



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

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NUVA-SIL(R) 5145

sds no. : 152782
V003.1

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

1.1. Product identifier

NUVA-SIL(R) 5145

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 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 (DPD):

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

2.2. Label elements

Label elements (DPD):

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

Additional labeling:

Safety data sheet available for professional user on request.

2.3. Other hazards

Methoxy curing silicones release methanol in contact with moisture. Methanol is toxic if swallowed and harmful by inhalation. It is highly flammable.

This product contains trace quantities of Hexamethyldisilazane. Hexamethyldisilazane reacts instantly with residual moisture in the package, and produces correspondingly small amounts of ammonia.

SECTION 3: Composition/information on ingredients**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
Silane, dimethoxydimethyl- 1112-39-6	214-189-4	>= 1- < 5 %	Flammable liquids 2 H225 Acute toxicity 4; Oral H302 Acute toxicity 4; Dermal H312 Skin irritation 2; Dermal H315 Serious eye irritation 2 H319 Acute toxicity 4; Inhalation H332 Specific target organ toxicity - single exposure 3; Inhalation H335
Tetraethyl silicate 78-10-4	201-083-8 01-2119496195-28	>= 1- < 5 %	Flammable liquids 3 H226 Acute toxicity 4; Inhalation H332 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335

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.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Silane, dimethoxydimethyl- 1112-39-6	214-189-4	>= 1- < 5 %	F - Highly flammable; R11
Tetraethyl silicate 78-10-4	201-083-8 01-2119496195-28	>= 1- < 5 %	R10 Xn - Harmful; R20 Xi - Irritant; R36/37

For full text of the R-Phrases indicated by codes 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

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:

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 chapter 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

Valid for
Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
METHANOL 67-56-1	200	266	Time Weighted Average (TWA):		EH40 WEL
METHANOL 67-56-1			Skin designation:	Can be absorbed through the skin.	EH40 WEL
METHANOL 67-56-1	250	333	Short Term Exposure Limit (STEL):		EH40 WEL
METHANOL 67-56-1	200	260	Time Weighted Average (TWA):	Indicative	ECLTV

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Tetraethyl orthosilicate 78-10-4	worker	dermal	Acute/short term exposure - systemic effects		12,1 mg/kg bw/day	
Tetraethyl orthosilicate 78-10-4	worker	inhalation	Acute/short term exposure - systemic effects		85 mg/m ³	
Tetraethyl orthosilicate 78-10-4	worker	inhalation	Acute/short term exposure - local effects		85 mg/m ³	
Tetraethyl orthosilicate 78-10-4	worker	dermal	Long term exposure - systemic effects		12,1 mg/kg bw/day	
Tetraethyl orthosilicate 78-10-4	worker	inhalation	Long term exposure - systemic effects		85 mg/m ³	
Tetraethyl orthosilicate 78-10-4	worker	inhalation	Long term exposure - local effects		85 mg/m ³	
Tetraethyl orthosilicate 78-10-4	general population	dermal	Acute/short term exposure - systemic effects		8,4 mg/kg bw/day	
Tetraethyl orthosilicate 78-10-4	general population	inhalation	Acute/short term exposure - local effects		25 mg/m ³	
Tetraethyl orthosilicate 78-10-4	general population	inhalation	Acute/short term exposure - systemic effects		25 mg/m ³	
Tetraethyl orthosilicate 78-10-4	general population	dermal	Long term exposure - systemic effects		8,4 mg/kg bw/day	
Tetraethyl orthosilicate 78-10-4	general population	inhalation	Long term exposure - systemic effects		25 mg/m ³	
Tetraethyl orthosilicate 78-10-4	general population	inhalation	Long term exposure - local effects		25 mg/m ³	

Biological Exposure Indices:

8.2. Exposure controls:

Engineering controls:
Ensure adequate ventilation.

Respiratory protection:
Use only in well-ventilated areas.

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.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	paste transparent
Odor	Alcoholic
pH	not applicable
Initial boiling point	Not applicable
Flash point	Product is a solid. (ASTM D 4359)
Decomposition temperature	No data available / Not applicable
Vapour pressure (21 °C (69.8 °F))	< 13 mbar
Density (ρ)	1,1 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)	Not determined
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
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

No data available.

10.6. Hazardous decomposition products

Methanol is liberated slowly upon exposure to moisture.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****General toxicological information:**

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.

Ingestion of large quantities may cause liver or kidney damage.

Inhalative toxicity:

Inhalation of vapors in high concentration may cause irritation of respiratory system

Methanol released during polymerisation of RTV silicones is toxic by inhalation. It is also highly flammable

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

May cause mild irritation to the eyes.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetraethyl silicate 78-10-4	LD50 LC50	> 2.000 mg/kg 10 - 16,8 mg/l	oral inhalation	4 h	rat rat	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Tetraethyl silicate 78-10-4	not sensitising	Buehler 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
Tetraethyl silicate 78-10-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)

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 preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Ecotoxicity:

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

Mobility:

Cured adhesives are immobile.

Persistence and Biodegradability:

The product is not biodegradable.

Bioaccumulative potential:

No data available.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Tetraethyl silicate 78-10-4	LC50	> 245 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	EU Method C.1 (Acute Toxicity for Fish)
Tetraethyl silicate 78-10-4	EC50	> 844 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
Tetraethyl silicate 78-10-4	EC50	889 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Tetraethyl silicate 78-10-4	readily biodegradable	aerobic	98 %	OECD Guideline 301 A (old version) (Ready Biodegradability: Modified AFNOR Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Tetraethyl silicate 78-10-4	0,04					

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

General information:

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content < 5 %
(1999/13/EC)

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:

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R36/37 Irritating to eyes and respiratory system.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

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.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.