

## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Manufactured By:** GIO CORPORATION  
MIHO B/D 4F, 394-10, GALHYUN-DONG,  
EUNPYUNG-GU, SEOUL, KOREA  
Tel : 82-2-1644-6582 Fax : 82-2-383-6582

**Revised:** 03-25-2011  
**CHEMTREC**

**Chemical Family/Use:** Sealant/Acid  
**Formula:** SILICONE SEALANT SOLARSIL S301

**HMIS**

Flammability: 0      Reactivity: 0      Health: 1      Prot. Equipm.:

**NFPA**

Flammability: 0      Reactivity: 0      Health: 1      Special Haz.:

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>PRODUCT COMPOSITION</u>	<u>CAS REG NO.</u>	<u>WGT. %</u>
<b><u>A. HAZARDOUS</u></b>		
Distillates, petroleum, hydrotreated light	64742-47-8	10 - 30 %
Methyltriacetoxysilane	4253-34-3	1 - 5 %
<b><u>B. NON-HAZARDOUS</u></b>		
Dimethylpolysiloxane	70131-67-8	60 - 90 %
Silica	7631-86-9	5 - 10 %

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

WARNING! May be harmful if swallowed, inhaled or absorbed through skin. Irritating to eyes, respiratory system and skin. May cause central nervous system depression. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 3 of MSDS for details.

Form: solid

Color: translucent

Odor: Acetic acid

**POTENTIAL HEALTH EFFECTS**

**INGESTION**

May be harmful if swallowed. May cause central nervous system effects. May cause gastrointestinal

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irritation, nausea, vomiting, and diarrhea.

**SKIN**

Uncured product contact will irritate lips, gums and tongue. Skin irritation is possible after contact with the uncured product. May be absorbed through skin and produce effects as listed under "Ingestion".

**INHALATION:** Cause mild respiratory tract irritation. Applies in uncured state. May be harmful if inhaled.

**EYES:** Eye irritation on contact with the uncured product.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing skin or respiratory diseases.

**SUBCHRONIC (TARGET ORGAN ):** Skin; Central nervous system

**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.

**ROUTES OF EXPOSURE:** dermal; Eyes; Inhalation

**OTHER:** Acetic acid released during curing. This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (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. An MSDS for formaldehyde is available from Gio Silicones.

#### **4. FIRST AID MEASURES**

**INGESTION**

Do not induce vomiting. If victim is conscious, give 1-3 glasses of water to drink. Never give anything by mouth to an unconscious person. 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. Get medical attention if irritation persists.

**INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

**EYES**

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

**NOTE TO PHYSICIAN**

None known. Treatment is symptomatic and supportive.

## 5. FIRE-FIGHTING MEASURES

**FLASH POINT:**

**METHOD:** NA

**IGNITION TEMPERATURE:**

**FLAMMABLE LIMITS IN AIR - LOWER (%):** not applicable

**FLAMMABLE LIMITS IN AIR - UPPER (%):** not applicable

**SENSITIVITY TO MECHANICAL IMPACT:** No

**SENSITIVITY TO STATIC DISCHARGE**

Sensitivity to static discharge is not expected.

**EXTINGUISHING MEDIA**

All standard extinguishing agents are suitable.

**SPECIAL FIRE FIGHTING PROCEDURES**

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

## 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 hazard. Wear proper protective equipment as specified in the protective equipment section.

## 7. HANDLING AND STORAGE

**STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Keep container closed when not in use. Avoid contact with skin and eyes. Use only in well-ventilated areas. Remove contact lenses before using 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 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. Store away from heat, sources of ignition, and incompatibles. Keep away from children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS

Eyewash stations; Showers; Use only in well-ventilated areas.

### RESPIRATORY PROTECTION

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

### PROTECTIVE GLOVES

rubber gloves

### EYE AND FACE PROTECTION

safety glasses

### OTHER PROTECTIVE EQUIPMENT

Wear suitable protective clothing and eye/face protection.

