

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

Page 1 of 12

LOCTITE EA 3342 known as Loctite 3342

sds no. : 173398 V003.1 Revision: 29.01.2013 printing date: 27.01.2015

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

# 1.1. Product identifier

LOCTITE EA 3342 known as Loctite 3342 **1.2. Relevant identified uses of the substance or mixture and uses advised against** 

Intended use: Anaerobic Adhesive

# 1.3. Details of the supplier of the safety data sheet

Henkel Limited 2 Bishop Square Business Park AL109EY Herfordshire Hatfield

Great Britain

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

ua-productsafety.uk@uk.henkel.com

# 1.4. Emergency telephone number

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

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Classification (DPD):

Xi - IrritantR41 Risk of serious damage to eyes.Xi - IrritantR37/38 Irritating to respiratory system and skin.SensitizingR43 May cause sensitisation by skin contact.

# 2.2. Label elements

# Label elements (DPD):

# Xi - Irritant



# Risk phrases:

R37/38 Irritating to respiratory system and skin. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact.

# Safety phrases:

S24/25 Avoid contact with skin and eyes.

- 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.
- S37/39 Wear suitable gloves and eye/face protection.

# Contains:

Methacrylic acid, N,N-(m-phenylene)dimaleimide, Tert-butyl perbenzoate

# 2.3. Other hazards

Non corrosive to skin in accordance with the invitro test method, B40 skin corrosion - Human skin model assay, specified in Part B of Annex V to Directive 67/548/EEC.

This product contains a solid compound, which in powder form is classified as very toxic by inhalation. The product is not labelled accordingly as such exposure can be excluded under normal and foreseeable conditions. In the case that the product is used divergently under formation of aerosols, measures have to be observed to exclude inhalational exposure.

# **SECTION 3: Composition/information on ingredients**

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Benzyl 2-methylacrylate 2495-37-6	219-674-4	>= 25-< 50 %	Specific target organ toxicity - single exposure 3 H335
			Skin irritation 2
			H315
			Serious eye irritation 2
			H319
Methacrylic acid	201-204-4	>= 10- < 20 %	Acute toxicity 4; Oral
79-41-4	01-2119463884-26		H302
			Acute toxicity 3; Dermal
			H311
			Acute toxicity 4
			H332 Skin corrosion/irritation 1A
			H314
N,N-(m-phenylene)dimaleimide	221-112-8	>= 7-< 10 %	Skin irritation 2; Dermal
3006-93-7	221-112-0	>= 7-< 10 /0	H315
5000 75 7			Skin sensitizer 1; Dermal
			H317
			Serious eye damage/eye irritation 1
			H318
			Acute toxicity 2; Inhalation H330
Tert-butyl perbenzoate 614-45-9	210-382-2 01-2119513317-46	>= 1-< 10 %	Organic peroxides C H242
			Skin irritation 2; Dermal
			H315
			Acute toxicity 4; Inhalation
			H332
			Skin sensitizer 1 H317
			Acute hazards to the aquatic environment 1
			H400
1-Methyltrimethylene dimethacrylate 1189-08-8	214-711-0	>= 0-< 10 %	Serious eye irritation 2 H319
1109 00 0			Specific target organ toxicity - single
			exposure 3
			H335
			Skin irritation 2
			H315
2,6-Di-tert-butyl-p-cresol 128-37-0	204-881-4 485-290-0	>= 0,1-<= 0,25 %	Acute hazards to the aquatic environment 1 H400
	01-2119555270-46		Chronic hazards to the aquatic environment 1 H410

