

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

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SDS No.: 463031

V002.0 Revision: 20.02.2017

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Replaces version from: 10.04.2015

LOCTITE SI 5990

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

1.1. Product identifier

LOCTITE SI 5990

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

Intended use: Silicone sealant

${f 1.3.}$ 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

$\textbf{Classification} \ (\textbf{CLP}) \textbf{:}$

Aerosols Category 3
H229 Pressurised container: May burst if heated.

2.2. Label elements

Label elements (CLP):

Signal word:	Warning
Hazard statement:	H229 Pressurised container: May burst if heated.
Precautionary statement:	P251 Do not pierce or burn, even after use. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

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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:

Silicone sealant

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	01-2119982962-22	1- < 10 %	STOT RE 2 H373
Dimethyltindineodecanoate 68928-76-7	273-028-6	0,1-< 0,25 %	Acute Tox. 4; Oral H302 Repr. 2 H361d STOT RE 1 H372 Aquatic Chronic 4 H413

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.

Consideration should be given to the possible effects of a faulty UV source (Stray radiation, ozone).

Skin contact:

Rinse with running water and soap.

Seek medical advice.

Eye contact:

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

Ingestion:

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

Seek medical advice.

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

Prolonged or repeated contact may cause skin irritation.

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

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Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Keep unnecessary personnel away.

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

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.

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:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry place.

Keep container tightly sealed.

Refer to Technical Data Sheet

7.3. Specific end use(s)

Silicone sealant

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,1	Time Weighted Average (TWA):		EH40 WEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,2	Short Term Exposure Limit (STEL):		EH40 WEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³		Short term exposure limit category / Remarks	Regulatory list
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN ORGANIC COMPOUNDS, (AS SN)]		0,2	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Dimethylbis[(1-oxoneodecyl)oxy]stannane 68928-76-7 [TIN ORGANIC COMPOUNDS, (AS SN)]		0,1	Time Weighted Average (TWA):	Indicative OELV	IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental		Value			Remarks	
	Compartment	period	mg/l	ppm	mg/kg	others	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	aqua (freshwater)		J			0,23978 mg/L	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	aqua (marine water)					0,02398 mg/L	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	sediment (freshwater)				2047,053 mg/kg		
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	sediment (marine water)				204,705 mg/kg		
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	soil				240,95 mg/kg		
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	sewage treatment plant (STP)					2,638 mg/L	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	oral					2,638 mg/kg food	

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Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	Workers	Inhalation	Long term exposure - systemic effects		0,41857 mg/m3	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	Workers	dermal	Long term exposure - systemic effects		0,05935 mg/kg bw/day	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	General population	Inhalation	Long term exposure - systemic effects		0,10322 mg/m3	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	General population	oral	Long term exposure - systemic effects		0,02968 mg/kg bw/day	
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	General population	dermal	Long term exposure - systemic effects		0,02968 mg/kg bw/day	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

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:

Eye protection should be used where there is any 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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance pressurized can

paste

copper Odor None

Odour threshold No data available / Not applicable

pH No data available / Not applicable

Initial boiling point $> 200 \,^{\circ}\text{C} (> 392 \,^{\circ}\text{F})$ Flash point $> 100 \,^{\circ}\text{C} (> 212 \,^{\circ}\text{F})$

Decomposition temperature No data available / Not applicable

Vapour pressure < 700 mbar

(50 °C (122 °F))

Density 1,0200 - 1,0600 g/cm3

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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) Insoluble

(20 °C (68 °F); Solvent: Water)

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

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

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 (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

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Oral toxicity:

May cause irritation to the digestive tract.

Inhalative toxicity:

Due to the low volatility of the product there are no hazards associated with inhalation under normal conditions of use

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Prolonged or repeated contact may cause eye irritation.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
2-Propanone, O,O',O"-	LD50	2.500 mg/kg	oral		rat	OECD Guideline 423 (Acute
(ethylsilylidyne)trioxime						Oral toxicity)
58190-57-1						
Dimethyltindineodecanoat	LD50	894 mg/kg	oral		rat	OECD Guideline 401 (Acute
e						Oral Toxicity)
68928-76-7						

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Dimethyltindineodecanoat	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute
e						Dermal Toxicity)
68928-76-7						

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime 58190-57-1	NOAEL=11,87 mg/kg			rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information

General ecological information:

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 (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Ecotoxicity:

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity	Exposure time	Species	Method
3332 3.00	-3 F		Study			
2-Propanone, O,O',O"- (ethylsilylidyne)trioxime	EC50	315,36 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth
58190-57-1	NOEC	62,34 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Inhibition Test) OECD Guideline 201 (Alga, Growth Inhibition Test)

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12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Dimethyltindineodecanoate 68928-76-7		aerobic	0 - 60 %	OECD 301 A - F

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dimethyltindineodecanoate		8.650				QSAR (Quantitative
68928-76-7						Structure Activity
						Relationship)
Dimethyltindineodecanoate	5,5					QSAR (Quantitative
68928-76-7						Structure Activity
						Relationship)

12.5. Results of PBT and vPvB assessment

No data available.

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.

Collection and delivery to recycling enterprise or other registered elimination institution.

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.

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SECTION 14: Transport information

14.1. UN number

ADR	1950
RID	1950
ADN	1950
IMDG	1950
IATA	1950

14.2. UN proper shipping name

ADR	AEROSOLS
RID	AEROSOLS
ADN	AEROSOLS
IMDG	AEROSOLS

IATA Aerosols, non-flammable

14.3. Transport hazard class(es)

ADR	2.2
RID	2.2
ADN	2.2
IMDG	2.2
IATA	2.2

14.4. Packing group

ADR RID ADN IMDG IATA

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
	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)

< 3 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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SECTION 16: Other information

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

H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

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

H413 May cause long lasting harmful effects to aquatic life.

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.