1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	RTV 3145
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.

1.2 Recommended use of the chemical and restrictions on use

Identified Use(s)	PC1 Adhesives, sealants
Uses Advised Against	None known.

1.3 Supplier's details

Company Identification	VISHAY MEASUREMENTS GROUP UK LTD Stroudley Road Basingstoke Hampshire RG24 8FW United Kingdom
Telephone	+44 (0) 1256 462131
Fax	+44 (0) 1256 471441
E-Mail (competent person)	mm.uk@vishaypg.com

1.4 Emergency Phone No. (00-1) 703-527-3887
CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) Skin Sens. 1; H317

2.1.2 Directive 67/548/EEC & Directive 1999/45/EC R43: May cause sensitization by skin contact.

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)

Product Name: RTV 3145

Hazard Pictogram(s)

Signal Word(s): Warning

Contains: Trimethoxy(methyl)silane

Hazard Statement(s): H317: May cause an allergic skin reaction.

Precautionary Statement(s):
P261: Avoid breathing vapours.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.

Additional Information EUH066: Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Trimethylated silica	< 25	68909-20-6	272-697-1	None assigned	EUH066
Trimethoxy(methyl)silane	5-10	1185-55-3	214-685-0	None assigned	Flam. Liq. 2; H225 Skin Sens. 1; H317
Methanol	< 0.2	67-56-1	200-659-6	None assigned	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 STOT RE 1; H370

EUH066: Repeated exposure may cause skin dryness or cracking. H225: Highly flammable liquid and vapour. H301: Toxic if swallowed. H311: Toxic in contact with skin. H317: May cause an allergic skin reaction. H331: Toxic if inhaled. H370: Causes damage to organs.

Directive 67/548/EEC & Directive 1999/45/EC

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases
Trimethylated silica	< 25	68909-20-6	272-697-1	None assigned	R66
Trimethoxy(methyl)silane	5-10	1185-55-3	214-685-0	None assigned	F; R11 R43
Methanol	< 0.2	67-56-1	200-659-6	None assigned	F; R11 T; R25 T; R24 T; R23 T; R39

F; Flammable, T; Toxic. R11: Highly flammable. R23: Toxic by inhalation. R24: Toxic in contact with skin. R25: Toxic if swallowed. R39: Danger of very serious irreversible effects. R43: May cause sensitization by skin contact. R66: Repeated exposure may cause skin dryness or cracking.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation — If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact — IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation or rash occurs: Get medical advice/attention.

Eye Contact — Rinse cautiously with water for several minutes.

Ingestion — Obtain medical attention if ill effects occur.

4.2 Most important symptoms and effects, both acute and delayed — May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed — Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

	Suitable Extinguishing media	As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.
	Unsuitable extinguishing media	Do not use water jet. Direct water jet may spread the fire.
5.2	**Special hazards arising from the substance or mixture**	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica, Carbon oxides and traces of incompletely burned carbon compounds, Formaldehyde, Sulphur products, Nitrogen products.
5.3	**Advice for fire-fighters**	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	**Personal precautions, protective equipment and emergency procedures**	Ensure adequate ventilation. Use personal protective equipment as required. See Section: 8.
6.2	**Environmental precautions**	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.
6.3	**Methods and material for containment and cleaning up**	Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. The spilled product produces an extremely slippery surface.
6.4	**Reference to other sections**	See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

7.1	**Precautions for safe handling**	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.
7.2	**Conditions for safe storage, including any incompatibilities**	Store in a well-ventilated place. Protect from moisture.
	Storage temperature	Maximum: 32°C
	Storage life	Stable under normal conditions.
	Incompatible materials	Keep away from: Oxidizing agents and Water. Contact with water or humid air will form methanol.
7.3	**Specific end use(s)**	PC1 Adhesives, sealants. See Section: 1.2

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Methanol	67-56-1	200	266	250	333	WEL

Note: WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2	**Biological limit value**	Not established.
8.1.3	**PNECs and DNELs**	Not established.
8.2	**Exposure controls**	
8.2.1	**Appropriate engineering controls**	Ensure adequate ventilation. or Use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit.
8.2.2	**Individual protection measures, such as personal protective equipment (PPE)**	General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.
	Eye/ face protection	Wear eye protection with side protection (EN166).

Skin protection

Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Body protection: Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment.

Thermal hazards — Not applicable.

8.2.3 Environmental Exposure Controls — Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Translucent white paste
Odour	Slight
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.12 (H2O = 1)
Solubility(ies)	Insoluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information — None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1	**Stability and reactivity**	This product releases methanol.
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	Contact with water or humid air will form methanol.
10.4	**Conditions to avoid**	Protect from moisture.
10.5	**Incompatible materials**	Keep away from: Oxidizing agents and Water.
10.6	**Hazardous decomposition product(s)**	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica, Carbon oxides and traces of incompletely burned carbon compounds, Formaldehyde, Sulphur products, Nitrogen products.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity

Ingestion	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >20.0 mg/l.
Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Skin corrosion/irritation	EUH066: Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	Based upon the available data, the classification criteria are not met.
Respiratory or skin sensitization	Skin Sens. 1: May cause an allergic skin reaction.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
STOT - single exposure	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Based upon the available data, the classification criteria are not met.
Aspiration hazard	Based upon the available data, the classification criteria are not met.

11.2 Other information Product may emit formaldehyde vapour at temperatures above 180ºC in the presence of air. Formaldehyde vapour is a suspected carcinogen, toxic by inhalation and irritating to eyes and the respiratory system. Exposure limits should be strictly respected.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 >100 mg/l (Fish)
12.2	**Persistence and degradability**	Part of the components are poorly biodegradable.
12.3	**Bioaccumulative potential**	The product has low potential for bioaccumulation.
12.4	**Mobility in soil**	The product is predicted to have low mobility in soil. (Insoluble in water.)
12.5	**Results of PBT and vPvB assessment**	Not classified as PBT or vPvB.
12.6	**Other adverse effects**	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	Dispose of contents in accordance with local, state or national legislation.
13.2	**Additional Information**	None.

14. SECTION 14: TRANSPORT INFORMATION

		ADR/RID / IMDG / IATA
14.1	**UN number**	Not classified as dangerous for transport.
14.2	**Proper Shipping Name**	Not classified
14.3	**Transport hazard class(es)**	Not classified
14.4	**Packing group**	Not classified
14.5	**Environmental hazards**	Not classified as a Marine Pollutant.
14.6	**Special precautions for user**	See Section: 2
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**	Not applicable.
14.8	**Additional Information**	None.

15. SECTION 15: REGULATORY INFORMATION

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

	mixture	
15.1.1	**EU regulations**	
	SVHCs	None
15.1.2	**National regulations**	
	Germany	Water hazard class: Non-hazardous ingredients
15.2	**Chemical Safety Assessment**	Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Methanol (CAS# 67-58-1) and Existing ECHA registration(s) for Trimethoxy(methyl)silane (CAS# 1185-55-3) and Methanol (CAS# 67-58-1).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Skin Sens. 1; H317	Threshold Calculation
EUH066	Existing Safety Data Sheet (SDS)

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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Annex to the extended Safety Data Sheet (eSDS)

No information available.