

# **MATERIAL SAFETY DATA SHEET**



# TruSil 100 Silicone Sealant (All Colors)

Silicone Rubber Compound

Revision 2 Prepared 2014-07-01

## **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Product Name: TruSil 100 - All Colors Product Codes: TS-100 C, W, B, A

Synonyms: Silicone sealant

General Use: Sealant and adhesive, general purpose, food service

Manufacturer

EverKem Diversified Products 5180 Indiana Avenue Winston-Salem, NC 27106 USA **Telephone Number for Information** 

+1-800-638-3160

**Emergency Telephone Number** 

+1-800-638-3160

## **SECTION 2 - HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW:**

Colorless, heavy bodied paste; acetic acid odor. May be irritating to skin, eyes and respiratory system.

NOTE: Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

OSHA/HCS Status: This material contains "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard (28 CFR 1910.1200).

EEC LABELING AND RISK PHRASES Xi, R36/37/38, R41

## **EXPECTED ROUTES OF EXPOSURE**

EYE CONTACT SKIN INHALATION

#### **EFFECTS OF OVEREXPOSURE**

**EYES:** Direct contact with uncured product causes eye irritation.

SKIN: Skin irritation possible after contact with uncured product. Uncured product contact will irrittate lips, gums and tongue.

**INHALATION:** Causes mild respiratory tract irritation in uncured state.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES/SKIN:** Redness and itching or burning sensation may indicate eye or excessive skin exposure. **INHALATION:** Excessive exposure may cause irritation to the upper and lower respiratory system.

ORAL: May be harmful if swallowed. Repeated ingestion or swallowing large amounts may injure internally.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

No known applicable information.

# **SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

% by Weight	Ingredient	CAS Number	EC Number	EC Classification
60.0 - 90.0	Poly(dimethylsiloxane), hydroxyl terminated	70131-67-8		Xi, R36/37/38
5.0 - 10.0	Silica, amorphous	7631-86-9	265-148-2	Xi, R36/37
5.0 - 10.0	Polydimethylsiloxane	63148-62-9	241-677-4	
1.0 - 5.0	Methyltriacetoxysilane	4253-34-3	224-221-9	R14; C, R34; Xn, R22

# **SECTION 4 - FIRST AID MEASURES**

**INHALATION:** If product vapors cause respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

**EYES:** Immediately flush eyes with lukewarm water for 15 - 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.

**SKIN:** Remove contaminated clothing, shoes and leather goods. Quickly and gently remove excess chemical with a dry cloth or paper towel. Flush with lukewarm flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.

**INGESTION:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Industrial Grade Silicone (Clear)

Page 1 of 5

## **SECTION 5 - FIRE FIGHTING MEASURES**

FLASH POINT LEL UEL FLAMMABILITY CLASSIFICATION

>93° C (199° F) N.A. N.A. Not determined

EXTINGUISHING MEDIA: On small fires use carbon dioxide, dry chemical or water spray. On large fires use dry chemical, foam or water spray.

#### **SPECIAL FIRE AND EXPLOSION HAZARDS**

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

# SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control runoff water to prevent environmental contamination.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate protective clothing designated in Section 8. Remove all sources of ignition. Ventilate the area.

**SMALL & LARGE SPILLS:** Wipe or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material. as well as those materials and items employed in the cleanup of releases.

# **SECTION 7 - HANDLING AND STORAGE**

**HANDLING PRECAUTIONS:** Wear all appropriate protective equipment as specified in Section 8. Keep containers closed when not in use. Use with adequate ventilation. Product evolves acetic acid when exposed to water or humid air. Provide ventilation during use to control acetic acid within exposure guidelines or use respiratory protection. Avoid contact with eyes and skin. Avoid breathing vapor. Do not take internally.

STORAGE CATEGORY: Not applicable

**STORAGE PRECAUTIONS:** Use reasonable care. Keep in cool, dry, ventilated storage areas in closed containers and away from water or moisture. Transfer only to approved containers having correct labeling. Containers that have been opened should be carefully resealed and kept upright to prevent leakage. Keep out of reach of children,

## **SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

Acetic acid (CAS #64-19-7) is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGI TLV: TWA 10 ppm, STEL 15 ppm.

## **OCCUPATIONAL EXPOSURE LIMITS**

CAS Number	Ingredient	OSHA PEL	ACGIH TLV	NIOSH
7631-86-9	Silica, amorphous	80 mg/m3 TWA (final rule)		10 ppm TWA
4253-34-3	Methyltriacetoxysilane	See acetic acid comments.		

**ENGINEERING CONTROLS:** Use adequate ventilation. Local exhaust is preferable. Refer to OSHA Standards 1910.94, 1910.107, 1910.108. **PROTECTIVE EQUIPMENT:** Wear protective clothing to prevent repeated or prolonged contact with product.

**RESPIRATORY PROTECTION:** Avoid breathing vapor. Respiratory protection is not needed under ambient conditions with adequate local exhaust. Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. If vapor is generated when material is heated or handled, appropriate respiratory

protection should be worn. Always use a NIOSH/MESA approved respirator when vapor concentration exceeds applicable concentration limits.

