

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

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SDS No.: 441445

V002.0 Revision: 16.06.2020

printing date: 13.08.2020

Replaces version from: 04.05.2017

LOCTITE PC 6315BK

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

# 1.1. Product identifier

LOCTITE PC 6315BK

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

Intended use:

2-Component epoxy 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@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):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Chronic hazards to the aquatic environment Category 3

H412 Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

# Label elements (CLP):

#### Hazard pictogram:



Contains

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700)

Dipropylene glycol diglycidyl ether

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Signal word: Warning

**Hazard statement:** H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statement:** P273 Avoid release to the environment.

**Prevention** P280 Wear protective gloves.

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

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

P337+P313 If eye irritation persists: 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 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
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight \( \leq 700 \) 25068-38-6	01-2119456619-26	10- 20 %	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Chronic 2 H411
Quartz (SiO2), <1% respirable 14808-60-7	238-878-4	25- 50 %	
Dipropylene glycol diglycidyl ether 41638-13-5		1-< 5%	Skin Irrit. 2; Dermal H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Chronic 3 H412
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	271-846-8 01-2119485289-22	1-< 5 %	Skin Irrit. 2 H315 Skin Sens. 1 H317

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 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.

SKIN: Rash, Urticaria.

SKIN: Redness, inflammation.

#### 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

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

# 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 contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

## 6.2. Environmental precautions

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

### 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.

Wash spillage site thoroughly with soap and water or detergent solution.

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.

See advice in section 8

## Hygiene measures:

Good industrial hygiene practices should be observed.

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

#### 7.2. Conditions for safe storage, including any incompatibilities

Refer to Technical Data Sheet

# 7.3. Specific end use(s)

2-Component epoxy adhesive

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

## 8.1. Control parameters

#### **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Quartz (SiO2) 14808-60-7 [SILICA, RESPIRABLE CRYSTALLINE]		0,1	Time Weighted Average (TWA):		EH40 WEL
Quartz (SiO2) 14808-60-7 [RESPIRABLE CRYSTALLINE SILICA DUST]		0,1	Time Weighted Average (TWA):		EU OELIII
Aluminium oxide 1344-28-1 [ALUMINIUM OXIDES, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Aluminium oxide 1344-28-1 [ALUMINIUM OXIDES, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

## **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Quartz (SiO2) 14808-60-7 [QUARTZ, RESPIRABLE DUST (SEE CRYSTALLINE SILICA)]		0,1	Time Weighted Average (TWA):		IR_OEL
Quartz (SiO2) 14808-60-7 [RESPIRABLE CRYSTALLINE SILICA DUST]		0,1	Time Weighted Average (TWA):		EU OELIII
Aluminium oxide 1344-28-1 [ALUMINIUM OXIDES, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Aluminium oxide 1344-28-1 [ALUMINIUM OXIDES, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	•	•	mg/l	ppm	mg/kg	others	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	aqua (freshwater)		0,006 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	aqua (marine water)		0,001 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sewage treatment plant (STP)		10 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sediment (freshwater)				0,341 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sediment (marine water)				0,034 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Soil				0,065 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	oral				11 mg/kg		
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	aqua (intermittent releases)		0,018 mg/l				
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	marine water - intermittent		0,002 mg/l				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	aqua (freshwater)		0,106 mg/l				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	aqua (intermittent releases)		0,072 mg/l				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	aqua (marine water)		0,011 mg/l				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	sewage treatment plant (STP)		10 mg/l				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	sediment (freshwater)				307,16 mg/kg		
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	sediment (marine water)				30,72 mg/kg		
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	Soil				1,234 mg/kg		

# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	dermal	Acute/short term exposure - systemic effects		8,33 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	Inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	dermal	Long term exposure - systemic effects		8,33 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	Workers	Inhalation	Long term exposure - systemic effects		12,25 mg/m3	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	dermal	Acute/short term exposure - systemic effects		3,571 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	dermal	Long term exposure - systemic effects		3,571 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	oral	Long term exposure - systemic effects		0,75 mg/kg	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	inhalation	Acute/short term exposure - systemic effects		0,75 mg/m3	
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	General population	inhalation	Long term exposure - systemic effects		0,75 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	Workers	Inhalation	Long term exposure - systemic effects		3,6 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	Workers	dermal	Long term exposure - systemic effects		1 mg/kg	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	General population	Inhalation	Long term exposure - systemic effects		0,87 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	General population	dermal	Long term exposure - systemic effects		0,5 mg/kg	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	General population	oral	Long term exposure - systemic effects		0,5 mg/kg	

# **Biological Exposure Indices:**

None

# 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. 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
black
Odor mild

