



**MATERIAL SAFETY DATA SHEET**

**Crafco Roadsaver Silicone Sealant**

**MSDS No.CRF002**

Date of Preparation: **July 27, 2010**

Revision No.1

**Section 1 – Chemical Product and Company Information**

<b>Product:</b>	Crafco Roadsaver Silicone NS Sealant, Roadsaver Silicone SL
<b>Chemical Name/ Chemical Formula:</b>	RTV Dimethylpolysiloxane
<b>CAS Number:</b>	Mixture
<b>Other Designations:</b>	
<b>General Use:</b>	Pavement Joint Sealant
<b>Manufacturer:</b>	CRAFCO, Inc., 420 North Roosevelt Avenue, Chandler, AZ 85226; Phone 602-276-0406; Hours of Operation 7:30 am – 4:30 pm; ERGON 24 Hour Emergency Phone Number 1-800-222-7122; CHEMTREC 1-800-424-9300.

**Section 2 – Composition / Information on Ingredients**

<b>Ingredient Name</b>	<b>CAS Number</b>	<b>% Vol</b>
Silicon Rubber Base	70131-67-8	10-60
Polydimethylsiloxane	63148-62-9	10-30
Methyl Oximino Silane	22984-54-9	0-5
Tetra Oximino Silane	34206-40-1	0-5
Toluene	108-88-3	0-5
Methyl-Tris-Cyclohexylamino-Silane	15901-40-3	0-1
Silica, amorphous, fumed, crystalline-free	112945-52-5	0-5
Mineral Filler	1317-65-3	20-60

INGREDIENT	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Silicone Rubber Base	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Dimethyl Siloxanes	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Methyl Oximino Silane	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Tetra Oximino Silane	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Toluene	200 ppm	300 ppm (ceiling)	50 ppm	None estab.	100 ppm	150 ppm	500 ppm
Methyl-Tris-Cyclohexylamino-silane	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Silica, amorphous, fumed, crystalline-free	10 mg/m <sup>3</sup>	None estab.	6 mg/m <sup>3</sup>	None estab.	None estab.	None estab.	None estab.
Mineral Filler	5 mg/m <sup>3</sup> (respirable particulate)	None estab.	10 mg/m <sup>3</sup> (respirable dust)	None estab.	None estab.	None estab.	None estab.

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**Section 3 – Hazards Information**

**EMERGENCY OVERVIEW**

HMIS
H-2
F-1
R-0
PPE*
* Sec.8

**POTENTIAL HEALTH EFFECTS**

**Primary Entry Routes:** Inhalation and absorption.

**Target Organs:** Mucous membranes, skin, and digestive tract.

**Acute Effects:** Exposure to product fumes, vapors, or mists in concentrations above the PEL/TLV may lead to systemic symptoms (salivation, vomiting, respiratory difficulties, dizziness, headache, loss of papillary reflexes, cyanosis, hypothermia, and mild convulsions).

**Inhalation:** Exposure to product fumes, vapor and dust may cause headache, nausea, and dizziness. Vapors from decomposition may produce reversible narcotic effect. Prolonged exposure in excess of the permissible exposure air concentrations may result in coma and respiratory failure.

**Eye:** Exposure to product fumes, vapors or mists may cause irritation. Direct contact may cause burns if not promptly treated.

**Skin:** Direct contact may cause skin irritation. Material maybe absorbed through the skin, leading to effects similar to ingestion and inhalation. Prolonged exposure may cause dermatitis, drying, or irritation.

**Ingestion:** None expected. Low to moderate oral toxicity. Ingestion may produce blood effects, reducing the body's ability to transport oxygen (methomoglobinemia and anemia). Reversible narcotic effects may occur.

**Carcinogenicity:** None of the ingredients are found on the OSHA designated carcinogens lists.

**Medical Conditions Aggravated by Long-Term Exposure:** Individuals with chronic respiratory or pre-existing skin disorders may be adversely affected by exposure to product fumes, vapors or mists.

**Chronic Effects:** Prolonged and repeated skin contact in the absence of recommended hygiene practices may cause dermatitis, drying, or irritation.