**EYE PROTECTION:** Wear protective goggles or safety glasses with side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166. It is recommended that contact lenses be removed before using this sealant. Do not handle lenses until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses, causing severe eye irritation.

**HAND PROTECTION:** Neoprene rubber gloves, nitrile gloves or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable. Breakthrough time of selected gloves must be greater than the intended use period.

WORK/HYGIENIC PRACTICES: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Practice safe workplace habits. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

# **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE Colorless paste pH Not determined ODOR Acetic acid odor VOLATILE VOLUME 3.1% (m)

Industrial Grade Silicone (Clear)
Page 2 of 5

**DENSITY** ca. 1.040 g/cm3 (8.68 lb/gal)

SPECIFIC GRAVITY 1.040

BOILING POINT Not determined MELTING POINT Not determined

VOLATILE ORGANIC COMPOUNDS (VOC) 36 g/L

EVAPORATION RATE <1 (Butyl acetate = 1)
VAPOR DENSITY Not determined
SOLUBILITY IN WATER Insoluble
SOLUBILITY IN ORGANIC SOLVENT Insoluble

and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. An

# **SECTION 10 - STABILITY AND REACTIVITY**

Stability: Stable; contact with water or humid air may result in the release of acetic acid vapors.

**Conditions to Avoid:** Avoid exposure to extreme temperatures.

Incompatibility (Materials to Avoid): None known. Water, moisture or humid air can cause hazardous vapors to form (acetic acid).

Hazardous Decomposition Products: Thermal decomposition products include carbon oxides, acetic acid, silicon dioxide, formaldehyde.

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Thermal decomposition products include carbon oxides, acetic acid, silicon dioxide, formaldehyde.

This product contains methylpolysiloxanes, which can generate formaldehyde at approximately 300 degrees F (150 deg C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin

MSDS for formaldehyde is available from many chemical suppliers.

Hazardous Polymerization: Will not occur

# **SECTION 11 - TOXICOLOGICAL INFORMATION**

### **ACUTE TOXICOLOGY DATA**

This product contains the following components which in their pure form have the following characteristics. No listing made if data is unavailable.

CAS No.	Ingredient Name Poly(dimethylsiloxane), hydroxyl terminated	Test & Species		Result	
70131-67-8		Oral LD50 Dermal LD50 Inhalation LC50		>20,720 mg/kg >15,500 mg/kg Not available	
7631-86-9	Silica, amorphous	Oral LD50 Dermal LD50 Inhalation LC50		>5,000 mg/kg >5,000 mg/kg >2.08 mg/l - 4 hr (dust)	
63148-62-9	Polydimethylsiloxane	Oral LD50 Dermal LD50 Inhalation LC50	Rat Rat	>5,000 mg/kg (Literature) >2,008 mg/kg Not available	
4253-34-3	Methyltriacetoxysilane	Oral LD50 Dermal LD50 Inhalation LC50	Rat	1,602 mg/kg Not available Not available	

# Potential Chronic Health Effects: Polydimethylsiloxane), hydroxyl terminated (CAS #70131-67-8)

Chronic Effects: Not listed as a carcinogen by IARC, ACGIH, NTP or OSHA. No data is available regarding its mutagenicity, and/or teratogenicity, nor is there available data that indicates it causes adverse developmental and/or fertility effects. RTECS: VW3157812

## Potential Chronic Health Effects: Silica, Amorphous (CAS #7631-86-9)

**Chronic Effects:** IARC Group 3 carcinogen (Not classifiable as to its carcinogenicity to humans). Not listed as a carcinogen by ACGIH, NTP or OSHA. No data is available regarding its mutagenicity, and/or teratogenicity, nor is there available data that indicates it causes adverse developmental and/or fertility effects. RTECS: VV7565000

# Potential Chronic Health Effects: Polydimethylsiloxane (CAS #63148-62-9)

**Chronic Effects:** Not listed as a carcinogen by IARC, ACGIH, NTP or OSHA. No data is available regarding its mutagenicity, and/or teratogenicity, nor is there available data that indicates it causes adverse developmental and/or fertility effects.

## Potential Chronic Health Effects: Methyltriacetoxysilane (CAS #4253-34-3)

Chronic Effects: Not listed as a carcinogen by IARC, ACGIH, NTP or OSHA. No data is available regarding its mutagenicity, and/or teratogenicity, nor is there available data that indicates it causes adverse developmental and/or fertility effects. RTECS: VV4500000

## **SECTION 12 - ECOLOGICAL INFORMATION**

This product contains the following components which in their pure form have the following characteristics. No listing made if data is unavailable.

# Data for Component: Poly(dimethylsiloxane), hydroxyl terminated

Environmental Effects: No bioaccumulation potential. Siloxanes are removed >90% by binding onto sewage sludge. No adverse effects on bacteria. The siloxanes in this product do not contribute to the biochemical Oxygen demand (BOD). No adverse effects on aquatic organisms.

Biodegradation: In soil, siloxanes are degraded.

