Cumene hydroperoxide 80-15-9		9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					
Butyl hydroxytoluene 128-37-0		330 - 1.800	56 d	Cyprinus carpio		OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)
Butyl hydroxytoluene 128-37-0	5,1					
1,1,2-Trichloroethane 79-00-5		2	14 d	Lepomis macrochirus		other guideline:
1,1,2-Trichloroethane 79-00-5	> 2,05 - < 2,49				20 °C	QSAR (Quantitative Structure Activity Relationship)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Methyl methacrylate 80-62-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Methacrylic acid 79-41-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
1-Methyltrimethylene dimethacrylate 1189-08-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Epoxy resin (number average molecular weight ≤ 700) 25068-38-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Cumene hydroperoxide 80-15-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Butyl hydroxytoluene 128-37-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very 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. Packing 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 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 < 55 %
(2010/75/EC)**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

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

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

**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 Regulation (EC) No 1907/2006

Page 1 of 16

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

SDS No. : 173210
V005.0

Revision: 21.07.2016

printing date: 03.05.2017

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

Classification (CLP):

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.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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 %	Flam. Liq. 2 H225 STOT SE 3 H335 Skin Irrit. 2 H315 Skin Sens. 1 H317
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 STOT RE 2 H373
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
Benzochinon, p- 106-51-4	203-405-2 01-2119933861-35	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 (Acute Aquat Tox): 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.

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°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
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

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		2	Time Weighted Average (TWA):		IR_OEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2 [PARAFFIN WAX, FUME]		6	Short Term Exposure Limit (STEL):		IR_OEL
p-Benzoquinone 106-51-4 [QUINONE]	0,3	1,2	Short Term Exposure Limit (STEL):		IR_OEL
p-Benzoquinone 106-51-4 [QUINONE]	0,1	0,4	Time Weighted Average (TWA):		IR_OEL

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	sewage treatment plant (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/cm ²	
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/m ³	
Methyl methacrylate 80-62-6	Workers	dermal	Long term exposure - local effects		1,5 mg/cm ²	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects		208 mg/m ³	
Methyl methacrylate 80-62-6	general population	dermal	Acute/short term exposure - local effects		1,5 mg/cm ²	
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/m ³	
Methyl methacrylate 80-62-6	general population	dermal	Long term exposure - local effects		1,5 mg/cm ²	
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - local effects		105 mg/m ³	

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 (EN 14387)

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.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

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 (ρ)	1,05 g/cm ³
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) (Solvent: Water)	Not miscible
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	
lower	2,1 % (V)
upper	12,5 % (V)
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable

Vapor density
Oxidising properties

No data available / Not applicable
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 (EC) No 1272/2008. 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
Diethylol-p-toluidine 3077-12-1	LD50	960 mg/kg	oral		rat	BASF Test OECD Guideline 401 (Acute Oral Toxicity)
Triphenylphosphine 603-35-0	LD50	700 mg/kg	oral		rat	
2-Ethylhex-2-enal 645-62-5	LD50	4.675 mg/kg	oral		rat	
Benzochinon, p- 106-51-4	LD50	130 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Triphenylphosphine 603-35-0	LC50	12,5 mg/l	aerosol	4 h	rat	Expert judgement
2-Ethylhex-2-enal 645-62-5	Acute toxicity estimate (ATE)	20,1 mg/l	aerosol			
2-Ethylhex-2-enal 645-62-5	LCLo	4 mg/l	Vapor.		rat	BASF Test

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Triphenylphosphine 603-35-0	LD50	> 4.000 mg/kg	dermal		rabbit	BASF Test
Benzochinon, p- 106-51-4	LD50	> 2.000 mg/kg	dermal		rat	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating			expert judgment
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			expert judgment
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 lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Triphenylphosphine 603-35-0	sensitising	Guinea pig maximisation test	guinea pig	EU Method B.6 (Skin Sensitisation)
2-Ethylhex-2-enal 645-62-5	sensitising	Guinea pig maximisation 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
Triphenylphosphine 603-35-0	NOAEL=6 mg/kg	oral: gavage	91 days7 days/week	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

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 (EC) No 1272/2008. 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.

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 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	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl methacrylate 80-62-6	NOEC	100 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl methacrylate 80-62-6	EC0	100 mg/l	Bacteria	30 min		
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)
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)	
2-Ethylhex-2-enal 645-62-5	EC50	27,7 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	
2-Ethylhex-2-enal 645-62-5	EC10	159 mg/l	Bacteria	6 h		
Benzochinon, p- 106-51-4	LC50	< 1 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
Benzochinon, p- 106-51-4	EC50	< 1 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Benzochinon, p- 106-51-4	EC50	6 mg/l	Algae		Scenedesmus sp.	OECD Guideline 201 (Alga, Growth Inhibition Test)
Benzochinon, p- 106-51-4	EC0	< 1 mg/l	Bacteria	30 min		

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" Biodegradability Modified OECD Screening Test)
Diethylol-p-toluidine 3077-12-1			> 48 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Triphenylphosphine 603-35-0	Not readily biodegradable.	aerobic	< 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)
Benzochinon, p- 106-51-4		aerobic	23 - 61 %	EU Method C.4-B (Determination of the "Ready" Biodegradability Modified 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	5,69					OECD Guideline 123 (Partition Coefficient (1- Octanol / Water), Slow- Stirring Method)
2-Ethylhex-2-enal 645-62-5	2,38				23 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Benzochinon, p- 106-51-4	0,2					

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Methyl methacrylate 80-62-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Diethylol-p-toluidine 3077-12-1	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria
Triphenylphosphine 603-35-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Benzochinon, p- 106-51-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very 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. Packing group

ADR	II
RID	II
ADN	II

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. Packing 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) 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 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 %
(2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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.
- H373 May cause damage to organs through prolonged or repeated exposure.
- 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.

Contains:

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.