

MATERIAL SAFETY DATA SHEET

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Section 1: Product Information

Product Identifier: Red Hi-Temp Silicone **Product Code: KK0205**
Product Use: Sealant

Section 2: Hazardous Information

Ingredient	Percent (Wt. %)	CAS Number	LD50(Oral-rat)	LC50(Inhalation-rat)
Amorphous Silica	10.0 - 30.0	7631-86-9	3,160 mg/kg	> 0.139 mg/L (4 hr)
Methyl Triacetoxysilane	1.0 - 5.0	4253-34-3	2,060 mg/kg	not available
Ethyl Triacetoxysilane	1.0 - 5.0	17689-77-9	1,460 mg/kg	not available
Octamethylcyclotetrasiloxane	0.1 - 1.0	556-67-2	1,540 mg/kg	not available

The ingredients listed above are controlled products as defined in CPR, am. SOR/88-555 or 29 CFR 1910.1200

Section 3: Physical Data

Physical State:	Paste
Odor and Appearance:	Acetic acid / thixotropic sealant; red color
Odor Threshold:	Not available
Specific Gravity:	1.04
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Boiling Point:	Not available
Freezing Point:	Not available
pH:	Not available
Coeff. Oil/Water Distribution:	Not available

Section 4: Fire and Explosion Data

Flammable Conditions:	Avoid direct sources of heat or ignition in uncured state.
Extinguishing Media:	Carbon dioxide, dry chemical, water fog or foam. Water can be used to cool fire exposed containers
Fire Fighting Measures:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.
Flash Point:	Not applicable
Flammability Limits:	Lower Explosion Limit - not available Upper Explosion Limit - not available
Autoignition Temperature:	Not available
Hazardous Decomposition Products:	Carbon oxides, silicone dioxide, metal oxides, formaldehyde, and traces of incompletely burned carbon products.
Sensitivity - Impact:	None
Static:	None

Section 5: Reactivity Data

Chemical Stability:	Stable
Incompatible Materials:	Strong oxidizing agents or electrophiles (e.g. ferric chloride). Concentrated acids or bases can degrade the silicone polymer.
Reactive Conditions:	Moisture and incompatible materials.
Hazardous Polymerization:	Will not occur.

Section 6: Toxicological Properties

ROUTES OF ENTRY INTO THE BODY (ACUTE EFFECTS):

Eyes:	Direct contact may cause moderate irritation.
Skin:	May cause moderate irritation.
Inhalation:	Irritates respiratory passages very slightly.
Ingestion:	Low ingestion hazard in normal use.

WHMIS HAZARD SYMBOL(S):



Effects of overexposure:	Acetic acid vapors may irritate eyes, nose and throat. Direct contact with eyes and skin will irritate.
Component Exposure Limits:	<u>Amorphous Silica (CAS# 7631-86-9)</u> : Although the silica is coated with the silicone sealant observe the particulate limits. OSHA PEL: TWA 15 mg/m ³ total dust, 5 mg/m ³ respirable fraction. ACGIH TLV: TWA 10 mg/m ³ inhalable particulate, 3 mg/m ³ respirable particulate. <u>Methyl Triacetoxysilane (CAS# 4253-34-3)</u> forms acetic acid upon contact with atmospheric moisture. Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: TWA 10 ppm, STEL 15 ppm; OSHA PEL: TWA 10 ppm. <u>Ethyl Triacetoxysilane (CAS# 17689-77-9)</u> forms acetic acid upon contact with atmospheric moisture. Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: TWA 10 ppm, STEL 15 ppm; OSHA PEL: TWA 10 ppm. <u>Octamethylcyclotetrasiloxane (CAS# 556-67-2)</u> : Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: TWA 10 ppm, STEL 15 ppm; OSHA PEL: TWA 10 ppm.
Sensitization:	Not Known
Carcinogenicity:	No ingredients considered by IARC, NTP or OSHA to be carcinogens except in the Black Sealant: Carbon Black (CAS# 1333-86-4): IARC Group 2B – possibly carcinogenic to humans.
Reproductive Toxicity:	Evidence of reproductive effects in laboratory animals when exposed to Octamethylcyclotetrasiloxane (CAS# 556-67-2) by inhalation at concentrations of 500 ppm or higher for 70 days prior to mating.
Teratogenicity:	Not known
Mutagenicity:	Not known
Synergistic Products:	Not known.

Section 7: First Aid Measures

Eyes:	Flush with copious quantities of lukewarm water. Do not attempt to physically remove the solids or gums from the eye. Seek medical attention immediately.
Skin:	Remove contaminated clothing. Wash thoroughly with warm water and non-abrasive soap. Seek medical attention if you feel ill or a reaction develops.
Inhalation:	Remove to fresh air and provide water. Seek medical attention if you feel ill or a reaction develops.
Ingestion:	No first aid should be needed.

Section 8: Preventive Measures

Personal Protective Equipment:	Safety glasses with side-protection, impermeable gloves (e.g., neoprene, nitrile, silver shield (R)), coveralls or apron are important in preventing contamination of eyes, skin and clothing. Wash thoroughly after handling.
Respiratory:	No respiratory protection should be needed.
Ventilation:	In indoor applications, passive ventilation (opening of doors and windows) is recommended. Local exhaust as necessary to keep exposure levels within guidelines.
Spill Containment / Clean Up:	Restrict access to the area of the spill. Provide ventilation and protective clothing. Scrape up sealant and place in container for disposal. Clean area as appropriate since silicone materials can represent a slip hazard. Cleaning may require steam or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup.
Waste Disposal:	Dispose in accordance with Federal, State / Provincial and local regulations.
Handling and Storage:	Store in an adequately ventilated area under dry conditions between 50°F (10°C) to 77°F (25°C) and keep container tightly sealed when not in use.
Shipping Information:	Not subject to DOT, TDG, IMDG Code or IATA Regulations.

Section 9: Regulatory Information

TSCA Inventory Status:	Chemical components listed on TSCA inventory except as exempted.
NFPA Profile:	Health 2, Flammability 1, Reactivity 0
SARA TITLE III Chemical Listings:	<u>Section 302 Extremely Hazardous Substances:</u> None <u>Section 304 CERCLA Hazardous Substances:</u> None <u>Section 312 Hazard Class:</u> Acute: Yes; Chronic: No; Fire: No; Pressure: No; Reactive: No <u>Section 313 Toxic Chemicals:</u> None present or none present in regulated quantities.
State Substance List:	This product contains a listed substance(s) that appears on one or more of the Substance Lists for Pennsylvania, Massachusetts and New Jersey: amorphous silica (CAS # 7631-86-9); methyl triacetoxysilane (CAS # 4253-34-3); ethyl triacetoxysilane (CAS # 17689-77-9); dimethylsiloxane, hydroxy terminated (CAS #70131-67-8).
California Proposition 65 List:	None known
Volatile Organic Content:	32 grams per liter (0.27 lb/gallon), 3.08% by weight (meets California Air Resources Board VOC standard for sealants and caulking compounds 12/31/2002).
WHMIS Classification:	D2A, D2B
Domestic Substance List:	Chemical components listed on DSL except as exempted.

Section 10: Additional Information

Notice to the Reader: The information is provided in good faith and is correct to the best of Kel Kem Ltd.'s knowledge as of the date hereof and is designed to assist our customers; however Kel Kem Ltd. makes no representation as to its completeness or accuracy. Final determination of suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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Section 11: Preparation Information

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Preparation Date: January 29, 2004

Phone Number: (905) 829-5888
Revision Date: April 13, 2010