Aquatic Ecotoxicity: No data available

## Data for Component: Poly(dimethylsiloxane), hydroxyl terminated

**Environmental Effects:** Bioaccumulation is not expected to occur. Insoluble in water. Forms thin oil on surface of water. Absorbed by floating particles. Separation by sedimentation.

Industrial Grade Silicone (Clear)
Page 3 of 5

Biodegradation: Biologically not degradable. Polydimethylsiloxanes are degradable to a certain extent in abiotic processes.

Aquatic Ecotoxicity: According to past experience toxicity to fish is improbable.

## Data for Component: Methyltriacetoxysilane

Environmental Effects: Bioaccumulation is not anticipated since this material is hydrolytically unstable. It undergoes rapid hydrolysis in aquatic media to form acetic acid and trisilanols; thus the exposures to this material is likely to be transient.

Environmental Fate and Transport: No data available

Aquatic Ecotoxicity No data available

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

The generation of waste should be avoided or minimized whenever possible. Although this product is classified as non-hazardous under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261 this material and its container should be disposed of in a safe way as empty containers may contain product residue. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial and Local laws and regulations.

# **SECTION 14 - TRANSPORT INFORMATION**

**Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

DOT, Ground USA:Not regulated for transportationSignal Word:NoneUN TGD, Canada:Not regulated for transportationHazard Symbols:Xi - Irritant

IMO/IMDG: Not regulated for transportation Marine Pollutant: This product is not a marine pollutant.

ICAO/IATA: Not regulated for transportation

## **SECTION 15 - REGULATORY INFORMATION**

#### **U. S. FEDERAL REGULATIONS**

**OSHA Hazard Communication Standard:** This material contains components which are "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard (28 CFR 1910.1200).

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

## Superfund Amendments and Reauthorization Act (SARA)

## SARA Section 311/312 Hazard Categories:

Reactive hazard: No Pressure hazard: No Fire hazard: No Immediate/acute: Yes Delayed/chronic: No

**SARA 313 Information:** No components of this material are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

## SARA 302/304/311/312 Extremely Hazardous Substance:

No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

# SARA 302/304 Emergency Planning & Notification:

No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): None of the components of this product are listed.

## Clean Air Act (CAA)

This product does not contain any Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

# Clean Water Act (CWA)

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

## **U.S. State Regulations**

## California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

This product does not contain chemical(s) known to the state of California to cause cancer or other reproductive harm.

## Other U.S. State Inventories:

This product contains the following chemicals listed on the Massachusetts Hazardous Substance List:

Silica, amorphous (CAS #7631-86-9)

This product contains the following chemicals listed on the Minnesota Hazardous Substances List:

Octamethylcyclotetrasiloxane (CAS #556-67-2)

This product contains the following chemicals listed on the New Jersey State Right to Know Hazardous Substance List: Methyltriacetoxysiloxane (CAS #4253-34-3)

Industrial Grade Silicone (Clear)

Page 4 of 5

This product contains the following chemicals listed on the Pennsylvania Hazardous Substance List: Silica, amorphous (CAS #7631-86-9)

#### **CANADA**

## WHMIS Hazard Symbol and Classification:

Class D, Division 2, Subdivision B (TOXIC)



D-2 B - Material causing other toxic effects

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the MSDS contains all the information required by the Controlled Products Regulations.

#### Canadian Domestic Substances List / Non-Domestic Substances List (DSL/NDSL):

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Some ingredients in this product are quantity regulated per the DSL and/or are not listed on the NDSL. These materials are present in quantities below reporting requirements and are considered proprietary by the manufacturer.

Canadian Ingredient Disclosure List (IDL): Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 3.

#### **EUROPEAN ECONOMIC COMMUNITY**

EUROPEAN COMMUNITY REGULATORY: All intentional ingredients are listed on the European EINECS Inventory.

### **EEC LABEL SYMBOL AND CLASSIFICATION:**

#### **EEC RISK PHRASES**

R36/37/38 Irritating to eyes, respiratory system and skin.

R41 Risk of serious damage to the eyes.

#### **EEC SAFETY PHRASES**

S2 Keep out of reach of children.S24/25 Avoid contact with skin and eyes.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**S51** Use only in well-ventilated areas...

## **EEC LABEL SYMBOL(S):**



"Xi" - Irritant

LABEL SYMBOL(S):



Health

Irritant

## **SECTION 16 - OTHER INFORMATION**

## **Hazardous Material Information System (HMIS)**

# Health 1 Flammability 1 Physical Hazard 0 Personal Protection C

## HMIS HAZARD RATING Legend

\* = Chronic Health Hazard 2 = MODERATE 0 = INSIGNIFICANT 3 = HIGH 1 = SLIGHT 4 = EXTREME

## Flammability

**National Fire Protection Association (NFPA)** 



Instability

Special

## Full Text of Risk (R) - Phrases Referenced in Section 3.

R14 Reacts violently with water.
R22 Harmful if swallowed.

R34 Causes burns

R36/37 Irritating to eyes and respiratory system.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Industrial Grade Silicone (Clear)

Page 5 of 5