

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

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LOCTITE STYCAST W 67 PTA

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

1.1. Product identifier

LOCTITE STYCAST W 67 PTA

Contains:

3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate CAS-No. 2386-87-0

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use:

Encapsulant

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA Henkelstr. 67 40589 Düsseldorf

Germany

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SDSinfo.Adhesive@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.com.

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

| SECTION 2: | Hazards identification |
|-------------------|------------------------|
|-------------------|------------------------|

2.1. Classification of the substance or mixture

| Classification (CLP): | |
|---|------------|
| Skin sensitizer | Category 1 |
| H317 May cause an allergic skin reaction. | |
| Specific target organ toxicity - repeated exposure | Category 2 |
| H373 May cause damage to organs through prolonged or repeated exposure. | |
| Target organ: nasal cavity (nasal epithelium) | |
| : Liver | |
| 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. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. |
| Precautionary statement: Prevention | P273 Avoid release to the environment. P280 Wear protective gloves. |
| Precautionary statement: Response | 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.

Following substances are present in a concentration >= 0,1% and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration \geq the concentration limit that are assessed to be a PBT, vPvB or ED.

SECTION 3: Composition/information on ingredients

3.1. Substances

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

| Hazardous components CAS-No. EC Number REACH-Reg No. | Concentration | Classification | Specific Conc. Limits, M- factors and ATEs | Add. Information |
|---|---------------|--|---|---------------------|
| 3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0 219-207-4 01-2119846133-44 | 50- 100 % | Skin Sens. 1, H317 STOT RE 2, H373 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:

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.

Prolonged or repeated contact may cause eye irritation.

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 end use(s) Encapsulant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

None

Predicted No-Effect Concentration (PNEC):

| Name on list | Environmental Compartment | nmental Exposure Value rtment period | | | | | Remarks |
|--|------------------------------------|---|----------------|-----|----------------|--------|---------|
| | | | mg/l | ppm | mg/kg | others | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | aqua (freshwater) | | 0,024 mg/l | | | | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | aqua (marine water) | | 0,0024 mg/l | | | | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | aqua (intermittent releases) | | 0,24 mg/l | | | | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | sewage treatment plant (STP) | | 19,5 mg/l | | | | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | sediment (freshwater) | | | | 0,211 mg/kg | | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | sediment (marine water) | | | | 0,021 mg/kg | | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | Soil | | | | 0,028 mg/kg | | |

Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|--|---------------------|----------------------|---|------------------|------------|---------|
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | Workers | inhalation | Long term exposure - systemic effects | | 0,18 mg/m3 | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | Workers | inhalation | Long term exposure - local effects | | 0,18 mg/m3 | |
| 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7- oxabicyclo[4.1.0]heptane-3-carboxylate 2386-87-0 | Workers | dermal | Long term exposure - systemic effects | | 0,05 mg/kg | |

Biological Exposure Indices:

None

8.2. Exposure controls:

Respiratory protection: Ensure adequate ventilation. An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area Filter type: A (EN 14387)

Hand protection: Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): nitrile rubber (NBR; >= 0.4 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): nitrile rubber (NBR; >= 0.4 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy

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

| mormation on basic physical and chemical | properties |
|--|---|
| Physical state | liquid |
| Delivery form | Currently under determination |
| Colour | colourless |
| Odor | mild |
| Melting point | Not applicable, Product is a liquid |
| Solidification temperature | < 20 °C (< 68 °F) |
| Initial boiling point | 363 °C (685.4 °F) |
| Flammability | The product is not flammable. |
| Explosive limits | Not applicable, The product is not flammable. |
| Flash point | 202 °C (395.6 °F) |
| Auto-ignition temperature | Not applicable, The product is not flammable. |
| Decomposition temperature | 375 °C (707 °F); |
| pH | 5,5 |
| (25 °C (77 °F); Conc.: 0,1 % product; | |
| Solvent: Water) | |
| Viscosity (kinematic) | 24 mm2/s |
| (25 °C (77 °F);) | |
| Solubility (qualitative) | Currently under determination |
| Partition coefficient: n-octanol/water | Not resp. Weakly lipophilic (log pow <3, no indication of |
| | bioaccumulation potential) |
| Vapour pressure | < 0,01 hPa |
| Density | 1,17 g/cm3 |
| (25 °C (77 °F)) | |
| Relative vapour density: | 8,7 |
| | (Air = 1) |
| | |

Particle characteristics

Not applicable Product is a liquid

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

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

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

1.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

May cause irritation to the digestive tract.

| Hazardous substances | Value | Value | Species | Method |
|---|-------|-------------|---------|--|
| CAS-No. | type | | | |
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | LD50 | 5.000 mg/kg | rat | OECD Guideline 401 (Acute Oral Toxicity) |

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 |
|---|---------------|---------------|---------|--|
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | LD50 | > 2.000 mg/kg | rat | OECD Guideline 402 (Acute Dermal Toxicity) |

