

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

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LOCTITE SI 5699 GY known as 5699 GREY 300ML DE FR GB NL

SDS No. : 152852 V004.0 Revision: 11.11.2015 printing date: 01.08.2016 Replaces version from: 18.03.2015

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

1.1. Product identifier

LOCTITE SI 5699 GY known as 5699 GREY 300ML DE FR GB NL

Contains:

Silicon compounds Butanone oxime Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime

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):	
Serious eye damage	Category 1
H318 Causes serious eye damage.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Carcinogenicity	Category 2
H351 Suspected of causing cancer.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H351 Suspected of causing cancer.
Precautionary statement: Prevention	P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement: Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

Methyl ethyl ketoxime is formed during cure.

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:

EC Number REACH-Reg No.	content	Classification
	5- < 10 %	Skin Sens. 1
		H317
		Eye Dam. 1
		H318
		STOT RE 2
		H373
	1 - < 5%	Carc. 2
01-2119539477-28		H351
		Eye Dam. 1
		H318
		Skin Sens. 1
		H317
		Acute Tox. 4; Dermal
		H312
		Flam. Liq. 3
251,002,0	0.1 . 1.0/	H226
	0,1-<1%	Flam. Sol. 1 H228
01-2119982966-14		Skin Sens. 1
		H317 Eye Irrit. 2
		H319
		STOT RE 2
		H373
		REACH-Reg No. 5- < 10 % 202-496-6 1- < 5 %

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.

Methyl ethyl ketoxime is formed during cure.

SECTION 4: 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: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Seek medical advice.

Ingestion: Do not induce vomiting. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed EYE: Irritation, conjunctivitis.

SKIN: Rash, Urticaria.

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

Extinguishing media which must not be used for safety reasons: None known

5.2. Special hazards arising from the substance or mixture

Do not expose to direct heat.

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.

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.

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

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

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ррт	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Butanone oxime 96-29-7 [METHYL ETHYL KETOXIME]	3	10	Time Weighted Average (TWA):		IR_OEL
Butanone oxime 96-29-7 [METHYL ETHYL KETOXIME]	10	33	Short Term Exposure Limit (STEL):		IR_OEL

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: Wear protective glasses. 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:

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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	paste				
	grey				
Odor	odorless				
Odour threshold	No data available / Not applicable				
pH	Not applicable				
pH	Not applicable				
Initial boiling point	> 200 °C (> 392 °F)				
Flash point	> 93 °C (> 199.4 °F)				
Decomposition temperature	No data available / Not applicable				
Vapour pressure	< 5 mm hg				
(50 °C (122 °F))					
Vapour pressure	< 700 mbar				
(50 °C (122 °F))					
Density	1,5 g/cm3				
(20 °C (68 °F))					
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)	Polymerises in presence of water.				
Solidification temperature	No data available / Not applicable				
Melting point	Not available.				
Flammability	No data available / Not applicable				
Auto-ignition temperature	No data available / Not applicable				
Explosive limits	No data available / Not applicable				
Enprositie minute	1.6 and available / 1.60 appliedble				

Partition coefficient: n-octanol/water Evaporation rate Vapor density Oxidising properties No data available / Not applicable No data available / Not applicable No data available / Not applicable No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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 Stable

Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

Methyl ethyl ketoxime formed during cure. Methanol is liberated slowly upon exposure to moisture.

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. Ingestion of large quantities may cause liver or kidney damage.

Inhalative toxicity:

Methylethyl ketoxime released during polymerisation of oxime curing RTV silicones is irritating to the respiratory system

Skin irritation:

Methylethyl ketoxime released during polymerisation of oxime curing silicones. It is harmful in contact with skin and is a skin sensitizer.

Eye irritation:

Causes serious eye damage.

Sensitizing:

May cause an allergic skin reaction.

Carcinogenicity:

Suspected of causing cancer

Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Silicon compounds	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Butanone oxime 96-29-7	LD50	2.326 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Butan-2-one O,O',O'',O'''- silanetetrayltetraoxime 34206-40-1	LD50	2.463 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time	_	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Silicon compounds	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)
Butanone oxime 96-29-7	Acute toxicity estimate (ATE)	1.100 mg/kg	dermal			Expert judgement
Butanone oxime 96-29-7	LD50	> 1.000 mg/kg			rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Butan-2-one O,O',O'',O'''- silanetetrayltetraoxime 34206-40-1	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Butanone oxime 96-29-7	Category 1 (irreversible effects on the eye)		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Butan-2-one O,O',O",O"- silanetetrayltetraoxime 34206-40-1	irritating	1 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Silicon compounds	sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Butanone oxime 96-29-7	sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Butan-2-one O,O',O'',O'''- silanetetrayltetraoxime 34206-40-1	sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Silicon compounds	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Silicon compounds	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Silicon compounds	NOAEL=10 mg/kg	oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Butan-2-one O,O',O'',O'''- silanetetrayltetraoxime 34206-40-1	NOAEL=25 mg/kg	oral: drinking water	90 ddaily: ad libitum	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

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.

