1. Identification of the Substance

Product Name: Tissue-Tek® Mold Release Concentrate (Product Code #4141)

Manufactured For: Sakura Finetek USA, Inc. Emergency Telephone Number:
Torrance, CA 90501 USA 800-424-9300 (Chemtrec)
Tel: 310 972-7800

2. Composition/Data on Components

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>Specific Chemical Identity</th>
<th>Exposure Limits/ Toxic Data</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octylphenoxypolyethoxyethanol</td>
<td>Nonionic Surfactant</td>
<td>None established LD50 oral rat - 5 gm, kg</td>
<td>9036-19-5</td>
<td>50%</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td></td>
<td>1000 ppm PEL - TWA</td>
<td>64-17-5</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm TLV - TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 oral rat - 7060 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td></td>
<td>200 ppm PEL - TWA Skin</td>
<td>67-56-1</td>
<td>2.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm TLV - TWA Skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 ppm STEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 oral rat - 5628 mg/kg, LC50 inhalation rat - 64, 100 ppm/4 hr</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

European Community Risk and Safety Phrases: R11, R36, S17, S16, S26

3. Hazards Identification

Man: Flammable! Product is harmful if swallowed. Contact may cause irritation.
Environment: This product contains 50% non-ionic surfactant.

<table>
<thead>
<tr>
<th>HMIS Hazard Rating</th>
<th>HMIS Hazard Rating Scale</th>
<th>Personal Protection (Section 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heath (blue): 2</td>
<td>Insignificant: 0</td>
<td>Safety Glasses</td>
</tr>
<tr>
<td>Flammability (red): 3</td>
<td>Slight: 1</td>
<td>Safety Glasses, Gloves</td>
</tr>
<tr>
<td>Reactivity (yellow): 1</td>
<td>Moderate: 2</td>
<td>Safety Glasses, Gloves, Apron</td>
</tr>
<tr>
<td>Personal Protection: C</td>
<td>High: 3</td>
<td>Face Shield, Gloves, Apron</td>
</tr>
<tr>
<td></td>
<td>Extreme: 4</td>
<td></td>
</tr>
</tbody>
</table>

4. First Aid Measures

Emergencies and First Aid Procedures: Call a physician immediately and arrange for transport to nearest ER (EMERGENCY ROOM).

While awaiting the physician or transport to ER:

Inhalation: Inhalation of vapors in a closed area could be a problem. If faintness or nausea occurs, remove patient to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call for transport to ER.

Ingestion: If victim is conscious and able to swallow, have them drink water or milk to dilute. Induce vomiting only if advised by physician or poison control center. Transport to the hospital as soon as possible.

Skin Contact: Terminate skin contact by removing any contaminated clothing and washing the contacted area with soap and water and then rinse with water. Wash clothing before reuse.

Eye Contact: In case of eye contact, immediately flush eyes with copious amounts of water for at least 15-20 minutes. Raise eye lids to be sure material is rinsed out. Transport to hospital for further care.
5. **Fire Fighting Measures**

**Flash Point (Method Used):** SD 3A Alcohol has a 60°F (TAG Closed Cup)

**Flammable Limits:**
- LEL: 3.3%
- UEL: 19%

**Extinguishing Media:** Use alcohol foam, carbon dioxide, dry chemical, or water spray.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing to prevent contact with the eyes and skin. Cool fire exposed containers with water until well after the fire is out.

**Unusual Fire and Explosion Hazards:** Very flammable liquid. Ethyl alcohol will auto ignite at 685°F. Vapors are heavier than air and can travel along surfaces to ignition sources and flash back.

6. **Accidental Release Measures**

**Steps to be taken in Case Material is Released or Spilled:** EXTINGUISH all open flames or sparks. Ventilate area. Take up with an inert absorbent and place in a disposable container.

7. **Handling and Storage**

Store at temperature and conditions as indicated on the Product Label.

Handle as a flammable liquid. Avoid breathing vapors. Avoid contact with the eyes, skin, and clothing. Keep away from heat, and all sources of ignition.

