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

SDS No. : 243882
V004.2

Loctite 5610 400ml- Kit comp. B

Revision: 02.02.2016
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Loctite 5610 400ml- Kit comp. B

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 Ireland
Operations and Research Limited
Tallaght Business Park
Dublin 24

Ireland

Phone: +353 (14046444)
Fax-no.: +353 (14519926)

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 irritation — Category 2
H319 Causes serious eye irritation.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:

Signal word: Warning

Hazard statement: H319 Causes serious eye irritation.

Precautionary statement: Response P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:
Part B of a two part adhesive

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Trimethoxy(methyl)silane 1185-55-3	214-685-0 01-2119517436-40	1- < 5 %	Flam. Liq. 2 H225
3-(Trimethoxysilyl)propylamine 13822-56-5	237-511-5 01-2119510159-45	1- < 3 %	Skin Irrit. 2; Dermal H315 Eye Dam. 1 H318
Hexamethyldisilizane 999-97-3	213-668-5 01-2119438176-38	0,1- < 1 %	Flam. Liq. 2 H225 Acute Tox. 4; Oral H302 Acute Tox. 3; Dermal H311 Acute Tox. 4; Inhalation H332 Aquatic Chronic 3 H412

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 if necessary.

Ingestion:
Do not induce vomiting.
Seek medical advice.

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

Prolonged or repeated contact may cause skin 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:
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 case of fire, keep containers cool with water spray.
carbon oxides.
Silica fume
Formaldehyde

5.3. Advice for firefighters
Wear self-contained breathing apparatus.

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.

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 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
Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Methanol 67-56-1 [METHANOL]	250	333	Short Term Exposure Limit (STEL):		EH40 WEL
Methanol 67-56-1 [METHANOL]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Methanol 67-56-1 [METHANOL]	200	266	Time Weighted Average (TWA):		EH40 WEL
Methanol 67-56-1 [METHANOL]	200	260	Time Weighted Average (TWA):	Indicative	ECTLV

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m^3	Value type	Short term exposure limit category / Remarks	Regulatory list
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Limestone 1317-65-3 [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
Methanol 67-56-1 [METHANOL]	200	260	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Methanol 67-56-1 [METHANOL]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Methanol 67-56-1 [METHANOL]	200	260	Time Weighted Average (TWA):	Indicative	ECTLV

Biological Exposure Indices:
None

8.2. Exposure controls:

Respiratory protection:
Use only in well-ventilated areas.
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:
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:

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 paste white
Odor	characteristic
Odour threshold	No data available / Not applicable
pH	Not applicable
Initial boiling point	Not determined
Flash point	Not determined
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density ()	1,7 g/cm3
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)	Insoluble
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	Heavier than air
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.
Acids.
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 under normal conditions of storage and use.

10.5. Incompatible materials
See section reactivity

10.6. Hazardous decomposition products
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 (EC) No 1272/2008. 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.

Skin irritation:
Prolonged or repeated contact may cause skin irritation.

Eye irritation:
Causes serious eye irritation.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Trimethoxy(methyl)silane 1185-55-3	LD50	11.685 mg/kg	oral		rat	
3-(Trimethoxysilyl)propylamine 13822-56-5	LD50	> 2.000 mg/kg	oral		rat	
Hexamethyldisilizane 999-97-3	LD50	851 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
Trimethoxy(methyl)silane 1185-55-3	LC50	> 42,1 mg/l	Vapor.	6 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Hexamethyldisilizane 999-97-3	Acute toxicity estimate (ATE)	10,1 mg/l	vapour			Expert judgement

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Trimethoxy(methyl)silane 1185-55-3	LD50	> 9.500 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
3-(Trimethoxysilyl)propylamine 13822-56-5	LD50	> 2.000 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Trimethoxy(methyl)silane 1185-55-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
3-(Trimethoxysilyl)propylamine 13822-56-5	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Trimethoxy(methyl)silane 1185-55-3	not irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
3-(Trimethoxysilyl)propylamine 13822-56-5	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Trimethoxy(methyl)silane 1185-55-3	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
3-(Trimethoxysilyl)propylamine 13822-56-5	not 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
Trimethoxy(methyl)silane 1185-55-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hexamethyldisilizane 999-97-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

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 (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 Study	Exposure time	Species	Method
Trimethoxy(methyl)silane 1185-55-3	LC50	> 746 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Trimethoxy(methyl)silane 1185-55-3	EC50	> 816 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Trimethoxy(methyl)silane 1185-55-3	EC50	> 913 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	> 913 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
3-(Trimethoxysilyl)propylamine 13822-56-5	LC50	1.264 mg/l	Fish		Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
3-(Trimethoxysilyl)propylamine 13822-56-5	EC50	302 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3-(Trimethoxysilyl)propylamine 13822-56-5	EC 50	3.400 mg/l	Bacteria			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Hexamethyldisilizane 999-97-3	LC50	88 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hexamethyldisilizane 999-97-3	EC50	80 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hexamethyldisilizane 999-97-3	NOEC	2,7 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	19 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth 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

Trimethoxy(methyl)silane 1185-55-3		aerobic	54 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
3-(Trimethoxysilyl)propylamine 13822-56-5		aerobic	67 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Hexamethyldisilizane 999-97-3		no data	15,3 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:
Cured adhesives are immobile.

Bioaccumulative potential:
No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	**PBT/vPvB**
Trimethoxy(methyl)silane 1185-55-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
3-(Trimethoxysilyl)propylamine 13822-56-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hexamethyldisilizane 999-97-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very 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

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) < 5,00 %

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:

H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

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.