Advanced Materials - Silicons

SCS1201 12C-Crtrg (0.740 Lbs-0.336 Kg)
Silicone sealant (adhesive)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured By: Boz Factory
Plasticslaan 1
Bergen op Zoom 07 4600 AC

Revised: 05/17/2005
Preparer: PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS
CHEMTREC 1-800-424-9300

Chemical Family/Use: Sealant
Formula: Mixture

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

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>PRODUCT COMPOSITION</th>
<th>CAS REG NO.</th>
<th>WGT. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. HAZARDOUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyltriacetoxilane</td>
<td>4253-34-3</td>
<td>1 - 5 %</td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>556-67-2</td>
<td>1 - 5 %</td>
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<td>B. NON-HAZARDOUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siloxanes &amp; Silicones, Dimethylpolymers w/Methylsilsesquioxanes</td>
<td>68554-67-6</td>
<td>10 - 30 %</td>
</tr>
<tr>
<td>Treated Filler</td>
<td>68611-44-9</td>
<td>10 - 30 %</td>
</tr>
<tr>
<td>Dimethylpolysiloxane</td>
<td>70131-67-8</td>
<td>60 - 90 %</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

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

Form: solid    Color: Translucent    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 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

ROUTES OF EXPOSURE
dermal

OTHER
Acetic acid released during curing. 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.

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
Treatment is symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

FLASH POINT:
METHOD: not applicable
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
Store away from heat, sources of ignition, and incompatibles. Keep out of the reach of children. Keep container tightly closed.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Product releases acetic acid during application and curing. 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.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS
Eyewash stations; Showers; Exhaust ventilation

RESPIRATORY PROTECTION
If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. A NIOSH/MSHA approved respirator with an organic vapor cartridge is generally acceptable. Supplied air respirators may be required for high vapor concentrations. 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
Safety glasses

OTHER PROTECTIVE EQUIPMENT
Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS RN</th>
<th>Source</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>556-67-2</td>
<td>ZGE_OEL, REL</td>
<td>5 ppm</td>
</tr>
</tbody>
</table>

Absence of values indicates none found

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


9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT - C & F:
VAPOUR PRESSURE (20 C) (MM HG):
VAPOUR DENSITY (AIR=1):
FREEZING POINT:
MELTING POINT:
PHYSICAL STATE: solid
ODOR: Acetic acid
COLOR: Translucent
EVAPORATION RATE (BUTYL ACETATE=1):
SPECIFIC GRAVITY (WATER=1):
DENSITY (KG/M3): 1.06 KG/M3
10. STABILITY AND REACTIVITY

STABILITY
Stable

HAZARDOUS POLYMERIZATION
Will not occur

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

INCOMPATIBILITY (MATERIALS TO AVOID)

CONDITIONS TO AVOID
None known.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL
Unknown

ACUTE DERMAL
Unknown

ACUTE INHALATION
NONE FOUND

OTHER
Octamethylocyclotetrasiloxane Ingestion: Rodents given large doses via oral gavage of octamethylocyclotetrasiloxane (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 octamethylocyclotetrasiloxane (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 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.
14. TRANSPORT INFORMATION
Not Regulated if Section is Blank

15. REGULATORY INFORMATION

Inventories

- TSCA list y (positive listing)
- Philippines Inventory of Chemicals and Chemical Substances (PICCS) y (positive listing)
- Canada NDSL Inventory n (Negative listing)
- EU list of existing chemical substances y (positive listing)
- Australia Inventory of Chemical Substances (AICS) y (positive listing)
- Canada DSL Inventory y (positive listing)
- Korea Existing Chemicals Inventory (KECI) y (positive listing)
- China Inventory of Existing Chemical Substances y (positive 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; Chronic Health Hazard

SARA (313) CHEMICALS

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 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 = Not Determined; V = Vendor Recommendation; 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; STEL = Short Term Exposure Limit; NT = Not Tested; ppm = parts per million ppb = parts per billion.