Odour threshold No data available / Not applicable

pH No data available / Not applicable
Melting point No data available / Not applicable
Solidification temperature No data available / Not applicable

Initial boiling point 149 °C (300.2 °F)

Flash point 204,44 °C (399.99 °F)Estimated
Evaporation rate No data available / Not applicable
Flammability No data available / Not applicable
Explosive limits No data available / Not applicable
Vapour pressure No data available / Not applicable
Relative vapour density: No data available / Not applicable

Density 15,5 - 17,0 lb/gal

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Bulk density No data available / Not applicable Solubility No data available / Not applicable Solubility (qualitative) No data available / Not applicable Partition coefficient: n-octanol/water No data available / Not applicable Auto-ignition temperature No data available / Not applicable No data available / Not applicable Decomposition temperature No data available / Not applicable Viscosity Viscosity (kinematic) No data available / Not applicable Explosive properties 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

Strong oxidizing agents. Reaction with strong bases Reaction with strong acids.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

Stable under normal conditions of storage and use.

#### 10.5. Incompatible materials

See section reactivity.

## 10.6. Hazardous decomposition products

carbon oxides.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

# Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	LD50	> 2.000 mg/kg	rat	OECD Guideline 420 (Acute Oral Toxicity)
Quartz (SiO2), <1% respirable 14808-60-7	LD50	> 5.050 mg/kg	rat	not specified
Dipropylene glycol diglycidyl ether 41638-13-5	LD50	> 2.000 mg/kg	rat	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	LD50	26.800 mg/kg	rat	not specified

#### Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Quartz (SiO2), <1% respirable 14808-60-7	LD50	> 2.000 mg/kg	not specified	not specified
Dipropylene glycol diglycidyl ether 41638-13-5	LD50	> 2.000 mg/kg	rabbit	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	LD50	> 4.000 mg/kg	rabbit	not specified

# Acute inhalative toxicity:

No data available.

## Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	moderately irritating	24 h	rabbit	Draize Test
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	moderately irritating	24 h	rabbit	EPA OTS 798.4470 (Acute Dermal Irritation)

# Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

# Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	sensitising	Buehler test	guinea pig	EPA OPPTS 870.2600 (Skin Sensitisation)

# Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	negative	oral: gavage		mouse	not specified
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

# Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not carcinogenic	dermal	2 y daily	mouse	male	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	not carcinogenic	oral: gavage	2 y daily	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

# Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

OECD Guideline 416 (Two- Generation Reproduction
Toxicity Study)
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# STOT-single exposure:

No data available.

# STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOAEL 50 mg/kg	oral: gavage	14 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	NOAEL >= 1 mg/kg	oral: gavage	13 w 5 d/w	rat	OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

# Aspiration hazard:

No data available.

# **SECTION 12: Ecological information**

## **General ecological information:**

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

# 12.1. Toxicity

# **Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	LC50	1,75 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Quartz (SiO2), <1% respirable 14808-60-7	LC50	> 1.000 mg/l		not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dipropylene glycol diglycidyl ether 41638-13-5	LC50	67 mg/l		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	LC50	> 1 - 10 mg/l	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)

## Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	EC50	1,7 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Quartz (SiO2), <1% respirable 14808-60-7	EC50	> 1.000 mg/l		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Dipropylene glycol diglycidyl ether 41638-13-5	EC50	90 mg/l		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	EC50	> 1 - 10 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

# Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight < 700) 25068-38-6	NOEC	0,3 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)

## Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	EC50	> 11 mg/l	72 h	1	OECD Guideline 201 (Alga, Growth Inhibition Test)
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	NOEC	4,2 mg/l	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
Quartz (SiO2), <1% respirable 14808-60-7	EC50	> 1.000 mg/l		*	OECD Guideline 201 (Alga, Growth Inhibition Test)

# Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight≤700) 25068-38-6	IC50	> 100 mg/l	3 h	activated sludge, industrial	other guideline:
Quartz (SiO2), <1% respirable 14808-60-7	EC0	> 1.000 mg/l			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

# 12.2. Persistence and degradability

No data available.

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight < 700) 25068-38-6	not readily biodegradable.	aerobic	5 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Dipropylene glycol diglycidyl ether 41638-13-5			8 - 27 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	readily biodegradable	aerobic	87 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

## 12.3. Bioaccumulative potential

No data available.