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

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Benzyl 2-methylacrylate 2495-37-6	219-674-4	>= 25 - < 50 %	Xi - Irritant; R36/37/38
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	>= 10 - < 20 %	C - Corrosive; R35 Xn - Harmful; R20/21/22
N,N-(m-phenylene)dimaleimide 3006-93-7	221-112-8	>= 7-< 10 %	T+ - Very toxic; R26 Xi - Irritant; R38 Xi - Irritant; R41 Xi - Irritant; R43
Tert-butyl perbenzoate 614-45-9	210-382-2 01-2119513317-46	>= 1 - < 10 %	E - Explosive; R2 O - Oxidizing; R7 Xi - Irritant; R38, R43 Xn - Harmful; R20 N - Dangerous for the environment; R50
1-Methyltrimethylene dimethacrylate 1189-08-8	214-711-0	>= 0 - < 10 %	Xi - Irritant; R36/37/38
2,6-Di-tert-butyl-p-cresol 128-37-0	204-881-4 485-290-0 01-2119555270-46	>= 0,1 - <= 0,25 %	N - Dangerous for the environment; R50/53

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

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation:

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

Skin contact:

Rinse with running water and soap. Seek medical advice.

#### Eye contact:

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

#### Ingestion:

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

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

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

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

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

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

## 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

MSDS-No.: 173398

V003.1

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

# **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 chapter 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.

#### 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

Store in original containers at  $8-21^{\circ}C$  (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

# 7.3. Specific end use(s)

Anaerobic Adhesive

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

#### **Occupational Exposure Limits**

Valid for Great Britain

Ingredient Category Remarks ppm mg/m<sup>3</sup> Туре METHACRYLIC ACID Time Weighted Average EH40 WEL 20 72 79-41-4 (TWA): METHACRYLIC ACID 40 143 Short Term Exposure EH40 WEL Limit (STEL): 79-41-4 2,6-DI-TERT-BUTYL-P-CRESOL EH40 WEL 10 Time Weighted Average 128-37-0 (TWA):

# Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value			Remarks	
			mg/l	ppm	mg/kg	others	
2,6-di-tert-Butyl-p-cresol 128-37-0	soil				1,04 mg/kg		
2,6-di-tert-Butyl-p-cresol 128-37-0	STP					100 mg/L	
2,6-di-tert-Butyl-p-cresol 128-37-0	sediment (freshwater)				1,29 mg/kg		
2,6-di-tert-Butyl-p-cresol 128-37-0	oral				16,7 mg/kg		
2,6-di-tert-Butyl-p-cresol 128-37-0	aqua (marine water)					0,4 µg/L	
2,6-di-tert-Butyl-p-cresol 128-37-0	aqua (intermittent releases)					4 μg/L	
2,6-di-tert-Butyl-p-cresol 128-37-0	aqua (freshwater)					4 µg/L	

# Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Methacrylic acid 79-41-4	worker	inhalation	Long term exposure - local effects		88 mg/m3	
Methacrylic acid 79-41-4	worker	inhalation	Long term exposure - systemic effects		29,6 mg/m3	
Methacrylic acid 79-41-4	worker	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	
2,6-di-tert-Butyl-p-cresol 128-37-0	general population	inhalation	Long term exposure - systemic effects		1,74 mg/m3	
2,6-di-tert-Butyl-p-cresol 128-37-0	worker	dermal	Long term exposure - systemic effects		8,3 mg/kg bw/day	
2,6-di-tert-Butyl-p-cresol 128-37-0	general population	dermal	Long term exposure - systemic effects		5 mg/kg bw/day	
2,6-di-tert-Butyl-p-cresol 128-37-0	worker	inhalation	Long term exposure - systemic effects		5,8 mg/m3	

# **Biological Exposure Indices:**

None

# 8.2. Exposure controls:

Respiratory protection: Use only in well-ventilated areas.

#### 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

y.i. mormation on basic physical and chemical ph	-
Appearance	paste
	yellow
Odor	characteristic
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	> 150  °C ( $> 302 $ °F)
Flash point	72 °C (161.6 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	< 39,99 mbar
	1.05 g/cm3
Density	1,05 g/cm5
	NT 1 4 11 1 / NT 4 11 11
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 soluble
(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
or r	rr-iouoio

#### 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. Reaction with strong bases

#### 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 preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

# Oral toxicity:

May cause irritation to the digestive tract.

