Material Safety Data Sheet

Section I

Section II — Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Hazardous Components (Specific Chemical Identity: Common Names)</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits Recommended</th>
<th>% (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 79-01-6 Trichloroethylene</td>
<td>50PPM</td>
<td>UN 1710(solution)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section III — Physical/Chemical Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>104°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>4.0</td>
</tr>
<tr>
<td>Melting Point</td>
<td>340</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>100%</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>No</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Colorless liquid, irritating non-residual odor at high concentration</td>
</tr>
</tbody>
</table>

Section IV — Fire and Explosion Hazard Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>None(TOC, TCC, COC)</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>UL14.8, UEL22.0</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Water Fog</td>
</tr>
<tr>
<td>Special Fire Fighting Procedures</td>
<td>Pressure demand self contained respiratory equipment</td>
</tr>
<tr>
<td>Unusual Fire and Explosion Hazards</td>
<td>Forms flammable vapor-air mixtures at temperature above ambient</td>
</tr>
</tbody>
</table>

DO NOT USE WELDING OR CUTTING TORCH.
Section V — Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable</td>
<td>Hydrolyst producing small amounts of hydrochloric acid</td>
</tr>
<tr>
<td>Stable</td>
<td>X aluminum, sodium, potassium, magnesium, water</td>
</tr>
</tbody>
</table>

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

Open flames & welding arcs can cause small amounts of phosgene & chlorine to form

Hazardous Polymerization

May Occur

Conditions to Avoid

None

X

Section VI — Health Hazard Data

Route(s) of Entry

Inhalation? yes

Skin? yes

Ingestion? yes

Health Hazards (Acute and Chronic)

Carboxyhemoglobin levels may be elevated. Anesthesia 900PPM death if too much is breathed.

Carcinogenicity:

NTP? NO

IARC Monographs? not considered to be a carcinogen

OSHA Regulated? NO

Sensitization and Hypersensitivity

Inhalation: Minimal effect at exposures below 1000PPM. EYE: contact can irritate eyes

Skin: contact may dry skin

Medical Conditions

Generally Aggravated by Exposure above 1000PPM can depress blood pressure, cardiac sensitization and ventricular arrhythmia

Emergency and First Aid Procedures

EYES: Irrigate with flowing water immediately for 15 min. SKIN: wash off in flowing water, use soap

INHALATION: remove to fresh air, call M.D. INGESTION: call Dr. DO NOT INDUCE VOMITING

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Small spills: allow to evaporate or mop up, wipe or soap up immediately. Remove to out of doors. LARGER SPILLS: contain liquid, transfer to closed metal containers. KEEP OUT OF WATER SUPPLY

Waste Disposal Method

incineration or approved landfill burial

Precautions to Be Taken in Handling and Storing

avoid breathing vapors

Other Precautions

avoid getting in eyes, use in well ventilated area

Section VIII — Control Measures

Respiratory Protection (Specify)

Ventilation

Local Exhaust yes Special none

Mechanical (General) yes other none

Protective Gloves

no other safety goggles

Eye Protection

Other Protective Clothing or Equipment

EYEWASH solutions and safety showers

Work/Hygienic Practices

AVOID INHALATION OR EYE CONTACT