SAFETY DATA SHEET

Version: 2.0
Date of Issue: 26 April 2017
Date of First Issue: 11 October 2012

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ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 1: IDENTIFICATION

Product identifier used on the label	3140-RTV
Other means of identification	Not applicable
Recommended use of the chemical and restrictions on use	
Recommended use	PC1 Adhesives, sealants
Restrictions on use	Anything other than the above.
Details of the supplier of the safety data sheet	
Supplier	VISHAY MEASUREMENTS GROUP, INC.
Address of Supplier	Post Office Box 27777 Raleigh, NC 27611 USA
Telephone	+1 919-365-3800
Fax	+1 919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com
Emergency telephone number	1-800-424-9300 CHEMTREC (24 hours)

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200	
Physical hazards	Not classified
Health hazards	Not classified
Environmental hazards	Not classified
Hazard Symbol	None assigned.
Signal Word(s)	None assigned.
Hazard Statement(s)	None assigned.
Precautionary Statement(s)	None assigned.
Other hazards	Repeated exposure may cause skin dryness or cracking. Contact with water or humid air will form methanol. 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.
Percent of the mixture consists of ingredient(s) of unknown acute toxicity:	0%

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable

Mixtures Substances in preparations / mixtures

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard classification
Trimethylated silica	< 25	68909-20-6	272-697-1	Not classified
Trimethoxy(methyl)silane	5 - 10	1185-55-3	214-685-0	Flammable Liquid, Category 2
Methanol	< 0.2	67-56-1	200-659-6	Flammable Liquid, Category 2 Acute toxicity, Category 4 – Oral Acute toxicity, Category 4 – Dermal Acute toxicity, Category 4 – Inhalation Carcinogen, Category 2 (SCL ≥ 10%) Specific target organ toxicity — single exposure, Category 1 (SCL ≥ 10%)

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Self-protection of the first aider	Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin and eyes. Contaminated clothing should be laundered before reuse.
Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open. If eye irritation persists, get medical advice/attention.
Ingestion	Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Do not induce vomiting. If symptoms develop, obtain medical attention.
Most important symptoms and effects, both acute and delayed	Repeated exposure may cause skin dryness or cracking.
Indication of any immediate medical attention and special treatment needed	Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or waterspray.
Unsuitable extinguishing Media	Do not use water jet.
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. 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.
Special protective equipment and precautions 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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8. Avoid breathing vapours. Avoid contact with skin and eyes. Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.
Methods and material for containment and cleaning up	Absorb spillage to prevent material damage. Cover spills with inert absorbent material. Neutralize with dilute acid. Ventilate the area and wash spill site after material pick-up is complete.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. Avoid breathing vapours. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product.
Conditions for safe storage, including any incompatibilities	Store in a well-ventilated place. Keep away from heat, sources of ignition and direct sunlight. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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	260	250(1)	325(1)	NIOSH
		200	260	-	-	OSHA
		200	-	250	-	ACGIH, Sk

Note: OSHA PELs 1910.1000 TABLE Z-1/ NIOSH RELs / ACGIH TLVs
Sk - Can be absorbed through skin.
(1) 15 minutes average value

The other components listed in Section 3 do not have occupational exposure limits.

Biological Exposure Indices

SUBSTANCE	CAS No.	Determinant	Biological Exposure Indices	Sampling Time	Note
Methanol	67-56-1	Methanol in Urine	15 mg/l	End of shift	B, Ns

Source: 2015 ACGIH Biological Exposure Indicies (BEIs)

B – Background
Ns – Nonspecific

The other components listed in Section 3 do not have biological exposure indicies.

Appropriate engineering controls	Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. Atmospheric levels should be controlled in compliance with the occupational exposure limit.
Individual protection measures, such as personal	General hygiene measures for the handling of chemicals are applicable. Keep

protective equipment (PPE)	good industrial hygiene. Avoid contact with skin and eyes. Avoid breathing vapours. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place. IF exposed: Flush with fresh water if contact with skin or eyes.
Eye/face protection 	Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).
Skin protection 	**Hand protection:** Wear impervious gloves (EN374). Protective index 6, corresponding > 480 minutes of permeation time according to EN 374 Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Neoprene or rubber gloves are recommended. **Body protection:** Wear suitable coveralls to prevent exposure to the skin.
Respiratory protection 	In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment. A suitable mask with filter type A (EN141 or EN405) may be appropriate.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Milky white liquid
Odor	Slight
Odor Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	Not available.
Initial boiling point and boiling range	>65°C
Flash Point	>101°C [Closed cup]
Evaporation rate (Butyl acetate = 1)	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.05
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	300 Poise at 25°C.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	This product releases methanol.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Contact with water or humid air will form methanol.
Conditions to avoid	Protect from moisture. Keep at temperature not exceeding (°C): 32.
Incompatible materials	Keep away from: Oxidizing agents and Water.
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.

