Material Safety Data Sheet

Version: 1.4
10/01/2010

SCS1097 12C-CONTRACTOR SEALANT-Crtrg (0.730 Lbs-0.331 Kg) BRONZE
SILICONE SEALANT

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured By:	**Momentive performance material** **260 Hudson River Rd** **Waterford NY 12188**
Revised:	10/01/2010
Preparer:	PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS
CHEMTREC	1-800-424-9300
Chemical Family/Use:	Sealant
Formula:	Mixture

HMIS

Flammability:	1	Reactivity:	0	Health:	0

NFPA

Flammability:	1	Reactivity:	0	Health:	1

2. 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: Paste **Color:** bronze **Odor:** Acetic acid.

POTENTIAL HEALTH EFFECTS

INGESTION
May be harmful if swallowed.

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

INHALATION
Inhalation of vapors may cause irritation of the respiratory tract. Applies in uncured state.

EYES
Eye irritation is possible after contact with the uncured product.

MEDICAL CONDITIONS AGGRAVATED
None known.

SUBCHRONIC (TARGET ORGAN)
Liver; Reproductive hazard.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS REG NO.	WGT. %
A. HAZARDOUS		
Methyltriacetoxysilane	4253-34-3	1 - 5 %
Octamethylcyclotetrasiloxane	556-67-2	1 - 5 %
B. NON-HAZARDOUS		
Treated Filler	68611-44-9	5 - 10 %
Siloxanes & Silicones, Dimethylpolymers w/Methylsilsesquioxanes	68554-67-6	5 - 10 %
Dimethylpolysiloxane	70131-67-8	60 - 100 %
Polydimethylsiloxane	63148-62-9	1 - 5 %

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. If skin irritation persists, call a physician.

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.

5. FIRE-FIGHTING MEASURES

FLASH POINT:	> 93 °C; 199 °F
METHOD:	estimated
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

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.

STORAGE

Store away from heat, sources of ignition, and incompatibles. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Eyewash stations; Showers

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

Cloth 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
Octamethylcyclotetrasiloxane	556-67-2	Z_INTL_OEL, REL	5 ppm

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

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
FREEZING POINT:	Not applicable
PHYSICAL STATE:	Paste
ODOR:	Acetic acid.
COLOR:	bronze
EVAPORATION RATE (BUTYL ACETATE=1):	< 1

SPECIFIC GRAVITY (WATER=1):	ca. 1.04
DENSITY:	ca. 1.04 g/cm3
ACID / ALKALINITY (MEQ/G):	Not applicable
pH:	Not applicable
SOLUBILITY IN WATER (20 C):	insoluble
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):	Toluene
VOLATILE ORGANIC CONTENT:	1.5 %(m)
VOC EXCL. H2O & EXEMPTS (G/L):	20 g/l

10. STABILITY AND REACTIVITY

STABILITY
Stable

HAZARDOUS POLYMERIZATION
Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS
Carbon dioxide (CO2); formaldehyde; Carbon monoxide; Acetic acid.; Silicon dioxide.

INCOMPATIBILITY (MATERIALS TO AVOID)
None known.

CONDITIONS TO AVOID
None known.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL
Remarks: Unknown

ACUTE DERMAL
Remarks: Unknown

ACUTE INHALATION
Remarks: No data available.

OTHER
A two year combined chronic / carcinogenicity study was conducted on Octamethylcyclotetrasiloxane with inhalative exposure. At the highest test concentration of 700 ppm an increase of uterine adenomes (benign tumors) was observed in some of the female rats, no effects were observed in male rats. The test concentration of 700 ppm greatly exceeds typical workplace exposure (industry proposed exposure limit: 10 ppm).

SENSITIZATION

Not applicable

SKIN IRRITATION

Prolonged contact may cause irritation.

EYE IRRITATION

Contact with eyes may cause irritation.

MUTAGENICITY

Unknown

OTHER EFFECTS OF OVEREXPOSURE

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. A MSDS for formaldehyde is available from Momentive., Acetic acid released during curing., This product contains less than 1% of fluoropropylmethylcyclo-trisiloxane (TFPMCT). Momentive has set a recommended occupational exposure limit (OEL) of 5 ppb for this material based on the results of animal feeding studies in which adverse liver, heart, skeletal muscle, and reproductive effects were seen. The significance of these effects to humans is unclear at this time. Information regarding these previously unknown potential adverse effects has been reported to the U.S. EPA under the provisions of TSCA Section 8(e). A MSDS for TFPMCT is available from Momentive., Octamethylcyclotetrasiloxane Ingestion: Rodents given large doses via oral gavage of octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed liver weights 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 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 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 period 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 enometrial adenomas. All of these effects were limited to the 700 ppm exposure group. The relevance of this 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.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

No data available.

DISTRIBUTION
No data available.
CHEMICAL FATE
No data available.

13. DISPOSAL CONSIDERATIONS

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

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

Australia Inventory of Chemical Substances (AICS)	y (positive listing)
EU list of existing chemical substances	y (positive listing)
Japan Inventory of Existing & New Chemical Substances (ENCS)	n (Negative listing)
China Inventory of Existing Chemical Substances	y (positive listing)
Korea Existing Chemicals Inventory (KECI)	y (positive listing)

Canada DSL Inventory	y (positive listing)	
Canada NDSL Inventory	n (Negative listing)	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)	
TSCA list	y (positive listing)	On TSCA Inventory

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

US Regulatory Information

SARA (311,312) HAZARD CLASS

Acute Health Hazard; Chronic Health Hazard

SARA (313) CHEMICALS

CALIFORNIA PROPOSITION 65

Warning! This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
7439-92-1, Lead.

Canadian Regulatory Information

WHMIS HAZARD CLASS

D2A - Very Toxic Material Causing Other Toxic Effects
D2B - Toxic Material Causing Other Toxic Effects

16. OTHER INFORMATION

OTHER

This product or its components are on the European inventory of existing commercial chemicals (EINECS)., 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., This product or its components are on the Australian inventory (ACOIN)., 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 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).