**Section 4 – First Aid Measures**

**Inhalation:** Remove to fresh air. Apply artificial respiration if needed. Seek medical attention.

**Eye Contact:** Flush eyes immediately with large amount of water for at least 15 minutes. Seek medical attention.

**Skin Contact:** Remove all contaminated clothing and wash exposed area thoroughly with non-abrasive soap and water.

**Ingestion:** Do not induce vomiting. Seek medical attention.

**Section 5 – Fire Fighting Measures**

**Flash Point:** >200°F minimum

**Flash Point Method:** Unknown

**Auto Ignition Temperature:** >700°F

**LEL:** Not determined.

**UEL:** Not determined.

**Flammability Classification:** Class IIIB

**Extinguishing Media:** CO<sub>2</sub>, dry chemical foam, water spray

**Unusual Fire or Explosion Hazards:**

**Hazardous Combustion Products:** Thermal decomposition may produce carbon monoxide, carbon dioxide, silicon dioxide, nitrous oxide, and methyl ethyl ketone (MEK). Upon decomposition (burning), may emit toxic fumes/vapors which can form flammable/explosive mixtures in air.

**Fire-Fighting Instructions:** Use of water spray on small fires is acceptable. Do not release runoff





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from fire control methods to sewers or waterways. Use a water spray to cool fire-exposed containers.

**Fire-Fighting Equipment:** Use self-contained breathing apparatus in enclosed areas where heavy smoke may occur.

#### Section 6 – Accidental Release Matters

**Spill/Leak Procedures:** Stop spill at source if possible without hazard. Remove sources of heat or ignition. Avoid breathing vapors, mists or fumes. Avoid skin contact. Cleanup personnel should be provided with appropriate clothing. Contain spilled material by diking/berming with absorbent solids such as sand or soil. Do not release runoff into sewers or waterways. In cases involving release to the environment such as a waterway of the United States, contact the National Response Center at 1-800-424-8802. In Canada, report releases to the appropriate Provincial authorities.

#### Section 7 – Handling and Storage

**Handling Precautions:** Unheated material presents no known hazards. Avoid prolonged or repeated contact with the skin or breathing fumes, vapors or mists. Wear appropriate protective equipment when performing maintenance on contaminated equipment. Exercise good personal hygiene including the removal of contaminated clothing and prompt washing with soap and water.

**Storage Requirements:** Ground and bond all transfer and storage equipment. Store in properly closed, labeled containers away from sources of ignition. Store containers in a well ventilated, clean and dry area.

**Regulatory Requirements:** None known.

#### Section 8 – Exposure Controls / Personal Protection

**Engineering Controls:** Use local or exhaust ventilation in all enclosed areas or if there is inadequate ventilation to control exposure.

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Protective Clothing/Equipment:** Wear protective gloves, boots, aprons, and gauntlets as need to prevent prolonged or repeated skin contact. Goggles and face shields should be used in areas where splashing may occur. Wear protective eyeglasses or safety goggles per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, or smoking.

#### Section 9 – Physical and Chemical Properties

**Physical State:** Viscous paste.

**Water Solubility:** Not soluble.



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**Appearance and Odor:** Gray, slight solvent odor.

**Other Solubilities:** No data.

**Odor Threshold:** Not determined.

**Boiling Point:** >150° F

**Vapor Pressure:** Not determined.

**Freezing/Melting Point:** Not determined.

**Vapor Density (Air = 1):** >1

**Viscosity:** Not determined.

**Formula Weight:** Not available.

**Refractive Index:** No data.

**Density:** Not available.

**Surface Tension:** No data.

**Specific Gravity (H<sub>2</sub>O = 1):** 1.0-1.5

**% Volatile:** <5%

**pH:** Not determined.

**Evaporation Rate:** Not determined.

### Section 10 – Stability and Reactivity

**Stability:** Stable at room temperature in closed containers under normal storage and handling conditions. Do not expose to moisture, acid, oxidizers, and metals such as iron

**Chemical Incompatibilities:** Calcium carbonate will react with acids.

**Conditions to Avoid:** Do not heat above >150° F.

**Hazardous Decomposition Products:** See Section 5.

### Section 11 – Toxicological Information

**Eye Effects:** Not known.

**Skin Effects:** Not known.

**Acute Inhalation Effects:** Not known.

**Acute Oral Effects:** Methyl Ethyl Ketoxime -  
Rat, oral, LD<sub>50</sub>: 2-3 mg/kg

**Carcinogenicity:** Not listed

**Mutagenicity:** No data.

**Teratogenicity:** No data.

**Chronic Effects:** Toluene - Chronic exposure has been associated with headache, nausea, lightheadedness, loss of coordination, memory loss, enlargement of the liver, and blood effects, as well as cardiac effects. The chronic neurotoxic effects are primarily at the CNS level and may progress to an irreversible state. Intentional misuse of toluene has resulted in reproductive effects including physical and developmental abnormalities, such as low birth weight and microencephaly, and has been referred to as fetal toluene syndrome.