SECTION 11: TOXICOLOGICAL INFORMATION

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.
Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20.0 mg/l.
Acute toxicity - 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	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	Based upon the available data, the classification criteria are not met.
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.

Information on likely routes of exposure

Inhalation	Possible – accidental exposure
Ingestion	Unlikely – accidental exposure
Skin Contact	Possible – accidental exposure
Eye Contact	Unlikely – accidental exposure

Early onset symptoms related to exposure	None anticipated
Delayed health effects from exposure	Repeated exposure may cause skin dryness or cracking.

Other information

NTP Report on Carcinogens	All chemicals are not listed
IARC Monographs	All chemicals are not listed
OSHA Designated Carcinogen	All chemicals are not listed

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 >100 mg/l (Fish). No adverse effects on bacteria are predicted.
Persistence and degradability	Siloxanes are removed from water by sedimentation or binding to sewage sludge. Removed > 90% by binding onto sewage sludge. The siloxanes in this product do not contribute to the BOD. In soil, siloxanes are degraded. This product hydrolyses in water or moist air, releasing methanol and organosilicons.
Bioaccumulative potential	The product has low potential for bioaccumulation.
Mobility in soil	The product is predicted to have high mobility in soil.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

(Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods')

	ADR/RID	IMDG	IATA
UN number	Not classified	Not classified	Not classified
UN proper shipping name	Not classified	Not classified	Not classified
Transport hazard class(es)	Not classified	Not classified	Not classified
Packing group	Not classified	Not classified	Not classified
Environmental hazards	Not classified	Not classified as a Marine Pollutant.	Not classified
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable		
Special precautions for user	See Section: 2		

SECTION 15: REGULATORY INFORMATION

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

US Federal Regulations

TSCA (Toxic Substance Control Act)	Trimethylated silica: Subject to 25,000 lb reporting threshold Trimethoxy(methyl)silane: Subject to 25,000 lb reporting threshold Methanol: Subject to 25,000 lb reporting threshold
EPCRA/SARA Section 302 Extremely Hazardous Substances	All chemicals are not listed
EPCRA Section 313 Toxics Release Inventory (TRI) Program	Methanol: De Minimis limit: 1%
NIOSH Occupational Carcinogen List	All chemicals are not listed
OSHA List of highly hazardous chemicals, toxics and reactives	All chemicals are not listed
NTP Report on Carcinogens (RoC) List	All chemicals are not listed
Poison Prevention Packaging Act	Methanol: Substance requiring special packaging

US State Regulations

California State, Proposition 65 List	Methanol: Safe harbor level - MADL: 47000 (inhalation) ug/day, 23000 (oral) ug/day
California State, Safer Consumer Products Regulations	Methanol: Initial Candidate Chemicals List
Maine State, Toxic Chemicals in Children's Products Act	Methanol: COC list
New Jersey State Worker and Community RTK Act	Methanol: CHC list
Pennsylvania State, Worker and Community RTK Act	Methanol: RTKHSL. SHHSL
Rhode Island State, Hazardous Substances RTK Act	Methanol: Hazardous Substance List. Environmental Hazard List

Non-Regional

IARC Monographs, List of Classifications	All chemicals are not listed

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated substance / mixture classification. New SDS Regulation compliant with HazCom 2012 format, all sections have been updated to include new information. Please review SDS with care.

Version 2.0
Revision Date 26 April 2017
Date of First Issue 11 October 2012

References:
Existing Safety Data Sheet (SDS), EU Data: Harmonised Classification(s) for Methanol (CAS No. 67-58-1) and Existing ECHA registration(s) for Trimethoxy(methyl)silane (CAS No. 1185-55-3) and Methanol (CAS No. 67-58-1).

GHS Classification of the substance or mixture	Classification Procedure
Not classified	Threshold Calculation

LEGEND

ACGIH: American Conference of Governmental Industrial Hygienists
BEI: Biological Exposure Indices (ACGIH)
IARC: International Agency for Research on Cancer
Irr: Irritation
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: The Occupational Safety & Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PEL: Permissible exposure limit
REL: Recommended exposure limit
SCL: Specific Concentration Limit
Skin": Risk of overexposure via dermal contact
STEL: Short Term Exposure Limit
TLV: Threshold Limit value
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
URT: Upper respiratory tract
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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