

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

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SDS No.: 373777

V003.3

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Replaces version from: 21.01.2014

# LOCTITE STYCAST U 2500 PTA

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

#### 1.1. Product identifier

LOCTITE STYCAST U 2500 PTA

#### **Contains:**

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

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

Intended use:

2-component-polyurethane adhesive

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

Henkel Ltd

Adhesives

Wood Lane End

HP24RQ 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):

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:



Signal word: Warning

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

**Response** P337+P313 If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards

None if used properly.

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

#### 3.2. Mixtures

#### General chemical description:

Part 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 <= 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	>= 2,5-< 5 %	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Chronic 2 H411
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	500-035-6 500-035-6 01-2119471485-32	1-< 5 %	Eye Irrit. 2 H319

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:

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

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

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

#### 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:

water, carbon dioxide, foam, powder

#### Extinguishing media which must not be used for safety reasons:

High pressure waterjet

#### 5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released. In case of fire, keep containers cool with water spray.

#### 5.3. Advice for firefighters

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 contact with skin and eyes.

Wear protective equipment.

## **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.

## 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:

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

Ensure good ventilation/extraction.

Keep container tightly sealed.

Store at room temperature.

#### 7.3. Specific enduse(s)

2-component-polyurethane adhesive

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

## 8.1. Control parameters

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

Name on list	En vi ronmental Compartment	Value				Remarks
	•	mg/l	ppm	mg/kg	others	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (freshwater)				0,006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (marine water)				0,0006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (intermittent releases)				0,018 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	STP				10 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (freshwater)			0,996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (marine water)			0,0996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	soil			0,196 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	oral				11 mg/kg food	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	aqua (freshwater)				0,085 mg/L	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	aqua (marine water)				0,0085 mg/L	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	aqua (intermittent releases)				1,51 mg/L	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	sediment (freshwater)			0,074 mg/kg		
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	sediment (marine water)			0,0074 mg/kg		
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	soil			0,0162 mg/kg		
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	STP				70 mg/L	

# Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Dermal	Acute/short term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Dermal	Long term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Long term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Acute/short term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 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	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	Workers	Dermal	Long term exposure - systemic effects		13,9 mg/kg bw/day	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	Workers	Inhalation	Long term exposure - systemic effects		98 mg/m3	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	general population	Dermal	Long term exposure - systemic effects		8,3 mg/kg bw/day	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	general population	Inhalation	Long term exposure - systemic effects		29 mg/m3	
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	general population	oral	Long term exposure - systemic effects		8,3 mg/kg bw/day	

# **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

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;  $\geq$ = 0.4 mm thickness)

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

Eve protection:

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

Skin protection:

Wear suitable protective clothing.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance liquid black

Odour threshold No data available / Not applicable

pΗ No data available / Not applicable Initial boiling point No data available / Not applicable

 $> 100 \, ^{\circ}\text{C} \, (> 212 \, ^{\circ}\text{F})$ Flash point

Decomposition temperature No data available / Not applicable Vapour pressure No data available / Not applicable Density

1,5 g/cm3

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

Solubility (qualitative) Insoluble

(Solvent: Water) Solidification temperature No data available / Not applicable

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

## 9.2. Other information

No data available / Not applicable

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## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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Reacts with alcohols and amines.

Reacts with oxidants, acids and lyes

Reaction with some curing agents may produce an exothermic reaction which in large masses could cause runaway polymerization.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

No decomposition if stored and applied as directed.

#### 10.5. Incompatible materials

See section reactivity

#### 10.6. Hazardous decomposition products

Hydrocarbons

carbon oxides.

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### General toxicological information:

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

## Oral toxicity:

May cause irritation to the digestive tract.

#### Inhalative toxicity:

May cause irritation to respiratory system.

#### Skin irritation:

Prolonged or repeated contact may cause skin irritation.

#### Eye irritation:

Causes serious eye irritation.

#### Sensitizing:

May cause an allergic skin reaction.

#### Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Reaction product:	LD50	> 2.000 mg/kg	oral		rat	
bisphenol-A-						
(epichlorhydrin); epoxy						
resin (number average						
molecular weight <= 700)						
25068-38-6						
1,2-Ethanediamine,	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute
polymer with						Oral Toxicity)
methyloxirane						-
25214-63-5						

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Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LD50	23.000 mg/kg	dermal		rabbit	

#### Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Reaction product:	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute
bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6				Dermal Irritation / Corrosion)

#### Serious eye damage/irritation:

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

## Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

#### Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study/ Route of administration	Metabolic activation/	Species	Method
			Exposure time		
Reaction product:	negative	bacterial reverse			OECD Guideline 472 (Genetic
bisphenol-A-		mutation assay (e.g			Toxicology: Escherichia coli,
(epichlorhydrin); epoxy		Ames test)			Reverse Mutation Assay)
resin (number average					
molecular weight <= 700)					
25068-38-6					

# **SECTION 12: Ecological information**

## General ecological information:

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

## 12.1. Toxicity

#### **Ecotoxicity:**

Harmful to aquatic life with long lasting effects.

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LC50	1,750000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
	LC50	1,75 mg/l	Fish	96 h	Oncorhynchus my kiss (reported as Salmo gairdneri)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	2,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	9,4 mg/l	Algae	72 h	Scenedesmus capricornut um	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
1,2-Ethanediamine, polymer with methyloxirane 25214-63-5	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	

## 12.2. Persistence and degradability

# **Persistence and Biodegradability:** The product is not biodegradable.

Hazardous components	Result	Route of	Degradability	Method
CAS-No.		application		
Reaction product: bisphenol- A-(epichlorhydrin); epoxy		aerobic	5 %	OECD Guideline 301 F (Ready Biodegradability: Manometric
resin (number average molecular weight <= 700) 25068-38-6				Respirometry Test)

## 12.3. Bioaccumulative potential / 12.4. Mobility in soil

## Mobility:

Cured adhesives are immobile.

## Bioaccumulative potential:

No data available.

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

Hazardous components	PBT/vPvB
CAS-No.	
Reaction product: bisphenol-A-(epichlorhydrin);	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
epoxy resin (number average molecular weight	Bioaccumulative (vPvB) criteria.
<= 700)	
25068-38-6	
1,2-Ethanediamine, polymer with methyloxirane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
25214-63-5	Bioaccumulative(vPvB) criteria.

## 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

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Product disposal:

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

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.

#### 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. Packaging 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 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) < 3.00 %

## 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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## **SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

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.

#### **Further information:**

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

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