TYCO CPVC
TFP-500 One Step Solvent Cement
SDS (Safety Data Sheet)

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION
PRODUCT NAME: TFP-500 RED Low VOC Cement for CPVC Plastic Pipe
PRODUCT USE: Low VOC Solvent Cement for CPVC Plastic Pipe
SUPPLIER: IPS Corporation
17109 South Main Street, Gardena, CA 90248-3127
P.O. Box 379, Gardena, CA 90247-0379
Tel. 1-310-898-3300

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)
Medical: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:
Acute Toxicity: Category 4
Skin Irritation: Category 3
Skin Sensitization: NO
Eye: Category 2

GHS LABEL: Signal Word: Danger
WHMIS CLASSIFICATION: CLASS B, DIVISION 2

Hazard Statements
H225: Highly flammable liquid and vapor
H319: Causes serious eye irritation
H332: Harmful if inhaled
H335: May cause respiratory irritation
H360: May cause drowsiness or dizziness
H336: May cause respiratory irritation
H318: May cause respiratory irritation
H310: May form explosive peroxides

Precautionary Statements
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
P280: Wear protective gloves/protective clothing/eye protection/face protection
P303+P361: UsePPE: Eye/face protection, gloves, clothing
P338: Keep container tightly closed
P337+P313: Get medical advice/attention

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>EINECS #</th>
<th>REACH Pre-registration Number</th>
<th>CONCENTRATION % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofuran (THF)</td>
<td>109-99-9</td>
<td>203-726-8</td>
<td>05-2116297729-22-0000</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone (MEK)</td>
<td>78-93-3</td>
<td>201-159-0</td>
<td>05-2116297728-24-0000</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>200-662-2</td>
<td>05-2116297713-35-0000</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-84-1</td>
<td>203-631-1</td>
<td>05-2116297718-25-0000</td>
</tr>
</tbody>
</table>

SECTION 4 - FIRST AID MEASURES
Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES
Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
Suitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon, hydrogen chloride and smoke
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

SECTION 6 - ACCIDENTAL RELEASE MEASURES
Personal precautions: Keep away from heat, sparks and open flame.
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

Sections 1-6 excerpt from: Filename: TFP-500 RED LoVoc 1-15.xls
### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
- Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
- Do not eat, drink or smoke while handling.

**Storage:**
- Store in ventilated room or shade below 33°C (90°F) and away from direct sunlight.
- Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
- Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

**EXPOSURE LIMITS:**

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>ACGIH STEL</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
<th>ACGIH STEL Ceiling</th>
<th>ACGIH STEL</th>
<th>ACGIH STEL Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofuran (THF)</td>
<td>50 ppm</td>
<td>150 ppm</td>
<td>200 ppm</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>250 ppm</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone (MEK)</td>
<td>200 ppm</td>
<td>300 ppm</td>
<td>200 ppm</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>300 ppm</td>
</tr>
<tr>
<td>Acetone</td>
<td>500 ppm</td>
<td>750 ppm</td>
<td>1000 ppm</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>750 ppm</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>20 ppm</td>
<td>50 ppm</td>
<td>50 ppm</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>

**Engineering Controls:**

- Use local exhaust as needed.

**Monitoring:**

- Maintain breathing zone airborne concentrations below exposure limits.

**Personal Protective Equipment (PPE):**

- Eye Protection:
  - Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.
- Skin Protection:
  - Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
  - Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.
- Respiratory Protection:
  - Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.

With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** Orange or gray, heavy syrupy liquid
- **Odor:** Ketone
- **pH:** Not Applicable
- **Melting/Freezing Point:** -108.5°C (-163.3°F) Based on first melting component: THF
- **Boiling Point:** 66°C (151°F) Based on first boiling component: THF
- **Flash Point:** -20°C (-4°F) TCC based on THF
- **Specific Gravity:** 0.989 @23°C (73°F) Heavy bodied
- ** Partition Coefficient n-octanol/water:** Not Available
- **Solubility:** Solvent portion soluble in water. Resin portion separates out.
- **Vapor Pressure:** 129 mm Hg @ 20°C (68°F) Based on THF
- **Compounds to avoid:** Solvents, strong acids and bases, amines, ammonia
- **Likely Routes of Exposure:** Inhalation, Eye and Skin Contact
- **Acute symptoms and effects:**
  - Ingestion: May cause nausea, vomiting, diarrhea and mental sluggishness.
  - Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
  - Eye Contact: Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.