Acute inhalative toxicity:

May cause irritation to respiratory system.

| Hazardous substances CAS-No. | Value type | Value | Test atmosphere | Exposure time | Species | Method |
|---|---------------|-------------|-----------------|------------------|---------|--|
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | LC50 | > 5,19 mg/l | dust/mist | 4 h | | OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method) |

Skin corrosion/irritation:

May cause sensitization by skin contact.

| Hazardous substances CAS-No. | Result | Exposure time | Species | Method |
|---|----------------|------------------|---------|--|
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | not irritating | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

Serious eye damage/irritation:

May cause mild irritation to the eyes.

| Hazardous substances CAS-No. | Result | Exposure time | Species | Method |
|---|----------------|------------------|---------|---|
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | not irritating | 9 d | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

Respiratory or skin sensitization:

May cause an allergic skin reaction.

| Hazardous substances CAS-No. | Result | Test type | Species | Method |
|---|-------------|---------------------------------|------------|---|
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |

Germ cell mutagenicity:

No data available.

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 |
|---|----------------|----------------------|--|---------|--|
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy cyclohexyl carboxylate 2386-87-0 | NOAEL 5 mg/kg | oral: gavage | 91 d daily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Toxicity (Fish):

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

| Hazardous substances CAS-No. | Value | Value | Exposure time | Species | Method |
|-------------------------------------|--------------|---------|---------------|---------------------|---------------------------|
| 3,4-Epoxy cyclohexyl methyl- | type LC50 | 24 mg/l | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, |
| 3,4-epoxy cyclohexyl carboxylate | | | | | Acute Toxicity Test) |
| 2386-87-0 | | | | | |

Toxicity (Daphnia):

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 |
|--|---------------|---------|---------------|---------|--|
| 3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0 | EC50 | 40 mg/l | 48 h | | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

Chronic toxicity to aquatic invertebrates

No data available.

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 | | | | |
| 3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0 | EC50 | > 110 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0 | NOEC | 30 mg/l | 72 h | Pseudokirchneriella subcapitata | 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 | | | | |
| 3,4-Epoxy cyclohexyl methyl- | EC10 | 409 mg/l | 3 h | activated sludge of a | OECD Guideline 209 |
| 3,4-epoxy cyclohexyl | | | | predominantly domestic sewage | (Activated Sludge, |
| carboxylate | | | | | Respiration Inhibition Test) |
| 2386-87-0 | | | | | |

12.2. Persistence and degradability

The product is not biodegradable.

| Hazardous substances CAS-No. | Result | Test type | Degradability | Exposure time | Method |
|--|----------------------------|-----------|---------------|------------------|---|
| 3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0 | not readily biodegradable. | aerobic | 71 % | 28 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Cured adhesives are immobile.

| Hazardous substances CAS-No. | LogPow | Temperature | Method |
|--|--------|-------------|---|
| 3,4-Epoxy cyclohexyl methyl- 3,4-epoxy cyclohexyl carboxylate 2386-87-0 | 1,34 | 20 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |

12.5. Results of PBT and vPvB assessment

| Hazardous substances | PBT / vPvB |
|---------------------------------------|--|
| CAS-No. | |
| 3,4-Epoxy cyclohexyl methyl-3,4-epoxy | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| cyclohexyl carboxylate | Bioaccumulative (vPvB) criteria. |
| 2386-87-0 | |

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: 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 or ID 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. Transport hazard class(es) 14.3. 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. Maritime transport in bulk according to IMO instruments not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixtureOzone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):Not applicablePrior Informed Consent (PIC) (Regulation (EU) No 649/2012):Not applicablePersistent organic pollutants (Regulation (EU) 2019/1021):Not applicableVOC content< 3 %</td>

15.2. Chemical safety assessment

(2010/75/EC)

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK:

WGK 1: slightly hazardous to water (Ordinance on facilities for handling substances that are hazardous to water (AwSV)) Classification according to AwSV, Annex 1 (5.2)

Storage class according to TRGS 510: 10

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:

H317 May cause an allergic skin reaction.

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

H412 Harmful to aquatic life with long lasting effects.

| ED: | Substance identified as having endocrine disrupting properties |
|-------------|--|
| EU OEL: | Substance with a Union workplace exposure limit |
| EU EXPLD 1: | Substance listed in Annex I, Reg (EC) No. 2019/1148 |
| EU EXPLD 2 | Substance listed in Annex II, Reg (EC) No. 2019/1148 |
| SVHC: | Substance of very high concern (REACH Candidate List) |
| PBT: | Substance fulfilling persistent, bioaccumulative and toxic criteria |
| PBT/vPvB: | Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very |
| | bioaccumulative criteria |
| vPvB: | Substance fulfilling very persistent and very bioaccumulative criteria |

Further information:

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