MULTI-PURPOSE SILICONE ADHESIVE

This product appears in the following stock number(s):
12045

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: MULTI-PURPOSE SILICONE ADHESIVE

General use: When cured, these products are not hazardous. They cure by reacting with atmospheric moisture to slowly give off acetic acid, the same substance as in vinegar. Acetic acid vapor can be an irritant

Chemical family: Silicones

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Abbr.</th>
<th>Weight%</th>
<th>ACGIH; TLV-TWA</th>
<th>OSHA PEL:</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLY (DIMETHYLSILOXANE), HYDROXY TERMINATED</td>
<td>n/e</td>
<td>1-60</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE</td>
<td>n/e</td>
<td>0-40</td>
<td>5 mg/m³</td>
<td>5 mg/m³ PEL (oil mist)</td>
<td>n/e</td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>n/e</td>
<td>5-15</td>
<td>10 mg/m³</td>
<td>6 mg/m³ TWA</td>
<td>n/e</td>
</tr>
<tr>
<td>ETHYLTETRACETOXYLSILANE</td>
<td>n/e</td>
<td>0-5</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>METHYLTRIACETOXYLSILANE</td>
<td>n/e</td>
<td>1-5</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>TRADE SECRET (Non-hazardous) MIXTURE</td>
<td>n/e</td>
<td>balance</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
</tbody>
</table>

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDOUS IDENTIFICATION

Emergency Overview

Appearance, form, odor: paste with vinegar odor

CAUTION!: Eye, skin and respiratory irritant. May be harmful if swallowed.

Potential health effects

Primary Routes of Exposure: Eye and skin contact, ingestion, inhalation

Symptoms of acute overexposure

Skin: May cause moderate skin irritation.
Eyes: The acetic acid vapor given off during cure can cause eye irritation in poorly ventilated areas
Inhalation: May cause mild respiratory irritation. Excessive inhalation causes headache, dizziness, nausea and incoordination.
Ingestion: Amounts consumed due to carelessness during normal operations should not cause injury. Ingestion of large amounts may cause discomfort.
Effects of Chronic Exposure: None known.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight%</th>
<th>NTP</th>
<th>ACGIH Carcinogens</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMORPHOUS SILICA</td>
<td>5-15</td>
<td></td>
<td></td>
<td>Group 3 Monograph 68, 1997</td>
</tr>
</tbody>
</table>

Medical Conditions Recognized as Being Aggravated by Exposure:
Methyltriacetoxysilane: Eye, skin and pulmonary disorders.

4. FIRST AID MEASURES
Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin Contact: Wipe off material with paper towel or cloth. Wash off with soap and water. If skin irritation persists, call a physician.
Inhalation: Move to fresh air; get medical attention if symptoms persist
Ingestion: If swallowed, DO NOT induce vomiting. Obtain medical attention immediately

5. FIRE FIGHTING MEASURES
Recommended Extinguishing Media: Water, Dry chemical, Carbon dioxide, foam
Flash point: >200°F (93.3°C) Method: CC
Lower Explosive Limit: n/d Upper Explosive Limit: n/d
Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.
Unusual Fire/Explosion Hazards: Toxic smoke or vapors may form during combustion.
Hazardous Products of Combustion: Acetic acid, Oxides of carbon, Formaldehyde, Silicon dioxide

6. ACCIDENTAL RELEASE MEASURES
Spill Control: Ventilate area. Wear the appropriate personal protective equipment.
Containment: Dike, contain and absorb with clay, sand or other suitable material
Cleanup: Wipe or scrape up spill material. Place in moisture-proof containers. Scrub areas of large spills with detergent and water to remove vinegar odor.
Special procedures: Spills may cause slippery floors.

7. HANDLING AND STORAGE
Handling precautions: Releases acetic acid vapor on contact with moisture or water vapor. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Storage: Store away from heat. Store away from water or moisture. Keep containers closed when not in use.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Ventilation:
General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the
lowest feasible levels when limits have not been established) during the use of this product.

