



American Sealants, Inc.  
 P.O. Box 80307  
 Fort Wayne, IN 46898-0307

(260) 489-0728  
 (260) 489-0825  
 Fax (260) 489-0519

# Product Data

## SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT: 600 SILICONE SEALANT**  
**Military Specification: MIL-A-46106A Type 1**

**Supplier: American Sealants, Inc.**  
**P.O. Box 80307**  
**Fort Wayne, IN 46818**

**Phone: (260) 489-0728**  
**Fax: (260) 489-0519**  
**Emergency: (800) 535-5053**  
**Revision date: 01/16/04**

**Chemical Family/Use: Silicone Rubber**  
**Formula: Mixture**

## SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Product Composition/ CAS. Reg. No.</u>	<u>Approx. Wgt. % TWA</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>		<u>Units</u>
		<u>STEL</u>	<u>TWA</u>	<u>STEL</u>	<u>Units</u>	
<b>A. Hazardous</b>						
Methyltriacetoxysilane 4253-34-3	1-5	10(R)	NE	10(R)	NE	PPM
Octamethylcyclotetrasiloxane 556-67-2	1-5	5 ppm	NE	GE REC	NE	GUIDE
<b>B. Non-hazardous</b>						
Silanol/STPD Siloxane W/ME SILSQXNS 68554-67-6	5-10	NF	NE	NF	NE	NA
Tetramer Treated Fumed Silica 68583-49-3	10-30	10	NE	15	NE	MG/M3
Dimethyl Polysiloxane Silanol/ST 70131-67-8	60-80	NA	NE	NA	NE	NA
Red Iron Oxide 1309-37-1	1-5	5	NE	10	NE	MG/M3

See Section 15 for description of any WHMIS Trade Secret(s)

## SECTION 3. HAZARDS IDENTIFICATION

**Emergency Overview:**

This section not in use

**Potential Health Effects:**

**Ingestion:** Irritation of the mouth, throat, and stomach

**Skin Contact:** Uncured product contact will irritate lips, gums and tongue  
 Uncured product contact may irritate the skin

**Inhalation:** Causes mild respiratory irritation

**Eye Contact:** Uncured product contact irritation.

**Medical Conditions Aggravated:** None Known

**Subchronic (Target Organ) Effects:** Reproductive Disorders. May cause liver effects

**Chronic Effects/Carcinogenicity:** This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

**Products/Ingredients:** This space reserved for special use

**Principle routes of exposure:** Eyes, Inhalation

**Other:** Acetic Acid released during curing.

Octamethylcyclotetrasiloxane

**Ingestion:** Rodents give large dose via oral gavage of octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed increased liver weight relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appeared normal) as well as hypertrophy (increased cell size).

**Inhalation:** In inhalation studies, laboratory rodents exposed to octamethylcyclotetrasiloxane (300 ppm five days week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects of liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents.

Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation). With octamethylcyclotetrasiloxane (D4). Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found.

Interim results from a two generation reproductive study in rats exposed to 500 and 700 ppm D4 (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) resulted in a statically significant decrease in live mean litter size as well as extended periods of off spring delivery (dystocia). These results were not observed at the 70 and 300 ppm dosing levels.

The relevance of these data to humans is unclear. Further studies are ongoing.

This product contains Methylpolysiloxanes which can generate Formaldehyde at approximately 300°F (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard.

---

## SECTION 4. FIRST AID MEASURES

---

**Ingestion:** None Known

**Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Skin:** To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water.

**Inhalation:** Remove to fresh air.

**Note to Physician:** None known

---

## SECTION 5. FIRE FIGHTING MEASURES

---

<b>Flash Point (Method Used):</b>	NA	(C) NA	(F) NA
<b>Method:</b>	NA		
<b>Ignition Temp</b>	UNK	(C) UNK	(F) UNK
<b>Flammability Limits in air:</b>	<b>Lower (%)</b> : NA	<b>Upper (%)</b> : NA	
<b>Sensitivity to Mechanical Impact (Y/N):</b>	No		
<b>Sensitivity to Static Discharge:</b>	Sensitivity to static discharge is not expected		
<b>Extinguishing Media:</b>	All standard firefighting media		

Special Firefighting Procedures: None known

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

---

**Action to be taken if material is released or spilled:** Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazards. Wear proper protective equipment as specified in the protective equipment section.

---

## SECTION 7. HANDLING AND STORAGE

---

**Precautions To Be Taken In Handling And Storing:**

Avoid contact with skin and eyes.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the fingertips for several days and transfer to lenses and cause severe eye irritation.

Product releases acetic acid during application and curing.

Use mechanical ventilation to stay below TLV of 10 ppm acetic acid.

Uncured product contact irritates eyes.

Uncured product contact may irritate skin.

---

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

**Engineering Controls:** Exhaust ventilation

Eyewash stations

Use in a well ventilated area

Localized ventilation should be used to control dust levels.

**Respiratory Protection:** Use in a well ventilated area

Use approved NIOSH respiratory protection if TLV exceeded or over exposure is likely.