### SECTION 10 - STABILITY AND REACTIVITY

- **Stability:** Stable
- **Hazardous decomposition products:** None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
- **Conditions to avoid:** Keep away from heat, sparks, open flame and other ignition sources.
- **Incompatible Materials:** Oxidizers, strong acids and bases, amines, ammonia

### SECTION 11 - TOXICOLOGICAL INFORMATION

- **Likely Routes of Exposure:** Inhalation, Eye and Skin Contact
- **Acute symptoms and effects:**
  - Inhalation: Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
  - Eye Contact: Vapors slightly uncomfortable. Overexposure may result in severe eye injury with conjunctival inflammation on contact with the liquid.
  - Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
- **Chronic (long-term) effects:** Category 2 Carcinogen
- **Toxicity:** LDo5 LC50
- **Target Organs:**
  - Tetrahydrofuran (THF): Inhalation 3 hrs. 21,000 mg/m³ (rat)  STOT SE3
  - Methyl Ethyl Ketone (MEK): Inhalation 23,000 mg/m³ (rat)  STOT SE3
  - Acetone: Inhalation 50,100 mg/m³ (rat)  STOT SE3
  - Cyclohexanone: Inhalation 4 hrs. 8,000 PPM (rat)

### SECTION 12 - ECOLOGICAL INFORMATION

- **Ecotoxicity:** None Known
- **Mobility:** In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of < 490 g/l.
- **Degradability:** Not readily biodegradable
- **Bioaccumulation:** Minimal to none.

### SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

- Follow local and national regulations. Consult disposal expert.

### SECTION 14 - TRANSPORT INFORMATION

**Proper Shipping Name:** Adhesives

**Hazard Class:** 3

**Secondary Risk:** None

**Identification Number:** UN 1133

**Packing Group:** PG II

**Label Required:** Class 3 Flammable Liquid

**Marine Pollutant:** NO

**TDG INFORMATION**

**TDG CLASS:** FLAMMABLE LIQUID 3

**SHIPPING NAME:** ADHESIVES

**UN NUMBER/PACKING GROUP:** UN 1133, PG II

**Supersedes:** JUN 2013

**Date Revised:** JAN 2015
**SECTION 15 - REGULATORY INFORMATION**

<table>
<thead>
<tr>
<th>Precautionary Label Information:</th>
<th>Highly Flammable, Irritant, Carc. Cat. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredients:</td>
<td>USA TSCA, Europe EINECS, Canada DSL, Australia</td>
</tr>
<tr>
<td>Symbols:</td>
<td>F, Xi</td>
</tr>
<tr>
<td>Risk Phrases:</td>
<td>R11: Highly flammable. R66: Repeated exposure may cause skin dryness or cracking</td>
</tr>
<tr>
<td>Safety Phrases:</td>
<td>R36/37: Irritating to eyes and respiratory system. R67: Vapors may cause drowsiness and dizziness</td>
</tr>
<tr>
<td>S2: Keep out of the reach of children</td>
<td>S25: Avoid contact with eyes.</td>
</tr>
<tr>
<td>S8: Keep container in a well-ventilated place.</td>
<td>S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</td>
</tr>
<tr>
<td>S16: Keep away from sources of ignition - No smoking.</td>
<td>S33: Take precautionary measures against static discharges.</td>
</tr>
</tbody>
</table>

**SECTION 16 - OTHER INFORMATION**

| Specification Information: | All ingredients are compliant with the requirements of the European Safety Health & Environmental Affairs Directive on RoHS (Restriction of Hazardous Substances). |
| Department issuing data sheet: | Safety Health & Environmental Affairs |
| Training necessary: | Yes, training in practices and procedures contained in product literature. |
| Reissue date / reason for reissue: | 1/16/2015 / Updated GHS Standard Format |
| Intended Use of Product: | Solvent Cement for CPVC Plastic Pipe |

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

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Final Sections 15-16 excerpt from: Filename: TFP-500 RED LoVoc 1-15.xls
Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.