

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

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SDS No.: 164825

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Replaces version from: 13.02.2015

LOCTITE SI 5399 RD known as 5399 RED 310ML GB

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

1.1. Product identifier

LOCTITE SI 5399 RD known as 5399 RED 310ML GB

Contains:

Methyltriacetoxysilane Triacetoxyethylsilane

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

Intended use: Silicone sealant

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye damage Category 1

H318 Causes serious eye damage.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Danger

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Hazard statement:

H315 Causes skin irritation. H318 Causes serious eye damage.

Precautionary statement:

Prevention

P280 Wear eye protection/face protection.

Precautionary statement:

Response

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Acetoxy curing silicone

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Triacetoxyethylsilane 17689-77-9	241-677-4 01-2119881778-15	1-< 3 %	Acute Tox. 4; Oral H302 Skin Corr. 1B H314
Methyltriacetoxysilane 4253-34-3	224-221-9 01-2119962266-32	1-< 3 %	Acute Tox. 4; Oral H302 Skin Corr. 1B H314

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.

Acetic acid produced on exposure to moisture.

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

SKIN: Redness, inflammation.

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:

Carbon dioxide, foam, powder

Fine water spray

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.

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.

Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Scrape up as much material as possible.

Ensure adequate ventilation.

Store in a partly filled, closed container until disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Vapours should be extracted to avoid inhalation.

Avoid skin and eye contact.

See advice in section 8

Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.

Never allow product to get in contact with water during storage

7.3. Specific end use(s)

Silicone sealant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

None

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Triacetoxyethylsilane 17689-77-9	aqua (freshwater)					>= 0,2 mg/L	
Triacetoxyethylsilane 17689-77-9	aqua (marine water)					>= 0,02 mg/L	
Triacetoxyethylsilane 17689-77-9	aqua (intermittent releases)					1,7 mg/L	
Triacetoxyethylsilane 17689-77-9	sediment (freshwater)				>= 0,16 mg/kg		
Triacetoxyethylsilane 17689-77-9	sediment (marine water)				>= 0,016 mg/kg		
Triacetoxyethylsilane 17689-77-9	soil				>= 0,031 mg/kg		
Triacetoxyethylsilane 17689-77-9	STP					> 1 mg/L	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Triacetoxyethylsilane 17689-77-9	Workers	Inhalation	Long term exposure - local effects		32,5 mg/m3	
Triacetoxyethylsilane 17689-77-9	Workers	Inhalation	Acute/short term exposure - local effects		32,5 mg/m3	
Triacetoxyethylsilane 17689-77-9	general population	Inhalation	Acute/short term exposure - local effects		65 mg/m3	
Triacetoxyethylsilane 17689-77-9	general population	Inhalation	Long term exposure - local effects		10,8 mg/m3	

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

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.

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 paste

red

Odor Acetic acid

Odour threshold No data available / Not applicable

pH Not applicable

Initial boiling point No data available / Not applicable

Flash point $> 150 \,^{\circ}\text{C} (> 302 \,^{\circ}\text{F})$ Decomposition temperature $> 200 \,^{\circ}\text{C} (> 392 \,^{\circ}\text{F})$

Vapour pressure No data available / Not applicable

Density 1,050 g/cm3

O

Bulk density

No data available / Not applicable
Viscosity

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable

Solubility (qualitative)

(Solvent: Water)

Solubility (qualitative) Insoluble

(Solvent: Acetone)

Solidification temperature
Melting point
No data available / Not applicable
No data available / Not applicable
Flammability
No data available / Not applicable
Auto-ignition temperature
No data available / Not applicable
Explosive limits
No data available / Not applicable
Partition coefficient: n-octanol/water
No data available / Not applicable

Evaporation rate Not available. Vapor density Not available.

Oxidising properties No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

Insoluble

10.1. Reactivity

Strong oxidizing agents.

Polymerises in presence of water.

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 used according to specifications.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Acetic acid is liberated slowly upon contact with moisture.

At higher temperatures (>150C) may release formaldehyde (traces).

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:

This material is considered to have low toxicity if swallowed.

Inhalative toxicity:

Acetic acid is liberated slowly upon contact with moisture.

Inhalation of vapors in high concentration may cause irritation of respiratory system

Skin irritation:

Causes skin irritation.

Eve irritation:

Causes serious eye damage.

Acetic acid released during polymerisation of acetoxy curing RTV silicones is irritating to the eyes

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Triacetoxyethylsilane 17689-77-9	LD50	1.460 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Methyltriacetoxysilane 4253-34-3	LD50	1.600 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

SECTION 12: Ecological information

General ecological information:

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

In the cured state contribution of this product to Environmental Hazards is insignificant in comparison to articles in which it is used.

Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered. 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:

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

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Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity	time		
			Study			
Triacetoxyethylsilane	LC50	251 mg/l	Fish	96 h	Brachydanio rerio (new name:	OECD Guideline
17689-77-9					Danio rerio)	203 (Fish, Acute
						Toxicity Test)
Triacetoxyethylsilane	EC50	62 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
17689-77-9						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Triacetoxyethylsilane	IC50	73 mg/l	Algae	72 h	Scenedesmus subspicatus (new	OECD Guideline
17689-77-9			_		name: Desmodesmus	201 (Alga, Growth
					subspicatus)	Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

	Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Ī	Triacetoxyethylsilane			74 %	OECD Guideline 301 A (old
	17689-77-9				version) (Ready Biodegradabiltiy:
					Modified AFNOR Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Triacetoxyethylsilane	0,74					
17689-77-9						

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Triacetoxyethylsilane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
17689-77-9	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

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

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.

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SECTION 14: Transport information

14.1. **UN** number

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.2. UN proper shipping name

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.3. Transport hazard class(es)

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.4. Packaging group

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.5. **Environmental hazards**

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

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 (2010/75/EC) < 5 %

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.

Further information:

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

Label elements (DPD):

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

Additional labeling:

Safety data sheet available for professional user on request.

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.