8. **Exposure Controls/Personal Protection**

**Ventilation:** Use room ventilation sufficient to meet PEL or use in a chemical hood.

**Respiratory Protection:** Respiratory protection is required if airborne concentration exceeds the PEL. For concentrations above the PEL a supplied air respirator is recommended.

**Protective Gloves:** Laboratory neoprene or rubber gloves are recommended.

**Eye Protection:** Standard laboratory safety glasses recommended. Contact lenses should not be worn in the laboratory.

**Other Protective Equipment/Clothing:** A laboratory coat or apron is suggested.

9. **Physical and Chemical Properties**

**Appearance and Odor:** Clear, colorless liquid with alcohol odor.

**pH:** N/D

**Boiling Point (F):** Approx. 173°F

**Melting Point (F):** N/A

**Solubility in Water:** Complete

**Specific Gravity (H2O=1):** N/D

**Vapor Pressure:** N/D

**Evaporation Rate:** N/D

10. **Stability and Reactivity**

**Stability:** Stable

**Conditions to Avoid:** Do not expose to ANY sparks, flames, and other sources of ignition.

**Materials To Avoid:** Avoid oxidizers, strong acids, bases, and acetyl chlorides.

**Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide.

**Hazardous Polymerization:** Will not occur

11. **Toxicological Information**

**Chronic Effects of Overexposure:** Prolonged overexposure to methanol may cause visual impairment, nervous system, liver, and kidney damage. Ethanol and methanol have been found to cause adverse reproductive effects in laboratory animals.

**Carcinogen or Suspected Carcinogen:** None of the components are listed as a carcinogen or suspected carcinogen.

**Medical Conditions Aggravated By Exposure:** Individuals with pre-existing liver or kidney disorders may be at increased risk from exposure.

**Acute Exposure Effects:**

**Inhalation:** Inhalation of vapors can cause respiratory irritation, nausea, headaches, dizziness, and other signs of narcosis. Prolonged overexposure may result in transient or permanent blindness and liver or kidney damage.

**Ingestion:** Ingestion may cause gastrointestinal irritation and nervous system depression with symptoms of headaches, nausea, and narcosis. Severe abdominal, back, and leg pain may occur along with transient or permanent blindness, liver and kidney damage. May be fatal if large volume is ingested.

**Skin Contact:** Contact may cause irritation. Liquid may be absorbed through the skin and can cause effects similar to ingestion. Treat at once.
Eye Contact: May cause moderate to severe irritation with possible damage. Absorption may cause optic nerve damage resulting in transient or permanent blindness.

12. Ecological Information
Ecological effects of this mixture have not been determined.
This product contains 50% non-ionic surfactant which has a reported LC50 for bluegill sunfish of 12 mg/L/96 hr (static).

13. Advice on Disposal
Primary Container Type: The product container is LD polyethylene.
Waste Disposal Method: Each disposal facility must determine proper disposal methods to comply with Local, State, and Federal Environmental Regulations.

14. Transport Information
Proper Shipping Name: Alcohols, n.o.s.
Technical Name: (Denatured alcohol)
Identification Number: UN 1987
Hazard Class And Packaging Group: 3 II
Label(s): Flammable liquid  Pass: IATA 305  Cargo: IATA 307
Unit Volume: 118 mL
Primary Container Type: 125 mL Plastic LD polyethylene
Sales Unit: 12 bottles/case

15. Regulatory Information
SARA 311/312: Hazard Categories for SARA Section 311/312 Reporting: Acute health, chronic health, fire hazard.
SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements under the SARA Section 313 (40 CFR 372): Methanol 2.3%

16. Other Information
This Material Safety Data Sheet has been furnished on request. A revised Material Safety Data Sheet will be furnished only if requested, also in case of specification changes. The above information, which is accurate to the best of our knowledge and belief, describes the safety aspects of our product but does not warrant any product properties. The company gives no warranty as to the accuracy or completeness of such information.