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

SDS No. : 444476
V002.2

LOCTITE SI 5990 known as Loctite SI 5990 40 ML EDFN

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

1.1. Product identifier
LOCTITE SI 5990 known as Loctite SI 5990 40 ML EDFN

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
Silicone 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):
The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

Supplemental information EUH210 Safety data sheet available on request.

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

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	5- < 10 %	STOT RE 2 H373
Dimethyltindineodecanoate 68928-76-7	273-028-6	0,1- < 1 %	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.

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
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

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
Keep unnecessary personnel away.
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.
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
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 adhesive

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
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
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	Value type	Short term exposure limit category / Remarks	Regulatory list
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		IR_OEL
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 Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
2-Propanone, O,O',O"-(ethylsilylidyne)trioxime 58190-57-1	aqua (freshwater)		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/l				

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	
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	
2-Propanone, O,O',O"-(ethylsilylidyne)trioxime 58190-57-1	General population	dermal	Long term exposure - systemic effects		0,02968 mg/kg	

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; >= 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 liquid copper
Odor	characteristic
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	> 100 °C (> 212 °F)
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	No data available / Not applicable
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Insoluble
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	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
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

10.5. Incompatible materials
See section reactivity.

10.6. Hazardous decomposition products
carbon oxides.

SECTION 11: Toxicological information

General toxicological information:
Prolonged or repeated contact may cause eye irritation.
Prolonged or repeated contact may cause skin irritation.

11.1. Information on toxicological effects

Acute oral toxicity:

May cause irritation to the digestive tract.

Hazardous substances CAS-No.	Value type	Value	Species	Method
2-Propanone, O,O',O"-(ethylsilylidyne)trioxime 58190-57-1	LD50	2.500 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Dimethyltindineodecanoate 68928-76-7	LD50	894 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
Dimethyltindineodecanoate 68928-76-7	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

No data available.

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation:

No data available.

Respiratory or skin sensitization:

No data available.

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
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)

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 CAS-No.	Value type	Value	Exposure time	Species	Method
Dimethyltindineodecanoate 68928-76-7	LC50		96 h	not specified	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 CAS-No.	Value type	Value	Exposure time	Species	Method
Dimethyltindineodecanoate 68928-76-7	EC50		48 h	Daphnia magna	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 CAS-No.	Value type	Value	Exposure time	Species	Method
2-Propanone, O,O',O"-(ethylsilylidyne)trioxime 58190-57-1	EC50	315,36 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Propanone, O,O',O"-(ethylsilylidyne)trioxime 58190-57-1	NOEC	62,34 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dimethyltindineodecanoate 68928-76-7	EC50		72 h	not specified	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

No data available.

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Dimethyltindineodecanoate 68928-76-7		aerobic	0 - 60 %		OECD 301 A - F

12.3. Bioaccumulative potential

No data available.

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

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Dimethyltindineodecanoate 68928-76-7	5,5		QSAR (Quantitative Structure Activity Relationship)

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or vPvB.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:
Collection and delivery to recycling enterprise or other registered elimination institution.
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. 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 (2010/75/EC) < 3 %

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.
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.