

SDS Number: 275 Revision Date: 07/30/2018 Supersedes Date: 04/27/2018

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: SILICONE SEALANT/ADHESIVE

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type:Solvent Release Adhesive RTVEmergency Contact:ChemtrecProduct Name:SILICONE SEALANT/ADHESIVEPhone:(800) 424-9300Part Number(s):19-158WhiteIndustrial use only

RTV rubbers [for electrical, electronic and general industry (gluing and sealing)]

SECTION 2. HAZARD(S) IDENTIFICATION

Not classified. Serious eye damage/eye irritation Sensitization, skin Reproductive toxicity (fertility) Specific target organ toxicity, repeated exposure

Category 2 Category 1 Category 2 Category 2 (Cardiovascular / Hematological: hematopoiesis)

Label elements

Physical hazards

Health hazards



Warning Signal word Causes serious eye irritation. May cause an allergic skin reaction. Suspected of damaging fertility. Hazard statement May cause damage to organs (Cardiovascular / Hematological: hematopoiesis) through prolonged or repeated exposure. Precautionary statement Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical Response advice/attention. Get medical advice/attention if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.



Mixtures

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SECTION 2. HAZARD(S) IDENTIFICATION

Storage Disposal	Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.	
	Incompatibilities:	Strong oxidizing agents, water, moisture
Substance(s) formed under the condition of use	This product reacts with water , moisture or hum Methylethylketoxime The following material is embedded in the produ used as intended or as supplied, the product will Titanium oxide.	ict and not available as respirable dusts. When

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Common name and synonyms	CAS number	%
Methyloximesilane*		Proprietary*	1 - < 3
Vinyloximesilane*		Proprietary*	< 1
Titanium oxide		13463-67-7	< 1
Alkoxysilane*		Proprietary*	< 1
Methylethylketoxime(Impurity)		96-29-7	< 1
Octamethylcyclotetrasiloxane (Impurity)		556-67-2	< 1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

SECTION 4. FIRST-AID	MEASURES	
Inhalation	Move to fresh air. Call a physician if symptor	ns develop or persist.
Skin contact	Wash off with soap and plenty of water. For unaffected skin. If skin irritation or rash occu contaminated clothing and wash before reus	
Eye contact	Rinse immediately with plenty of water for at and easy to do. Continue rinsing. Get medic	least 15 minutes. Remove contact lenses, if present al attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention water	Get immediate medical attention if symptoms occur.
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SECTION 4. FIRST-AID MEASURES (CONTINUED)

Most important symptoms/effects, acute and delayed	Dermatitis. Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Unsuitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Alcohol-resistant foam None known.
Specific hazards arising from the chemical	By heating and fire, harmful vapors/gases may be formed. Nitrogen oxides. (corrosive)
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
General fire hazards	

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch or walk through spilled material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Methods and materials for containment and cleaning up	Eliminate sources of ignition.
	Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills in original containers for re-use.
Environmental precautions	Prevent further leakage or spillage if safe to do so.



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SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Provide adequate ventilation. Use care in handling/storage. Obtain special instructions before use.
_	Wash hands thoroughly after handling. Do not handle until all safety precautions have been read
	and understood. Do not breathe mist or vapor. Avoid contact with eyes. Avoid contact with skin.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep container tightly closed. Keep out of the reach of children. Store in a cool, dry place out of direct sunlight. Keep in original container.
0, 1	Do not eat, drink, or smoke when using this product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Components	Туре	Value	Form
Titanium oxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
US. ACGIH Threshold Limit	Values		
Components	Туре	Value	
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	
US. Workplace Environment	tal Exposure Level (WEEL) Guides		
Components	Туре	Value	
Methylethylketoxime(Impurit y) (CAS 96-29-7)	TWA	36 mg/m3	
,		10 ppm	
Vendor guide			
Components	Туре	Value	
Methylethylketoxime(Impurit y) (CAS 96-29-7)	STEL	10 ppm	
	TWA	3 ppm	
propriate engineering trols	Provide adequate general and local exhaust ventila Pay attention to ventilation such as local exhaust, r hours after application.		
Eye/face protection	such as personal protective equipment Tightly sealed safety glasses according to EN 166.		ergency eye wash fountain and quic r in the immediate work area.
Skin protection			
Hand protection	Wear protective gloves. Wash hands before breaks	and at the end of	workday.
Other	Wear suitable protective clothing.		

