Material Safety Data Sheet
Universal Mold Release (Aerosol)  
MSDS No. 892
Date of Preparation: February 7, 2007  
Revision: 0006

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Universal Mold Release (Aerosol)  
Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042  
Phone (610) 252-5800, FAX (610) 252-6200

Emergency Contact: Chem-Tel  
Domestic  800-255-3924  
International  813-248-0585

Section 2 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>ACGIH TLV</th>
<th>Exposure Limits</th>
<th>Weight Percent (%)</th>
<th>AEL* Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Ether</td>
<td>115-10-6</td>
<td>None Established</td>
<td>None Established</td>
<td>50-60</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Ethane,1,1,1,2-Tetrafluoro</td>
<td>811-97-2</td>
<td>None Established</td>
<td>None Established</td>
<td>30-40</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Silicone Polymers</td>
<td>Mixture</td>
<td>None Established</td>
<td>None Established</td>
<td>5-10</td>
<td></td>
</tr>
</tbody>
</table>

*AEL is the materials manufactures acceptable exposure limit.

Section 3 - Hazards Identification

Acute Effects

Inhalation: Over exposure by inhalation of vapors may cause respiratory irritation or nonspecific discomfort such as nausea, headache or weakness. Inhalation of concentrations above the recommended limits may cause temporary central nervous system depression with anesthetic effects such as dizziness, headache, incoordination and loss of consciousness or temporary alteration of the heart’s electrical activity (cardiac arrhythmia). Gross overexposure may be fatal. Inhalation of respirable aerosols of the release agent in this product may cause serious toxic effect in the lungs, based on animal studies.

Eye: Eye contact with liquid or vapor may cause irritation.

Skin: Skin contact with the liquid may cause freezing of the skin or irritation.

Ingestion: Ingestion is not considered a potential route of exposure

Carcinogenicity: This product contains no components listed as carcinogenic by IARC, NTP, and OSHA 1910(Z).

Medical Conditions Aggravated by Long-Term Exposure:

Individuals with preexisting diseases of the central nervous or cardiovascular system may have increased susceptibility to the toxicity of excessive exposure.

Chronic Effects: No chronic health effects known.

Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.
**Ingestion:** Ingestion is unlikely route of exposure. Do not induce vomiting unless instructed by a physician.

**Section 4 - First Aid Measures (continued)**

*After first aid, get appropriate in-plant, paramedic, or community medical support.*

**Note to Physicians:**
Because of possible disturbance of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used only in situations of emergency life support.

**Section 5 - Fire-Fighting Measures**

**Fire and Explosion Hazards:** Vapors confined in a poorly ventilated area may be ignited by a spark or flame. Vapors may travel considerable distances to source of ignition. Vapors are heavier than air and may accumulate in low areas. Containers may rupture or explode under fire conditions. Hazardous decomposition products may be formed. Material can accumulate static charges, which can cause an incendiary electrical discharge.

Empty containers retain product residue and can be dangerous.

**Flammability Classification:** Non Flammable aerosol, as determined by ASTM D 3065-77 and FSHA sec. 1500.45. However, this product contains components, which may be ignited under certain circumstances. Do not use near sources such as sparks or open flames.

**Fire-Fighting Instructions:** Use dry chemical, foam or CO₂; water may be ineffective but should be used to keep containers cool.

**Section 6 - Accidental Release Measures**

**Spill /Leak Procedures:** Avoid breathing vapors. Evacuate area until vapor has been dispersed. Remove all sources of ignition. Stop or reduce discharge if it can be done safely.

**Section 7 - Handling and Storage**

**Handling Precautions:** Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Do not use near ignition sources. Contents under pressure. Do not puncture or incinerate.

**Storage Requirements:** Store in cool dry, well-ventilated area away from all sources of ignition. Empty container may contain residues, which are hazardous. Do not store at temperature above 120°F.

**Section 8 - Exposure Controls / Personal Protection**

**Engineering Controls:**

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Administrative Controls:**
Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.

Section 8 - Exposure Controls / Personal Protection (continued)

For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Form</td>
<td>Aerosol Can</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Clear, Slight ethereal odor</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>50 psig @ 70°F</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.86 @ 70°F</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>insoluble</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>(butyl acetate =1) &gt;1</td>
</tr>
</tbody>
</table>

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Hazardous Decomposition Products: Thermal oxidative decomposition of Universal Mold Release (Aerosol) can produce, halogens, halogen acids and possibly carbonyl halides, such as phosgene

Section 11- Toxicological Information

None established

Section 12 - Ecological Information

None Established
Section 13 - Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>DOT</th>
<th>IATA</th>
<th>IMDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name: N/A</td>
<td>Shipping Name: Consumer Commodity</td>
<td>Shipping Name: Aerosol, non-flammable, N.O.S</td>
</tr>
<tr>
<td>UN #: N/A</td>
<td>ID #: 8000</td>
<td>UN #: UN 1950</td>
</tr>
<tr>
<td>Hazard Class: ORM-D</td>
<td>Hazard Class: 9</td>
<td>Hazard Class: 2</td>
</tr>
<tr>
<td>Label: N/A</td>
<td>Label: Non-Required</td>
<td>Label: Non-Required</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

**EPA Regulations:**
SARA 311/312 Codes: This product contains the following chemicals that are subject to release reporting requirements under section 313 of SARA Title III. None

Section 16 - Other Information

**Prepared By:** Dominick J. Finocchio  
**Title:** Technical Director

The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.