**Protective Gloves:** Cloth gloves

**Eyes and face Protection:** Use safety glasses

**Ventilation:** Use only in well ventilated area

Mechanical ventilation

**Other Protective Equipment:** None known

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

---

**Product Information**

<b>Boiling Point:</b>	NA	(C) NA	(F)
<b>Vapor Pressure (20°C) (MM HG):</b>	NEG		
<b>Vapor Density (AIR=1):</b>	NEG		
<b>Freezing Point:</b>	UNK	(C) UNK	(F)
<b>Melting Point:</b>	UNK	(C) UNK	(F)
<b>Physical State:</b>	Solid		
<b>Odor:</b>	Acetic Acid		
<b>Color:</b>	Red		
<b>Odor Threshold (PPM)</b>	1.0		
<b>% Volatile by Volume:</b>	<3.9		
<b>Evap. Rate (Butyl Acetate=1)</b>	Neg		
<b>Specific Gravity (Water=1)</b>	1.06		
<b>Density (KG/M3)</b>	1060		
<b>Acid/Alkalinity (MEQ/G)</b>	UNK		
<b>PH</b>	NA		
<b>VOC (EPA METH.24) (G/L)</b>	1060		
<b>Solubility in Water (20°C)</b>	Insoluble		
<b>Solubility in Organic Solvent (State Solvent):</b>	Toluene		

---

**SECTION 10. SPECIAL PRECAUTIONS**

---

**Stability:** Stable  
**Hazardous Polymerization:** Will Not Occur  
**Hazardous Thermal Decomposition/Combustion Products:**  
Carbon Monoxide  
Carbon Dioxide  
Silicon Dioxide  
Acetic Acid  
Formaldehyde  
**Incompatibility (Materials To Avoid):** None Known  
**Conditions to Avoid:** None Known

---

**SECTION 11. TOXICOLOGICAL INFORMATION**

---

**Methyltriacetoxysilane:**  
**Acute Oral LD50 (MG/KG):** 2,060 (RAT)  
**Acute Dermal LD50 (MG/KG):** None Found  
**Acute Inhalation LC50 (MG/L)** None Found  
**Other:** None Found

**AMES Test:**  
**Octamethylcyclotetrasiloxane**  
**Acute Oral LD50 (MG/KG):** >64,000 (RAT)  
**Acute Dermal LD50 (MG/KG):** >16,00 (RBT)  
**Acute Inhalation LC50 (MG/L)** >41 MG/L 6HR (RAT)  
**Other:** Non-irritating to the skin (human)

**AMES Test:**  
**Silanol/STPD Siloxane W/ME SILSQRNS**  
**Acute Oral LD50 (MG/KG):** >40,000 RAT, ESTM.  
**Acute Dermal LD50 (MG/KG):** None Found  
**Acute Inhalation LC50 (MG/L)** .535 MG/L ESTM  
**Other:**

**AMES Test:**  
**Tetramer Treated Fumed Silica**  
**Acute Oral LD50 (MG/KG):** NA  
**Acute Dermal LD50 (MG/KG):** NA  
**Acute Inhalation LC50 (MG/L)** NA  
**Other:**

**AMES Test:**  
**Dimethyl Polysiloxane Silanol/ST**  
**Acute Oral LD50 (MG/KG):** RAT>40,000  
**Acute Dermal LD50 (MG/KG):** Unknown  
**Acute Inhalation LC50 (MG/L)** RAT >535 MG/L (4HR)  
**Other:**

**AMES Test:**  
**Red Iron Oxide**  
**Acute Oral LD50 (MG/KG):** None found  
**Acute Dermal LD50 (MG/KG):** None Found  
**Acute Inhalation LC50 (MG/L)** None Found  
**Other:**

---

**SECTION 12. ECOLOGICAL INFORMATION**

---

**Ecotoxicological Information:** No data at this time

**Chemical Fate Information:**

No data at this time

---

### SECTION 13. DISPOSAL CONSIDERATIONS

---

**Disposal Method:**

Disposal should be made in accordance with federal, state and local regulations.

---

### SECTION 14. TRANSPORT INFORMATION

---

<b>Dot Shipping Name:</b>	None
<b>Dot Hazard Class:</b>	Not Dot Regulated
<b>Dot Label(s):</b>	None
<b>UN/NA Number:</b>	None
<b>Placards:</b>	None
<b>IATA:</b>	Not regulated by IATA
<b>IMO IMDG-code:</b>	NA
<b>European Class:</b>	
<b>RID (OCTD):</b>	NA
<b>ADR (ECE):</b>	NA
<b>RAR (DATA):</b>	NA

---

### SECTION 15. REGULATORY INFORMATION

---

**SARA Section 302:** None Found  
**SARA (311, 312) Hazardous Class:** Acute Health Hazard, Chronic Health Hazard  
**SARA (313) Chemicals:** None  
**CPSC Classification:** Irritant  
**WHMIS Hazard Class:** D2A Very Toxic Materials  
D2B Toxic Materials  
**WHMIS Trade Secret:** None  
**Export:**  
    **SCHDLE B HTSUS:** 3910.00 Silicones in Primary Form  
    **ECCN:** EAR99  
**Hazard Rating System**  
    **HMIS** Flammability 0, Reactivity 0, Health 2  
    **NFPA** Flammability 0, Reactivity 0, Health 2  
**California Proposition 65:** None

---

### SECTION 16. OTHER INFORMATION

---

This product or its components are on the European inventory of existing commercial chemicals (EINCES).....  
These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific content of the intended use.

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.