Other engineering controls: Eye wash station.

Personal protective equipment

Eye and face protection: Safety glasses with side shields

Skin protection: Chemical-resistant gloves (i.e. butyl) and other gear as required to prevent skin contact.

Respiratory protection: With good ventilation, none required. Use NIOSH-approved organic vapor cartridges for uncured
product and dust/particle respirators during sanding/grinding operations of cured product as exposure levels dictate.

Comments: When heated to temperatures above 300 degrees F. in the presence of air, this product can form
formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Safe
handling conditions may be maintained by keeping vapor concentrations below the OSHA permissible limit for
formaldehyde

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity: 0.96
Boiling Point: >300°F
Melting point: n/d
Vapor Pressure: n/d
VOC: <70 g/l
pH (5% solution or slurry in water): n/d

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to Avoid: Exposure to moisture.

Incompatibilities: Strong oxidizers

Hazardous Products of Combustion: Acetic acid, Oxides of carbon, Formaldehyde, Silicon dioxide

Conditions under which hazardous polymerization may occur: N/A.

11. TOXICOLOGICAL INFORMATION

Eye Contact: No data available.

Subchronic effects: None known.

Carcinogenicity, teratogenicity and mutagenicity: None known.

Other chronic effects: None known.

Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLY (DIMETHYLSILOXANE), HYDROXY TERMINATED 70131-67-8</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
</tr>
</tbody>
</table>
10. TOXICOLOGICAL PROPERTIES

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
</tr>
<tr>
<td>64742-46-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
</tr>
<tr>
<td>7631-86-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYLTRIACETOXYLSILANE</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
</tr>
<tr>
<td>17689-77-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>METHYLTRIACETOXYLSILANE</td>
<td>2060 mg/kg</td>
<td>n/d</td>
<td>n/d</td>
</tr>
<tr>
<td>4253-34-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRADE SECRET (Non-hazardous) MIXTURE</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
</tr>
</tbody>
</table>

*n/d* = not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available.

Mobility and persistence: No data available.

Environmental fate: No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Recommended Method of Disposal: If material becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state and local regulations.


14. TRANSPORT INFORMATION

Proper shipping name: Not regulated

Technical name: N/A

Hazard class: N/A

UN/ID Number: N/A

Packing group: N/A

Emergency Response Guide no: N/A

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA:
All ingredients of this product are listed or are exempt from listing on the TSCA Inventory.

The following RCRA code(s) applies to this material if it becomes waste:
None

Regulatory status of hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Component</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>12B EXPORT NOTIFICATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLY (DIMETHYLSILOXANE), HYDROXY TERMINATED</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>70131-67-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Component** | **Extremely Hazardous*** | **Toxic Chemical**** | **CERCLA RQ (lbs)** | **12B EXPORT NOTIFICATION:**
--- | --- | --- | --- | ---
DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE 64742-46-7 | No | No | 0.0 | Not required
AMORPHOUS SILICA 7631-86-9 | No | No | 0.0 | Not required
ETHYLTRIACETOXYLSILANE 17689-77-9 | No | No | 0.0 | Not required
METHYLTRIACETOXYLSILANE 4253-34-3 | No | No | 0.0 | Not required
TRADE SECRET (Non-hazardous) MIXTURE | No | No | 0.0 | Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance List.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: Immediate health hazard

**California regulations:** For purposes of the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65), this product does not contain any listed chemical at or above the No Significant Risk Limit.

**Canadian Regulations**
WHMIS Hazard Class: D2B  TOXIC MATERIALS

### 16. OTHER INFORMATION

**Hazardous Material Information System (HMIS) rating:**
- Health 1
- Flammability 1
- Physical Hazard 0

HMIS is a registered trademark of the National Paint and Coatings Assn.

**Revision Date:** September/08/2008
**Revision Number:** 4

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