## Inhalative toxicity:

Irritating to respiratory system

#### Skin irritation:

Irritating to the skin.

#### Eye irritation:

Risk of serious damage to eyes

## Sensitizing:

May cause sensitization by skin contact.

#### 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)

# Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Methacrylic acid 79-41-4	LC50	7,1 mg/l	inhalation	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	LD50	500 - 1.000 mg/kg	dermal		rabbit	

# Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Methacrylic acid 79-41-4	Category 1A (corrosive)	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

# Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

# **SECTION 12: Ecological information**

## General ecological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/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.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Benzyl 2-methylacrylate	LC50	4,67 mg/l	Fish	48 h		OECD Guideline
2495-37-6						203 (Fish, Acute
						Toxicity Test)
Methacrylic acid	LC50	100 - 180 mg/l	Fish	96 h	Brachydanio rerio (new name:	OECD Guideline
79-41-4					Danio rerio)	203 (Fish, Acute
	l l					Toxicity Test)
Methacrylic acid	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
79-41-4						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Methacrylic acid	EC50	> 8,2 mg/l	Algae			OECD Guideline
79-41-4						201 (Alga, Growth
						Inhibition Test)
Tert-butyl perbenzoate	LC50	1,6 mg/l	Fish	96 h	Brachydanio rerio (new name:	OECD Guideline
614-45-9					Danio rerio)	203 (Fish, Acute
						Toxicity Test)
Tert-butyl perbenzoate	EC50	11 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
614-45-9						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Tert-butyl perbenzoate	EC50	0,8 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
614-45-9		-	_		_	201 (Alga, Growth
						Inhibition Test)
2,6-Di-tert-butyl-p-cresol	LC0	>= 0,57 mg/l	Fish	96 h	Brachydanio rerio (new name:	EU Method C.1
128-37-0		-			Danio rerio)	(Acute Toxicity for
						Fish)
2,6-Di-tert-butyl-p-cresol	EC50	0,48 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
128-37-0		·	-			202 (Daphnia sp.
						Acute
						Immobilisation
						Test)

# 12.2. Persistence and degradability

# Persistence and Biodegradability:

The product is not biodegradable.

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

Benzyl 2-methylacrylate 2495-37-6	readily biodegradable		74 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Tert-butyl perbenzoate 614-45-9	readily biodegradable, but failing 10-day window	aerobic	72 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
2,6-Di-tert-butyl-p-cresol 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 CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Benzyl 2-methylacrylate 2495-37-6	2,53					
Methacrylic acid 79-41-4	0,93					
2,6-Di-tert-butyl-p-cresol 128-37-0	5,1					

# 12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Methacrylic acid 79-41-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2,6-Di-tert-butyl-p-cresol 128-37-0	Not fulfilling PBT (persistent/bioaccummulative/toxic) 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 Not dangerous goods RID Not dangerous goods ADNR Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods 14.2. UN proper shipping name ADR Not dangerous goods RID Not dangerous goods ADNR Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods 14.3. Transport hazard class(es) ADR Not dangerous goods RID Not dangerous goods ADNR Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods 14.4. **Packaging group** ADR Not dangerous goods RID Not dangerous goods ADNR Not dangerous goods IMDG Not dangerous goods Not dangerous goods IATA 14.5. **Environmental hazards** ADR not applicable RID not applicable ADNR not applicable IMDG not applicable not applicable IATA 14.6. Special precautions for user ADR not applicable RID not applicable ADNR not applicable IMDG not applicable not applicable IATA 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) < 3,0 %

#### 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: R2 Risk of explosion by shock, friction, fire or other sources of ignition. R20 Harmful by inhalation. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R26 Very toxic by inhalation. R35 Causes severe burns. R36/37/38 Irritating to eyes, respiratory system and skin. R38 Irritating to skin. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact. R50 Very toxic to aquatic organisms. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R7 May cause fire. H242 Heating may cause a fire. H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very 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.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and it's subsequent amendments, and Commission Directive 1999/45/EC.