CRAFCO INC

SAFETY DATA SHEET

1. Identification

Product identifier Crafco Roadsaver Silicone NS Sealant, Roadsaver Silicone SL

Other means of identification Not available.

Recommended use Pavement Joint Sealant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer: Crafco, Inc.

Address: 6165 West Detroit St.

Chandler, AZ 85226 USA

Contact Name: Jim Chehovits **Telephone:** 602-276-0406

E-mail: jim.chehovits@crafco.com 800-424-9300 (North America) + 1-703-527-3887 (International)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Reproductive toxicity Category 2 **Environmental hazards** Hazardous to the aquatic environment, acute Category 2

hazard

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting

effects.

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. Avoid

release to the environment.

Response IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair):

Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed

or if you feel unwell: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

See section 13 of this SDS for disposal instructions.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Polydimethylsiloxane		9016-00-6	15 - 40
Silica		112945-52-5	0 - 5
Toluene		108-88-3	0 - 2
Other components below reportab	le levels		40 - 70

Composition comments The full text for all R-phrases is displayed in Section 16 of the SDS.

Material name: Crafco Roadsaver Silicone NS Sealant, Roadsaver Silicone SL 5012 Version #: 02 Revision date: 03-19-2015 Issue date: 01-28-2015

4. First-aid measures

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

Call a physician if symptoms develop or persist.

Skin contact IF ON SKIN: Gently wash with plenty of soap and water. If irritation persists get medical attention.

Immediately rinse with water for several minutes. If a contact lens is present, DO NOT delay Eye contact irrigation or attempt to remove the lens. Continue rinsing. Get medical attention if irritation

develops and persists.

Not available.

Ingestion Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or

poison control center immediately.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.

treatment needed **General information**

If you feel unwell, seek medical advice (show the label where possible). Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from

the chemical

Irritating, corrosive and/or toxic gases or fumes will be released during a fire.

Special protective equipment

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

and precautions for firefighters

Fire-fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Eliminate sources of ignition. Dike far ahead of spill for later disposal. Following product recovery, flush area with water.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing. Do not ingest. Wash hands after handling and before eating. When using, do not eat, drink or smoke. Avoid contact during pregnancy/while nursing. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store in a cool and well-ventilated place. Keep away from heat and sources of ignition. Keep out of the reach of children. Keep container tightly closed.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Туре	Value	
Toluene (CAS 108-88-3)	Ceiling	300 ppm	_
	TWA	200 ppm	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Туре	Value	
Silica (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	
US. ACGIH Threshold Limit Val	ues		
Components	Туре	Value	
Toluene (CAS 108-88-3)	TWA	20 ppm	
US. NIOSH: Pocket Guide to Ch	nemical Hazards		
Components	Туре	Value	
Silica (CAS 112945-52-5)	TWA	6 mg/m3	
Toluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time	
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*	
	0.03 mg/l	Toluene	Urine	*	
	0.02 mg/l	Toluene	Blood	*	

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Toluene (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Skin designation applies. Toluene (CAS 108-88-3)

Appropriate engineering

controls

Provide adequate ventilation if fumes or vapors are generated.

Individual protection measures, such as personal protective equipment

Goggles/face shield are recommended. Eye/face protection

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear qauntlet style

gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In the case of respirable dust and/or fumes, use self-contained breathing apparatus. When workers

are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards Not available.

General hygiene When using, do not eat, drink or smoke. Use good industrial hygiene practices in handling this considerations

material. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance Paste. Physical state Liquid. Paste. **Form** Color Grey. Odor Slight. **Odor threshold** Not available. Not available. pН Not available. Melting point/freezing point

Initial boiling point and

boiling range

< 150 °F (< 65.56 °C)

> 392.0 °F (> 200.0 °C) Flash point

Evaporation rate Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

(%)

Flammability limit -

upper (%)

Not available.

Not available.

Explosive limit - lower

(%)

Explosive limit - upper (%)

Not available.

Vapor pressure Not available. Vapor density Not available. **Relative density** Not available.

Solubility(ies)

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature > 700 °F (> 371.11 °C)

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Percent volatile < 5 % Specific gravity 1 - 1.5

10. Stability and reactivity

Reactivity Not available.

Chemical stability Material is stable under normal conditions. Stable under normal temperature conditions.