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

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

12.1. Toxicity

Ecotoxicity:

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

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity Study	time		
Butanone oxime 96-29-7	LC50	320 - 1.000 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
	NOEC	50 mg/l	Fish	14 d	Oryzias latipes	OECD Guideline 204 (Fish,
						Prolonged Toxicity Test: 14-day Study)
Butanone oxime	EC50	> 500 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2
96-29-7						(Acute Toxicity for Daphnia)
Butanone oxime	EC50	11,8 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline
96-29-7						201 (Alga, Growth Inhibition Test)
	NOEC	2,56 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline
						201 (Alga, Growth Inhibition Test)
Butanone oxime	EC10	177 mg/l	Bacteria	17 h		DIN 38412, part 8
96-29-7						(Pseudomonas
						Zellvermehrungshe
Butanone oxime	NOEC	> 100 mg/l	chronic	21 d	Daphnia magna	mm-Test) OECD 211
96-29-7	NOLC	> 100 mg/1	Daphnia	21 u	Daphina magna	(Daphnia magna,
70-27-1			Dapinna			Reproduction Test)
Butan-2-one O,O',O",O"'-	LC50	843 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline
silanetetrayltetraoxime		0			1 1	203 (Fish, Acute
34206-40-1						Toxicity Test)
	NOEC	50 mg/l	Fish	14 d	Oryzias latipes	OECD Guideline
						204 (Fish,
						Prolonged Toxicity
Butan-2-one O,O',O",O"'-	EC50	201 mg/l	Daphnia	48 h	Daphnia magna	Test: 14-day Study) OECD Guideline
silanetetrayltetraoxime	EC30	201 mg/1	Dapinna	40 11	Dapinna magna	202 (Daphnia sp.
34206-40-1						Acute
51200 10 1						Immobilisation
						Test)
Butan-2-one O,O',O",O"'-	EC50	16 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
silanetetrayltetraoxime					(new name: Pseudokirchnerella	
34206-40-1					subcapitata)	Inhibition Test)
	NOEC	2,6 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
					(new name: Pseudokirchnerella	
	NOEG	. 100 /1	1 .	21.1	subcapitata)	Inhibition Test)
Butan-2-one O,O',O",O"- silanetetrayltetraoxime	NOEC	> 100 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna,
34206-40-1			Dapinna			(Daphnia magna, Reproduction Test)
5-200-40-1	1 1		1	1	I	reproduction rest)

12.2. Persistence and degradability

Persistence and Biodegradability: The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Butanone oxime 96-29-7	inherently biodegradable	aerobic	70 %	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Butan-2-one O,O',O",O"- silanetetrayltetraoxime 34206-40-1	Not readily biodegradable.	aerobic	28 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

V004.0

Cured adhesives are immobile.

Bioaccumulative potential:

Does not bioaccumulate.

Hazardous components	LogKow Bioconcentration	Exposure	Species	Temperature	Method
CAS-No.	factor (BCF)	time		-	

Butanone oxime 96-29-7		0,5 - 0,6	42 d	Oryzias latipes	25 °C	OECD Guideline 305 C (Bioaccumulation: Test for
Butanone oxime 96-29-7	0,65				25 °C	the Degree of Bioconcentration in Fish) OECD Guideline 107 (Partition Coefficient (n-
						octanol / water), Shake Flask Method)

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. Contribution of this product to waste is very insignificant in comparison to article in which it is used

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

SECTION 14: Transport information
UN number
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
UN proper shipping name
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Transport hazard class(es)
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Packing group
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Environmental hazards
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Special precautions for user
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Transport in bulk according to Annex II of Marpol and the IBC Code
not applicable

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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:

H226 Flammable liquid and vapor.

H228 Flammable solid.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

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

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):

Xn - Harmful

Risk phrases:

R36 Irritating to eyes. R40 Limited evidence of a carcinogenic effect. R43 May cause sensitisation by skin contact.

Safety phrases:

S22 Do not breathe dust.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37 Wear suitable protective clothing and gloves.

S60 This material and its container must be disposed of as hazardous waste.

Contains:

Silicon compounds, Butanone oxime

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.