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

Respiratory protection	If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Avoid contact with eyes. Avoid contact with skin. When using, do not eat, drink or smoke. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	Paste.
Color	White.
Odor	Oxime odor
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	204.8 °F (96 °C) Closed Cup
Evaporation rate	< 1 (Butyl Acetate=1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	No data
Flammability limit - upper (%)	No data
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Negligible (25 °C)
Vapor density	> 1 (air=1)
Relative density	1.03 (25 °C)
Solubility(ies)	
Solubility (water)	Not soluble
Specific Gravity (water = 1): Not ava	ilable
D = 1 $N = 1$ $A = 1/2$ $A = 1/2$	



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

Coeff. Water/Oil Dist:	Not available	Volatility:	Not available
Auto-ignition	No data	KOC:	Not available
Decomposition	Not available.	VOC:	(1 to 3)%
Viscosity	Not applicable	VUC:	(1 10 5)%
Other information		Log KOW:	Not available
Molecular weight	Not applicable		

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reactions	No hazardous reaction known under normal conditions of use, storage and transport. Stable at normal conditions. Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	Strong oxidizing agents. Water, moisture.
Hazardous decomposition products	This product reacts with water, moisture or humid air to evolve following compounds: Methylethylketoxime. Refer to section 8 : exposure controls/personal protection and section 11 : toxicological information. Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Nitrogen oxides. Formaldehyde.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of e	exposure
Ingestion	No significant effects are expected.
Inhalation	No significant effects are expected.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Dermatitis. Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction.
Information on toxicological eff	fects
Acute toxicity	



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Product Name: SILICONE SEALANT/ADHESIVE

SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Components	Species	Test Results			
Alkoxysilane (CAS Proprietary)					
Acute					
Dermal					
LD50	Rabbit	> 2000 mg/kg			
		16 ml/kg			
Inhalation					
LC50	Rat	1.49 - 2.44 mg/l/4h			
Oral					
LD50	Rat	2995 mg/kg			
		2400 mg/kg			
Methylethylketoxime(Impurity) (0	CAS 96-29-7)				
Acute	· · · · · · · · · · · · · · · · · · ·				
Dermal					
LD50	Rabbit	200 µl/kg			
Oral					
LD50	Rat	930 mg/kg			
Skin corrosion/irritation	SKIN-RABBIT : Moderately irritating [SKIN-RABBIT : 500mg/24hr MILD [O				
Serious eye damage/eye irritation	Causes serious eye damage. [Vinylox EYE-RABBIT : 15mg SEVERE [Alkox Causes serious eye irritation. [Methyl EYE-RABBIT : MILD [Octamethylcycl	ysilane] oximesilane]			
Respiratory or skin sensitizati	on				
Respiratory sensitization	Not available.				
Skin sensitization	May cause an allergic skin reaction. [Methyloximesilane] [Vinyloximesilane] [Methylethylketoxime] Positive (Guinea pig) [Alkoxysilane] No evidence of sensitization [Octamethylcyclotetrasiloxane]				
Germ cell mutagenicity	Negative(Ames test, Chromosome analysis, Micronucleus test) [Alkoxysilane] Negative(Bacteria) [Octamethylcyclotetrasiloxane]				
Carcinogenicity	Suspected of causing cancer. [Methy The following material is embedded in used as intended or as supplied, the Titanium oxide.	n the product and not available as respirable dusts. When			



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium oxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

NOT IISTCU.	
Reproductive toxicity	Octamethylcyclotetrasiloxane administered to rats by whole body inhalation at concentrations of 500 and 700 ppm for 70 days prior to mating, through mating, gestation and lactation resulted in decreases in live litter size. Additionally, increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia) were observed at these concentrations. Statistically significant alterations in these parameters were not observed in the lower concentrations evaluated (300 and 70 ppm). In a previous range-finding study, rats exposed to vapor concentrations of 700 ppm had decreases in the number of implantation sites and live litter size. The significance of these findings to humans is not known. [Octamethylcyclotetrasiloxane] Developmental toxicity: NOAEL 500mg/kg/day (Rat), Maternal toxicity: NOAEL 500mg/kg/day (Rat) [Alkoxysilane]
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Cardiovascular / Hematological : hematopoiesis. [Vinyloximesilane] Cardiovascular / Hematological : hematopoiesis. [Methyloximesilane]
	Repeated inhalation or oral exposure of mice and rats to octamethylcyclotetrasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive. A two year combined chronic and carcinogenicity assy was conducted on octamethylcyclotetrasiloxane. Rats were exposed by whole-body vapor inhalation 6hrs/day, 5days/week for up to 104weeks to 0, 10, 30, 150 or 700ppm of octamethylcyclotetrasiloxane. The increase in incidence of (uterine)endometrial cell hyperplasia and uterine adenomas(benign tumors) were observed in female rats at 700ppm. Since these effects only occurred at 700ppm, a level that greatly exceeds typical workplace or consumer exposure, it is unlikely that industrial, commercial or consumer uses of products containing octamethylcyclotetrasiloxane would result in a significant risk to humans. [Octamethylcyclotetrasiloxane]
Aspiration hazard	Not available.
Chronic effects	Not available.



