



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

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LOCTITE SI 5910 BK known as 5910 LOW VISCOSITY BLACK
RTV S

SDS No. : 152856
V005.0

Revision: 19.11.2015

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

1.1. Product identifier

LOCTITE SI 5910 BK known as 5910 LOW VISCOSITY BLACK RTV S

Contains:

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

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

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

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:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Silicon compounds		1- < 5 %	Skin Sens. 1 H317 Eye Dam. 1 H318 STOT RE 2 H373
Butanone oxime 96-29-7	202-496-6 01-2119539477-28	1- < 3 %	Carc. 2 H351 Eye Dam. 1 H318 Skin Sens. 1 H317 Acute Tox. 4; Dermal H312 Flam. Liq. 3 H226
Butan-2-one O,O',O'',O'''- silanetetrayltetraoxime 34206-40-1	251-882-0 01-2119982966-14	0,1- < 1 %	Flam. Sol. 1 H228 Skin Sens. 1 H317 Eye Irrit. 2 H319 STOT RE 2 H373

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

SKIN: Rash, Urticaria.

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

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)

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
Carbon black 1333-86-4 [CARBON BLACK]		7	Short Term Exposure Limit (STEL):		EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		3,5	Time Weighted Average (TWA):		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
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
Stearic acid 57-11-4 [STEARATES (EXCEPT LEAD STEARATE)]		10	Time Weighted Average (TWA):		IR_OEL
Carbon black 1333-86-4 [CARBON BLACK]		3,5	Time Weighted Average (TWA):		IR_OEL
Carbon black 1333-86-4 [CARBON BLACK]		7	Short Term Exposure Limit (STEL):		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; \geq 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; \geq 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:

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	paste black
Odor	mild
Odour threshold	No data available / Not applicable
pH	Not applicable
Initial boiling point	> 200 °C (> 392 °F)
Flash point	> 93,30 °C (> 199,94 °F)Not available.
Decomposition temperature	No data available / Not applicable
Vapour pressure (20 °C (68 °F))	< 5 mm hg
Density (ρ)	1,31 g/cm ³
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.
Solubility (qualitative) (Solvent: Acetone)	Partially soluble

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

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

See section reactivity

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 CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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 CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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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) Expert judgement
Butanone oxime 96-29-7	Acute toxicity estimate (ATE)	1.100 mg/kg	dermal			
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 maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Butanone oxime 96-29-7	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime 34206-40-1	sensitising	Guinea pig maximisation 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:**

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.

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.

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

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:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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Butanone oxime 96-29-7		0,5 - 0,6	42 d	Oryzias latipes	25 °C	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish) OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Butanone oxime 96-29-7	0,65				25 °C	

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

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 < 5,00 %
(2010/75/EC)

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:

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitisation by skin contact.

Safety phrases:

S23 Do not breathe vapour.

S24 Avoid contact with skin.

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

S28 After contact with skin, wash immediately with plenty of water and soap.

S36/37 Wear suitable protective clothing and gloves.

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.