# 12.4. Mobility in soil

No data available.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
reaction product: bisphenol-A-	3,242	25 °C	EU Method A.8 (Partition Coefficient)
(epichlorhydrin); epoxy resin			
(number average molecular			
weight≤700)			
25068-38-6			

#### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
reaction product: bisphenol-A-(epichlorhydrin);	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
epoxy resin (number average molecular	Bioaccumulative (vPvB) criteria.
weight < 700)	
25068-38-6	
Quartz (SiO2), <1% respirable	According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not
14808-60-7	be conducted for inorganic substances.
Dipropylene glycol diglycidyl ether	Not fulfilling PBT (persistent/bioaccummulative/toxic) criteria
41638-13-5	
oxirane, mono[(C12-14-alkyloxy)methyl]	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
derivs.	Bioaccumulative (vPvB) criteria.
68609-97-2	

#### 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.

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

### 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.

# Waste code

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

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

# **SECTION 14: Transport information**

## 14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

# 14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

## 14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

## 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 <3 % (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  $\frac{1}{2}$ 

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

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

#### **Further information:**

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.

#### Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your\_company.com).

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 as amended Page 1 of 15

SDS No.: 416626

V002.0 Revision: 16.06.2020

printing date: 13.08.2020

Replaces version from: 04.05.2017

# LOCTITE PC 6315BK

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

#### 1.1. Product identifier

LOCTITE PC 6315BK

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

Intended use:

2-Component epoxy 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@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):

Acute toxicity Category 4

H302 Harmful if swallowed. Route of Exposure: Oral

Skin corrosion Category 1B

H314 Causes severe skin burns and eye damage.

Serious eye damage Category 1

H318 Causes serious eye damage.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Toxic to reproduction Category 2

H361f Suspected of damaging fertility.

Chronic hazards to the aquatic environment Category 2

H411 Toxic to aquatic life with long lasting effects

#### 2.2. Label elements

## Label elements (CLP):



Contains Mixed vegetable oil fatty acids tetraethylenepentamide

Amidoamine Resin 4-tert-butylphenol

m-Phenylenebis(methylamine)

Trimethylhexane-1,6-diamine

Signal word:	Danger
Hazard statement:	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361f Suspected of damaging fertility. H411 Toxic to aquatic life with long lasting effects.
Precautionary statement: Prevention	P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement: Response	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor. 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
Mixed vegetable oil fatty acids tetraethylenepentamide 68991-84-4	273-652-9	25- 50 %	Skin Sens. 1 H317 Skin Corr. 1B
Amidoamine Resin 68443-08-3		25- 50 %	H314 Acute Tox. 4; Oral H302 Skin Corr. 1B
4-tert-butylphenol	202-679-0	1-< 5 %	H314 Aquatic Chronic 1
98-54-4	01-2119489419-21		H410 Repr. 2 H361f Skin Irrit. 2 H315 Eye Dam. 1 H318 ===== EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)
m-Phenylenebis(methylamine) 1477-55-0	216-032-5 01-2119480150-50	1- < 3 %	Acute Tox. 4; Oral H302 Skin Corr. 1B H314 Skin Sens. 1 H317 Acute Tox. 4; Inhalation H332 Aquatic Chronic 3 H412 Eye Dam. 1 H318
Trimethylhexane-1,6-diamine 25620-58-0	247-134-8	1-< 3 %	Acute Tox. 4; Oral H302 Skin Corr. 1A H314 Eye Dam. 1 H318 Skin Sens. 1A H317 Aquatic Chronic 3 H412

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

Causes burns.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

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

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

#### **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 contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

#### 6.2. Environmental precautions

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

#### 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.

Wash spillage site thoroughly with soap and water or detergent solution.

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

Avoid skin and eye contact.

See advice in section 8

#### Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Good industrial hygiene practices should be observed.

### 7.2. Conditions for safe storage, including any incompatibilities

Refer to Technical Data Sheet

# 7.3. Specific end use(s)

2-Component epoxy adhesive

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

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Great Britain

None

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	• •	Short term exposure limit category / Remarks	Regulatory list
m-Phenylenebis(methylamine)		0,1	Time Weighted Average		IR_OEL
1477-55-0			(TWA):		
[M-XYLENE A,A'-DIAMINE (M-					
PHENYLENEBIS(METHYLAMINE))]					