Possibility of hazardous

reactions

products

Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks. Avoid high temperatures. Temperatures above 100 °C

Incompatible materials Strong acids, alkalies and oxidizing agents.

Hazardous decomposition

Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon

dioxide and/or low molecular weight hydrocarbons. Toxic gas.

11. Toxicological information

Information on likely routes of exposure

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

Inhalation Health injuries are not known or expected under normal use.

Skin contact Causes mild skin irritation. May be irritating to eyes. Eye contact

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity Not classified.

Product Species Test Results

Crafco Roadsaver Silicone NS Sealant, Roadsaver Silicone SL (CAS Mixture)

Acute

Dermal

LD50 Rabbit 594.9618 ml/kg estimated

Inhalation

LC50 Mouse 16878.3496 ppm, 24 Hours estimated

Oral

LD50 Rat 109.7093 g/kg estimated

Other

LD50 Mouse 2489.5566 mg/kg estimated

Species	Test Results
Rat	56204.9023 mg/kg estimated
Species	Test Results
Mouse	> 15000 mg/kg
Rat	> 22500 mg/kg
Rabbit	12124 mg/kg
	14.1 ml/kg
Mouse	5320 ppm, 8 Hours
	400 ppm, 24 Hours
Rat	26700 ppm, 1 Hours
	12200 ppm, 2 Hours
	8000 ppm, 4 Hours
	FF,
Rat	2.6 g/kg
-	- 31 3
Mouse	59 mg/kg
	1332 mg/kg
rat.	1332 Hg/Ng
	Rat Species Mouse Rat Rabbit Mouse

^{*} Estimates for product may be based on additional component data not shown.

Not available.

Skin corrosion/irritation Causes mild skin irritation. Not classified.

Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available. Skin sensitization Not available.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silica (CAS 112945-52-5) 3 Not classifiable as to carcinogenicity to humans. Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity

- single exposure

Not available.

Specific target organ toxicity

- repeated exposure

Not available.

Not available. **Aspiration hazard**

Chronic effects Not relevant at normal room temperatures. When heated, harmful vapors may be formed.

12. Ecological information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Product Species Test Results

Crafco Roadsaver Silicone NS Sealant, Roadsaver Silicone SL (CAS Mixture)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hr

Product		Species	Test Results
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	5.5 mg/l, 96 hr
Components		Species	Test Results
Polydimethylsiloxane ((CAS 9016-00-6)		
Aquatic			
Fish	LC50	Channel catfish (Ictalurus punctatus)	2.36 - 4.15 mg/l, 96 hours
Toluene (CAS 108-88-	-3)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Toluene 2.73

Mobility in soilNot available.Other adverse effectsNot available.

13. Disposal considerations

Disposal instructionsContract with a disposal operator licensed by the Law on Disposal and Cleaning. Do not dispose of

waste into sewer. Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose in accordance with all applicable regulations.

Hazardous waste code Not regulated.

US RCRA Hazardous Waste U List: Reference

Toluene (CAS 108-88-3) U220

Waste from residues /

unused products

Dispose of in accordance with local regulations.

Contaminated packaging Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Toluene (CAS 108-88-3) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Chemical name CAS number % by wt. Toluene 108-88-3 0 - 2

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Toluene (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA)

Hazardous substance

Section 112(r) (40 CFR

68.130)

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)

Toluene (CAS 108-88-3)

DEA Essential Chemical Code Number

Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

US state regulations

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Silica (CAS 112945-52-5) Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

Toluene (CAS 108-88-3) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

Silica (CAS 112945-52-5) Toluene (CAS 108-88-3)

US. Rhode Island RTK

Toluene (CAS 108-88-3)

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Toluene (CAS 108-88-3) Listed: January 1, 1991 US - California Proposition 65 - CRT: Listed date/Female reproductive toxin Toluene (CAS 108-88-3) Listed: August 7, 2009

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No

Country(s) or regionInventory nameOn inventory (yes/no)*KoreaExisting Chemicals List (ECL)Yes

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Philippine Inventory of Chemicals and Chemical Substances

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

 Issue date
 01-28-2015

 Revision date
 03-19-2015

Version # 02

Philippines

Further information HMIS® is a registered trade and service mark of the NPCA.

References ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge,

information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

Revision Information Composition / Information on Ingredients: Disclosure Overrides

Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data

Yes