**Delayed (Subchronic and Chronic) Effects:** In a subchronic oral toxicity animal study, methyl ethyl ketoxime (MEKO) produced an adverse effect upon red blood cells (anemia). This was found for all dose levels tested. In an acute dermal animal study, 200 mg/kg caused mild hematologic effects. No effects were seen at 20 mg/kg. Liver carcinomas were observed in a lifetime inhalation study in which mice and rats were exposed to MEKO 6 hrs/day, 5 days/week for 18 and 26 months, respectively. MEKO is not considered mutagenic based on several in-vitro and in-vivo studies.

### Section 12 – Ecological Information

**Ecotoxicity:** Material will react with water, releasing MEKO, which has been determined to be biodegradable and has a static 96 hour LC<sub>50</sub> of 48 mg/l and a 48 hour EC<sub>50</sub> (bluegill) of 750 mg/l (daphnia).

**Environmental Fate:**

**Environmental Transport:** No data.

**Environmental Degradation:** No data.

**Soil Absorption/Mobility:** No data.

### Section 13 – Disposal Considerations

This product, as supplied, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261). Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine, at the time of disposal, whether the material is a hazardous waste



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subject to RCRA.

The transportation, storage, treatment, and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional considerations, as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of this material must be conducted in compliance with all federal, state and local regulations.

Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death. Recommend using a non-hazardous solvent to remove the product. Follow federal, state and local regulations for the disposal of the waste material, regardless of its classification.

## Section 14 – Transport Information

### Ambient Temperature Material (Viscous Liquid)

<b>Shipping Name:</b> Not Regulated	<b>Packaging Authorizations:</b>	<b>Quantity Limitations:</b>
<b>Shipping Symbols:</b> NA	a) <b>Exceptions:</b> NA	a) <b>Passenger, Aircraft, or Railcar:</b> NA
<b>Hazard Class:</b> NA	b) <b>Non-bulk Packaging:</b> NA	b) <b>Cargo Aircraft Only:</b> NA
<b>ID No.:</b> NA	c) <b>Bulk Packaging:</b> NA	<b>Vessel Stowage Requirements:</b>
<b>Label:</b> NA		a) <b>Vessel Stowage:</b> NA
<b>Special Provisions (172.102):</b> NA		b) <b>Other:</b> NA

## Section 15 – Regulatory Information

**EPA Regulations:** This product and/or its components are listed on the TSCA Chemical Inventory. Additional reporting (Tier II, Tier I, or Chemical Release Reporting) may be required.

### RCRA

RCRA Hazardous Waste Number: Not listed.

RCRA Hazardous Waste Classification (40 CFR 261): This material should not be hazardous due to characteristics.

### CERCLA

CERCLA: Not listed.

CERCLA Reportable Quantity (RQ): This material, in its solid form, is not a listed hazardous substance and does not have a reportable quantity. However, if spilled in liquid form into waters of the U.S., it may be reportable under the Clean Water Act.

### SARA

SARA 311/312 Codes: Fire–No, Pressure–No, Reactivity–No, Immediate (acute)–Yes, Delayed (chronic)–Yes.

SARA Toxic Chemical: Not listed.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

### OSHA Regulations



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Hazard Communication Standard (29 CFR 1910.1200): Yes

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): See Table in Section 2.

OSHA Specifically Regulated Substance: No

#### State Regulations

The following chemicals are specifically listed by individual states. For details on each state's regulatory requirements, contact the appropriate agency in that state.

Pennsylvania Right-to-Know - calcium carbonate, toluene (vapors)

Rhode Island Hazardous Substances List - calcium carbonate, toluene (vapors)

Florida Hazardous Substances List - amorphous silica

Minnesota Right-to-Know - calcium carbonate, toluene (vapors), amorphous silica

New Jersey - toluene (vapors), amorphous silica

Texas Air Contaminants With Health Effects Screening Level

Illinois Toxic Substance Disclosure to Employees List

California State Superfund Hazardous Substance

California Proposition 65 Carcinogens or Reproductive Toxins List: This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

### Section 16 – Other Information

#### Revision Notes:

#### Additional Hazard Rating Systems:

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