# **Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
			mg/l	ppm	mg/kg	others	
4-tert-butylphenol 98-54-4	aqua (marine water)		0,001 mg/l				
4-tert-butylphenol 98-54-4	aqua (freshwater)		0,01 mg/l				
4-tert-butylphenol 98-54-4	aqua (intermittent releases)		0,048 mg/l				
4-tert-butylphenol 98-54-4	sediment (marine water)				0,027 mg/kg		
4-tert-butylphenol 98-54-4	sediment (freshwater)				0,27 mg/kg		
4-tert-butylphenol 98-54-4	sewage treatment plant (STP)		1,5 mg/l				
4-tert-butylphenol 98-54-4	Soil				0,25 mg/kg		
4-tert-butylphenol 98-54-4	oral				46,67 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	aqua (freshwater)		0,094 mg/l				
m-Phenylenebis(methylamine) 1477-55-0	aqua (marine water)		0,0094 mg/l				
m-Phenylenebis(methylamine) 1477-55-0	aqua (intermittent releases)		0,152 mg/l				
m-Phenylenebis(methylamine) 1477-55-0	sewage treatment plant (STP)		10 mg/l				
m-Phenylenebis(methylamine) 1477-55-0	sediment (freshwater)				0,43 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	sediment (marine water)				0,043 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	Soil				0,045 mg/kg		

#### **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
4-tert-butylphenol 98-54-4	General population	dermal	Long term exposure - systemic effects		0,026 mg/kg	
4-tert-butylphenol 98-54-4	General population	inhalation	Long term exposure - systemic effects		0,09 mg/m3	
4-tert-butylphenol 98-54-4	General population	oral	Long term exposure - systemic effects		0,026 mg/kg	
4-tert-butylphenol 98-54-4	Workers	dermal	Long term exposure - systemic effects		0,071 mg/kg	
4-tert-butylphenol 98-54-4	Workers	inhalation	Long term exposure - systemic effects		0,5 mg/m3	
m-Phenylenebis(methylamine) 1477-55-0	Workers	dermal	Long term exposure - systemic effects		0,33 mg/kg	
m-Phenylenebis(methylamine) 1477-55-0	Workers	inhalation	Long term exposure - systemic effects		1,2 mg/m3	
m-Phenylenebis(methylamine) 1477-55-0	Workers	inhalation	Long term exposure - local effects		0,2 mg/m3	

#### **Biological Exposure Indices:**

None

#### 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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;  $\geq$ = 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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. 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
Amber
Odor Ammonia

Odour threshold No data available / Not applicable

pH No data available / Not applicable
Melting point No data available / Not applicable
Solidification temperature No data available / Not applicable
Initial boiling point No data available / Not applicable

Flash point 110 °C (230 °F)Estimated

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable Vapour pressure No data available / Not applicable Relative vapour density: No data available / Not applicable

Density 8,2 - 8,4 lb/gal

()

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Slightly soluble

(Solvent: Water)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable
No data available / Not applicable
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

Strong oxidizing agents.

## 10.2. Chemical stability

Stable under recommended storage conditions.

## 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

Stable under normal conditions of storage and use.

#### 10.5. Incompatible materials

See section reactivity.

#### 10.6. Hazardous decomposition products

None if used for intended purpose.

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

## Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
4-tert-butylphenol 98-54-4	LD50	4.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
m- Phenylenebis(methylamin e) 1477-55-0	LD50	980 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Trimethylhexane-1,6-diamine 25620-58-0	LD50	910 mg/kg	rat	not specified

# Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
4-tert-butylphenol 98-54-4	LD50	> 16.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
m- Phenylenebis(methylamin e) 1477-55-0	LD50	> 3.100 mg/kg	rat	not specified

#### Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
m- Phenylenebis(methylamin	LC50	1,16 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
e) 1477-55-0						

# Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
4-tert-butylphenol 98-54-4	irritating	5 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Trimethylhexane-1,6-diamine 25620-58-0	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

# Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
4-tert-butylphenol 98-54-4	Category 1 (irreversible effects on the eye)	1 s	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

# Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
4-tert-butylphenol	sensitising			not specified
98-54-4				
m-	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
Phenylenebis(methylamin		assay (LLNA)		Local Lymph Node Assay)
e)				
1477-55-0				
Trimethylhexane-1,6-	sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
diamine		test		
25620-58-0				

# Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study /	Metabolic	Species	Method
CAS-No.		Route of administration	activation / Exposure time		
4-tert-butylphenol 98-54-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
m- Phenylenebis(methylamin e) 1477-55-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
m- Phenylenebis(methylamin e) 1477-55-0	negative	in vitro mammalian chromosome aberration test	with and without		not specified
Trimethylhexane-1,6-diamine 25620-58-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
Trimethylhexane-1,6-diamine 25620-58-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Trimethylhexane-1,6-diamine 25620-58-0	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
4-tert-butylphenol 98-54-4	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Trimethylhexane-1,6-diamine 25620-58-0	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

# Carcinogenicity

No data available.

# Reproductive toxicity:

No data available.

# STOT-single exposure:

No data available.

# STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
4-tert-butylphenol 98-54-4	LOAEL >= 200 mg/kg	oral: gavage	daily	rat	not specified
m- Phenylenebis(methylamin e) 1477-55-0	LOAEL >= 600 mg/kg	oral: gavage	28 days daily	rat	Guidelines for 28-Day Repeat Dose Toxicity Test (Japan)
Trimethylhexane-1,6-diamine 25620-58-0	NOAEL 10 mg/kg	oral: gavage	13 weeks daily	rat	FDA Guideline

# Aspiration hazard:

No data available.

# **SECTION 12: Ecological information**

# General ecological information:

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

# 12.1. Toxicity

## Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
4-tert-butylphenol 98-54-4	LC50	5,14 mg/l	96 h	Pimephales promelas	EU Method C.1 (Acute Toxicity for Fish)
4-tert-butylphenol 98-54-4	NOEC	> 0,01 - 0,1 mg/l	128 d	1 1	OECD Guideline 210 (fish early lite stage toxicity test)
m-Phenylenebis(methylamine) 1477-55-0	LC50	> 100 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Trimethylhexane-1,6-diamine 25620-58-0	LC50	172 mg/l	48 h	Leuciscus idus	DIN 38412-15

## Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
4-tert-butylphenol	EC50	4,8 mg/l	48 h	Daphnia magna	OECD Guideline 202
98-54-4					(Daphnia sp. Acute
					Immobilisation Test)
m-Phenylenebis(methylamine)	EC50	16 mg/l	48 h	Daphnia magna	OECD Guideline 202
1477-55-0					(Daphnia sp. Acute
					Immobilisation Test)
Trimethylhexane-1,6-diamine	EC50	31,5 mg/l	24 h	Daphnia magna	OECD Guideline 202
25620-58-0					(Daphnia sp. Acute
					Immobilisation Test)

# Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
4-tert-butylphenol 98-54-4	NOEC	0,73 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)
m-Phenylenebis(methylamine) 1477-55-0	NOEC	4,7 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)

## Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
4-tert-butylphenol 98-54-4	EC50	11,2 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
4-tert-butylphenol 98-54-4	NOEC	0,32 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
m-Phenylenebis(methylamine) 1477-55-0	EC50	33,3 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
m-Phenylenebis(methylamine) 1477-55-0	NOEC	22,9 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Trimethylhexane-1,6-diamine 25620-58-0	EC10	16,3 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Trimethylhexane-1,6-diamine 25620-58-0	EC50	29,5 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)

# Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
4-tert-butylphenol	EC50	> 10 mg/l	3 h	activated sludge of a	OECD Guideline 209
98-54-4				predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)
Trimethylhexane-1,6-diamine	EC10	72 mg/l	17 h	not specified	DIN 38412, part 8
25620-58-0					(Pseudomonas
					Zellvermehrungshemm-
					Test)

# 12.2. Persistence and degradability

No data available.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
4-tert-butylphenol 98-54-4	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Trimethylhexane-1,6-diamine 25620-58-0	not readily biodegradable.	aerobic	37 %	21 d	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Trimethylhexane-1,6-diamine 25620-58-0	not inherently biodegradable	aerobic	13 %	28 d	EU Method C.9 (Biodegradation: Zahn-Wellens Test)

# 12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
4-tert-butylphenol 98-54-4	20 - 48	56 d		Cyprinus carpio	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)

# 12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	Temperature	Method
4-tert-butylphenol 98-54-4	3	23 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

#### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
4-tert-butylphenol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
98-54-4	Bioaccumulative (vPvB) criteria.
m-Phenylenebis(methylamine)	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1477-55-0	Bioaccumulative (vPvB) criteria.
Trimethylhexane-1,6-diamine	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
25620-58-0	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.

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

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.

#### Waste code

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

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

# **SECTION 14: Transport information**

#### 14.1. UN number

ADR 3066 RID 3066 ADN 3066 IMDG 3066 IATA 3066

## 14.2. UN proper shipping name

ADR PAINT RID PAINT ADN PAINT

IMDG PAINT (butyl phenols)

IATA Paint

## 14.3. Transport hazard class(es)

ADR 8 RID 8 ADN 8 IMDG 8 IATA 8

## 14.4. Packing group

ADR II
RID II
ADN II
IMDG II
IATA II

## 14.5. Environmental hazards

ADR Environmentally Hazardous RID Environmentally Hazardous ADN Environmentally Hazardous

IMDG Marine pollutant IATA not applicable

# 14.6. Special precautions for user

ADR not applicable
Tunnelcode: (E)
RID not applicable
ADN not applicable
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 (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:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

#### **Further information:**

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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.

#### Dear Customer,

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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.