

**SCS1009 12C-Crtrg (0.730 Lbs-0.331 Kg)
 SILICONE SEALANT**
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured By: GES Waterford Plant
 260 Hudson River Rd
 Waterford NY 12188
Revised: 06/12/2006
Preparer: PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS
CHEMTREC 1-800-424-9300
Chemical Family/Use: Sealant
Formula: Silicone sealant

HMIS

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

NFPA

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>PRODUCT COMPOSITION</u>	<u>CAS REG NO.</u>	<u>WGT. %</u>
<u>A. HAZARDOUS</u>		
Methyltriacetoxysilane	4253-34-3	1 - 5 %
Octamethylcyclotetrasiloxane	556-67-2	1 - 5 %
<u>B. NON-HAZARDOUS</u>		
Dimethylpolysiloxane	70131-67-8	60 - 90 %
Treated Filler	68611-44-9	5 - 10 %
Siloxanes & Silicones, Dimethylpolymers w/Methylsilsesquioxanes	68554-67-6	5 - 10 %

3. HAZARDS IDENTIFICATION
EMERGENCY OVERVIEW

WARNING! Irritating to eyes, respiratory system and skin. May be harmful if swallowed. Adverse liver and reproductive effects reported in animals.

Form: solid

Color: Aluminium

Odor: Acetic acid



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POTENTIAL HEALTH EFFECTS

INGESTION

May be harmful if swallowed.

SKIN

Skin irritation is possible after contact with the uncured product. Uncured product contact will irritate lips, gums and tongue.

INHALATION

Causes mild respiratory tract irritation. Applies in uncured state.

EYES

Eye irritation on contact with the uncured product.

MEDICAL CONDITIONS AGGRAVATED

None known.

SUBCHRONIC (TARGET ORGAN)

Reproductive hazard; May cause liver effects.

CHRONIC EFFECTS / CARCINOGENICITY

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

ROUTES OF EXPOSURE

dermal; Eyes

OTHER

Acetic acid released during curing. Contains octamethylcyclotetrasiloxane which may cause reproductive effects based on animal data.

4. FIRST AID MEASURES

INGESTION

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

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.

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NOTE TO PHYSICIAN

Treatment is symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

FLASH POINT:

METHOD:

not applicable

IGNITION TEMPERATURE:

Unknown

FLAMMABLE LIMITS IN AIR - LOWER (%):

Unknown

FLAMMABLE LIMITS IN AIR - UPPER (%):

Unknown

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. Increase area ventilation.

7. HANDLING AND STORAGE

STORAGE

Store away from heat, sources of ignition, and incompatibles.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Use only in well-ventilated areas. 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, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses and cause severe eye irritation. Keep away from children.

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ENGINEERING CONTROLS

Showers; Eyewash stations; Ensure adequate ventilation, especially in confined 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 29 CFR 1910.134).

PROTECTIVE GLOVES

Impermeable or chemical resistant gloves.

EYE AND FACE PROTECTION

Monogoggles.; Face-shield

OTHER PROTECTIVE EQUIPMENT

Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

Component	CAS RN	Source	Value
Octamethylcyclotetrasiloxane	556-67-2	ZGE_OEL, REL	5 ppm

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

BOILING POINT - C & F:	not applicable
VAPOR PRESSURE (20 C) (MM HG):	not applicable
VAPOR DENSITY (AIR=1):	not applicable
FREEZING POINT:	not applicable
MELTING POINT:	not applicable
PHYSICAL STATE:	solid
ODOR:	Acetic acid
COLOR:	Aluminium
EVAPORATION RATE (BUTYL ACETATE=1):	< 1
SPECIFIC GRAVITY (WATER=1):	ca. 1.04
DENSITY (KG/M3):	ca. 1,040.00 KG/M3
ACID / ALKALINITY (MEQ/G):	not applicable
pH:	not applicable
VOLATILE ORGANIC CONTENT (VOL):	not applicable
SOLUBILITY IN WATER (20 C):	insoluble

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SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): Toluene
VOC EXCL. H2O & EXEMPTS (G/L): 20.00

10. STABILITY AND REACTIVITY**STABILITY**

Stable

HAZARDOUS POLYMERIZATION

Will not occur

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

Carbon dioxide (CO₂); formaldehyde; Carbon monoxide; Acetic acid; Silicon dioxide.; 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. An MSDS for formaldehyde is available from GE Advanced Materials - Silicones.

INCOMPATIBILITY (MATERIALS TO AVOID)

None known.

CONDITIONS TO AVOID

None known.

11. TOXICOLOGICAL INFORMATION**ACUTE ORAL**

Remarks: Not applicable.

ACUTE DERMAL

Remarks: Not applicable.

ACUTE INHALATION

Remarks: Not applicable.

OTHER

Octamethylcyclotetrasiloxane Ingestion: Rodents given large doses via oral gavage of octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear 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 on 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



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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 statistically 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. Preliminary results from an ongoing 24-month combined chronic/oncogenicity study in rats exposed to 10, 30, 150, or 700 ppm D4 showed test-article related effects in the kidney (male and female) and uterus of rats exposed for 12 to 24 months. These effects include increased kidney weight and severity of chronic nephropathy, increased uterine weight, increased incidence of endometrial cell hyperplasia, and an increased incidence of endometrial adenomas. All of these effects are limited to the 700 ppm exposure group. The relevance of these data to humans is unclear. Further studies are ongoing. In developmental toxicity studies, rats and rabbits were exposed to octamethylcyclotetrasiloxane at concentrations up to 700 ppm and 500 ppm respectively. No teratogenic effects (birth defects) were observed in either study.

SENSITIZATION

no data available

SKIN IRRITATION

no data available

EYE IRRITATION

no data available

MUTAGENICITY

Unknown

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGY

no data available

CHEMICAL FATE

no data available

DISTRIBUTION

no data available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD

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



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14. TRANSPORT INFORMATION

Further Information: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

15. REGULATORY INFORMATION

Inventories

Canada NDSL Inventory	n (Negative listing)
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)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)
EU list of existing chemical substances	y (positive listing)
TSCA list	y (positive listing)
Canada DSL Inventory	q (quantity restricted)

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

US Regulatory Information

CERCLA		
<u>PRODUCT COMPOSITION</u>	<u>Chemical</u>	<u>CERCLA Reportable Quantity</u>

CLEAN AIR ACT

CLEAN WATER ACT

SARA SECTION 302

SARA (311,312) HAZARD CLASS
Acute Health Hazard; Chronic Health Hazard

SARA (313) CHEMICALS



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Canadian Regulatory Information

WHMIS HAZARD CLASS

D2A VERY TOXIC MATERIALS, D2B TOXIC MATERIALS

Other

SCHDLE B/HTSUS: 3214.10.00.10 Mastic based on rubber

ECCN: EAR99

CALIFORNIA PROPOSITION 65

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

16. OTHER INFORMATION

OTHER

C = ceiling limit applicable NEGL = negligible EST = estimated NF = none found NA = not applicable UNKN = unknown NE = none established REC = recommended ND = none determined V = recommended by vendor SKN = skin TS = trade secret R = recommended MST = mist NT = not tested STEL = short term exposure limit ppm = parts per million ppb = parts per billion
By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2)., 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.