### Exposure Guidelines

Component	CAS RN	Source	Value
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Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>BOILING POINT - C &amp; F:</b> applicable	not
<b>VAPOR PRESSURE (20 C) (MM HG): VAPOR DENSITY (AIR=1):</b>	
<b>FREEZING POINT:</b> applicable	not
<b>MELTING POINT:</b> applicable	not
<b>PHYSICAL STATE:</b>	solid
<b>ODOR:</b>	Aceticad
<b>COLOR:</b>	
<b>EVAPORATION RATE (BUTYL ACETATE=1): SPECIFIC GRAVITY (WATER=1):</b>	
<b>DENSITY (KG/M3):</b> KG/M3	ca. 0.96
<b>ACID / ALKALINITY (MEQ/G): pH:</b>	
<b>VOLATILE ORGANIC CONTENT (VOL):</b>	
<b>SOLUBILITY IN WATER (20 C):</b>	insolue

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**SOLUBILITY IN ORGANIC SOLVENT  
(STATE SOLVENT):**

**VOC EXCL. H2O & EXEMPTS (G/L):**

## 10. STABILITY AND REACTIVITY

**STABILITY**

Stable

**HAZARDOUS POLYMERIZATION**

Will not occur

**HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION  
PRODUCTS**

carbon dioxide (CO<sub>2</sub>); Carbon monoxide; Silicon dioxide.;  
formaldehyde; Acetic acid

**INCOMPATIBILITY (MATERIALS TO AVOID)**

None known.

**CONDITIONS TO AVOID**

None known.

## 11. TOXICOLOGICAL INFORMATION

**ACUTE ORAL** Unknown

**ACUTE DERMAL** Unknown

**ACUTE INHALATION** Unknown

**OTHER** None.

## 12. ECOLOGICAL INFORMATION

**SKIN IRRITATION** no data available

**EYE IRRITATION** no data available

**MUTAGENICITY** Unknown

**ECOTOXICOLOGY** no data available

**CHEMICAL FATE** no data available

**DISTRIBUTION**

### 13. DISPOSAL CONSIDERATIONS

#### DISPOSAL METHOD

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

### 14. TRANSPORT INFORMATION

**Not Regulated if Section is Blank**

### 15. REGULATORY INFORMATION

#### Inventories

Japan Inventory of Existing & New Chemical Substances (ENCS)	y (positive listing)
Korea Existing Chemicals Inventory (KECI)	y (positive listing)
China Inventory of Existing Chemical Substances	y (positive listing)
Australia Inventory of Chemical Substances (AICS)	y (positive listing)
TSCA list	y (positive listing)
Canada DSL Inventory	q (quantity restricted)
Canada NDSL Inventory	n (Negative listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	n (Negative listing)
EU list of existing chemical substances	q (quantity restricted)
EU list of existing chemical substances	y (positive listing)
Canada DSL Inventory	n (Negative listing)

For inventories that are marked as quantity restricted or special cases, please contact GE.

#### US Regulatory Information

##### CERCLA

##### PRODUCT COMPOSITION

##### Chemical

##### CERCLA Reportable Quantity

##### CLEAN AIR ACT

##### CLEAN WATER ACT

##### SARA SECTION 302



**SARA (311,312) HAZARD CLASS**

Acute Health Hazard

**SARA (313) CHEMICALS**

**Canadian Regulatory Information**

**WHMIS HAZARD CLASS**

D2B TOXIC MATERIALS, D2A VERY TOXIC MATERIALS

**Other**

**SCHDLE B/HTSUS:** 3214.10.0010 Mastics based on rubber

**ECCN:** EAR99

**CALIFORNIA PROPOSITION 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

**16. OTHER INFORMATION**

**OTHER**

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is 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....., C = ceiling limit NEGL = negligible EST = estimated NF = none found NA = not applicable UNKN = unknown NE = none established REC = recommended ND = none determined V = recommended by vendor By-product = reaction by-product; TSCA inventory status not required under 40 CFR part 720.30(h-2) SKN = skin TS

trade secret R = recommended MST = mist ST = short term exposure limit NT = not tested ppm = parts per million ppb = parts per billion .....