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Further information

n	Additional Information
	Methyl Ethyl Ketoxime (MEKO). Material will generate MEKO on exposure to humid air gradually. Male rodents exposed to MEKO vapor at high concentration throughout their lifetime developed
	liver cancer. But relevance to humans is uncertain now. Please read the detail information to MEKO below
	Skin Irritation ;Causes mild irritation. Can be absorbed through the skin.
	Eyes Irritation ;Causes severe irritation.
	Acute Oral Tox. ;LD50(rat)= >900mg/kg.
	Acute Dermal Tox. ;LD50(rabbit)= >1000mg/kg.
	Acute Inhalation Tox.;LC50(rat) > 4.83mg/l/4Hr
	Inhalation Tox. ;Shows narcotic action at high concentration. May produce blood effects Skin Sensitization :Positive(guinea pig)
	Neurotoxicity ;High dose can produce transient and reversible change in neurobehavioral
	function.
	Carcinogenicity ;Liver carcinomas were observed in a lifetime inhalation study (ca.2 years)
	in which mice and rats were exposed.
	Other Chronic Study ;Degenerative effects on the olfactory epithelium of nasal passages
	occured in a concentration related manner in males and females of mice and rats at MEKO
	concentration of 15, 75 and 375ppm. The significant change in hematological parameters were
	observed at 404ppm concentration. Workplace Environmental Exposure Level; Vendor guide ; 3ppm(TWA), 10ppm(STEL),
	AIHA WEEL ; 10ppm(TWA)

SECTION 12. ECOLOGICAL INFORMATION

cotoxicity	Toxic to aquatic life. Toxic to aquatic life with long lasting effects. [Alkoxysilane]						
	May cause long lasting harmful effects to aquatic life. [Octamethylcyclotetrasiloxane]						
Components		Species	Test Results				
Alkoxysilane (CAS Pro	oprietary)						
Aquatic							
Algae	EbC50	Green algae (Selenastrum capricornutum)	5.5 mg/l, 72 hr				
	ErC50	Green algae (Selenastrum capricornutum)	8.8 mg/l, 72 hr				
Crustacea	EC50	Water flea (Daphnia magna)	90 mg/l, 48 hr				
Fish	LC50	Bluegill (Lepomis macrochirus)	> 100 mg/l, 96 hr				
		Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hr				
		Rainbow Trout	> 100 mg/l, 96 hr				



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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Methylethylketoxime(Impurity	(CAS 96-29-7)					
Aquatic						
Fish	LC50	Fathead minnow (Pimephales promelas)	777 - 914 mg/l, 96 hours			
Titanium oxide (CAS 13463-	67-7)					
Aquatic						
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours			
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours			
Persistence and degradability	Causes easily	hydrolysis in water or atmosphere. [Alkoxy	/silane]			
Bioaccumulative potential	Bio concentration Factor(BCF) / (Fathead minnows) : 12400 [Octamethylcyclotetrasiloxane]					
Mobility in soil	Not available.					
Other adverse effects	Not available.					

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal instructions

Follow applicable Federal, State and Local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

Not regulated as dangerous goods.

The U.S. EPA has not published waste numbers for this product's components.

Dispose of unused product properly. Empty containers should be taken

to an approved waste handling site for recycling or disposal.

Not regulated as dangerous goods.

IMDG

IATA

Not regulated as dangerous goods.

Transport in bulk according to This product is not intended to be transported in bulk. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15. REGULATORY INFORMATION

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
OSHA Specifically Regulated Not listed.	Substances (29 CFR 1910.1001-1050)



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SECTION 15. REGULATORY INFORMATION (CONTINUED)

TSCA:

Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 313 (TRI reporting)

SARA 304: SARA 311/312:

None contained in product. Not applicable. None known.

US state regulations

US. Massachusetts RTK - Substance List

Titanium oxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act Titanium oxide (CAS 13463-67-7) US. Rhode Island RTK Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law Titanium oxide (CAS 13463-67-7) US. Rhode Island RTK Not regulated.

California Proposition 65:

The following material is embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards: Titanium oxide WARNING! This product contains a chemical known to the state of California to cause cancer.

All components of this product are listed on TSCA Inventory.

International Inventories

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Methylethylketoxime (Impurity)	96-29-7	Yes	DSL	EINECS	Yes	Yes	Yes	Yes	Yes	Yes
Octamethylcyclotetrasiloxane (Impurity)	556-67-2	Yes	DSL	EINECS	Yes	Yes	Yes	Yes	Yes	Yes
Titanium dioxide	13463-67-7	Yes	DSL	REACH	Yes	Yes	Yes	Yes	Yes	Yes



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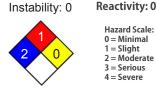
SECTION 16. OTHER INFORMATION

Issue date Version # NFPA ratings

Health: 2 Flammability: 1

07-08-2015

NFPA ratings



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1 = Slight

Key/Legend:

AIĆS (Australia); DSL (Canada); IECSC (China); REACH (European Union); ENCS (Japan); ISHL (Japan); KECI (Korea); NZIOC (New Zealand); PICCS (Philippines); TCSI (Taiwan); TSCA (USA); ACGIH USA. ACGIH Threshold Limit Values (TLV); NIOSH REL USA. NIOSH Recommended Exposure Limits; OSHA PO - USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000; OSHA Z-1 - USA. Occupational Exposure Limits (OSHA)

Table Z-1 Limits for Air Contaminates; OSHA Z-3 - USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts; ACGIH / TWA - 8-hour,

time-weighted average; NIOSH REL / TWA - Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek; NIOSH REL / ST - STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday; OSHA P0 / TWA - 8-hour, time-weighted average; OSHA Z-1 / TWA - 8-hour, time-weighted average; OSHA Z-3 / TWA - 8-hour, time-weighted average