## SECTION I

### MANUFACTURER'S NAME
IPS Corporation

### ADDRESS
17109 S. Main St., P.O. 379, Gardena, CA. 90248

### CHEMICAL NAME and FAMILY
- Polystyrene Solvent Cement
- Mixture of Polystyrene Resin and Organic Solvents

### TRADE NAME
WELD-ON 4807 Low VOC Cement for Polystyrene

### FORMULA
Proprietary

## SECTION II - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name (MEK)</th>
<th>CAS#</th>
<th>APPROX %</th>
<th>ACGIH-TLV</th>
<th>ACGIH-STEL</th>
<th>OSHA-PEL</th>
<th>OSHA-STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>78-93-3</td>
<td>62 - 72*</td>
<td>200 PPM</td>
<td>300 PPM</td>
<td>200 PPM</td>
<td>300 PPM</td>
</tr>
</tbody>
</table>

All of the constituents of Weld-On adhesive products are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

*Title III Section 313 Supplier Notification: This product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40CFR372. This information must be included in all MSDS's that are copied and distributed for this material.

## SECTION III - PHYSICAL DATA

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Odor</th>
<th>Boiling Point (°F/°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milky, opaque, medium syrupy liquid</td>
<td>Ketone</td>
<td>175.2°F (80°C) Based on first boiling component: MEK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific Gravity @ 73 F ± 3.6 °C (23°C ± 2°C)</th>
<th>Vapor Pressure (mm Hg.)</th>
<th>Percent Volatile by Volume (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical 0.876 ± 0.040</td>
<td>71.2 mm Hg. based on first boiling component, MEK @ 73°F (23°C)</td>
<td>Approx: 60 - 75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor Density (Air = 1)</th>
<th>Evaporation Rate (BUAC = 1)</th>
<th>Solubility in Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>Approx. 5.7</td>
<td>Solvent @ 68°F (20°C) - Approx. 26.8%. Resin precipitates.</td>
</tr>
</tbody>
</table>

VOC STATEMENT: VOC as manufactured: 610 Grams/Liter (g/l). Maximum VOC as applied does not exceed 350 Grams/Liter (g/l). Meets SCAQMD Rule 1168 VOC emission limits for Plastic Cement Welding.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

### FLASH POINT
21°F (-6°C) T.C.C. Based on MEK

<table>
<thead>
<tr>
<th>FLAMMABLE LIMITS</th>
<th>LEL</th>
<th>UEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(PERCENT BY VOLUME)</td>
<td>1.8</td>
<td>11.5</td>
</tr>
</tbody>
</table>

### FIRE EXTINGUISING MEDIA
- Ansul "Purple K" potassium bicarbonate dry chemical, any appropriately sized ABC dry chemical, carbon dioxide, or foam extinguisher can be used. Use of a water fog by trained personnel can avoid water flow or water streams distributing burning material or contaminated water over a large area or into sewers or storm drains.

### SPECIAL FIRE FIGHTING PROCEDURES
- Evacuate enclosed areas. Stay upwind. Close quarters or confined spaces require self-contained breathing apparatus, positive pressure masks or airline masks. Use water spray to cool containers, to flush spills from source of ignition and to disperse vapors.

### UNUSUAL FIRE AND EXPLOSION HAZARDS
- Fire hazard because of low flash point and high volatility. Vapors are heavier than air and may travel to source(s) of ignition at or near ground or lower level(s) and flash back.
SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY:

<table>
<thead>
<tr>
<th>OF ENTRY</th>
<th>Inhalation</th>
<th>Skin Contact</th>
<th>Eye Contact</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EFFECT OF OVEREXPOSURE

ACUTE:
- Inhalation: Concentrations of 100-300 ppm cause nose and throat irritation. Higher concentrations cause irritation, headache, nausea, drowsiness, dizziness, incoordination.
- Skin Contact: Prolonged exposure to liquid or vapors at concentrations greater than the TLV causes moderate irritation and dermatitis.
- Eye Contact: Liquid and vapors are irritating to eyes. Can cause severe injury - damage reversible.
- Ingestion: Moderately toxic. May cause nausea, vomiting and diarrhea.

CHRONIC:
- There is no evidence that exposure to Methyl Ethyl Ketone (MEK) alone causes progressive or irreversible neurotoxic effects. However, simultaneous over-exposure to MEK and n-Hexane can potentiate the known irreversible neurotoxic effects of n-Hexane.
- There is no reported human evidence that these neurotoxic effects occur when exposure to both chemicals is maintained below established OSHA and ACGIH limits.

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

- REPRODUCTIVE EFFECTS: N.A.
- TERATOGENICITY: N.A.
- MUTAGENICITY: N.A.
- EMBRYOTOXICITY: N.A.
- SENSITIZATION TO PRODUCT: N.A.
- SYNERGISTIC PRODUCTS: N.A.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: This material may aggravate an existing dermatitis. Breathing of vapor and/or mist may aggravate asthma and inflammatory or fibrotic pulmonary diseases.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation:
- If overcome by vapors, remove to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen.
- Call physician.

Eye Contact:
- Flush eyes with plenty of water for 15 minutes and call a physician.

Skin Contact:
- Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.

Ingestion:
- Give 1 or 2 glasses of water or milk. Do not induce vomiting. Call physician or poison center immediately.

SECTION VI - REACTIVITY

STABILITY: UNSTABLE

CONDITIONS TO AVOID: X Keep away from heat, sparks, open flame and other sources of ignition.

INCOMPATIBILITY:
- MATERIALS TO AVOID: Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS:
- On combustion: Dense smoke containing carbon monoxide, carbon dioxide and hydrogen cyanide.

HAZARDOUS:
- MAY OCCUR: CONDITIONS TO AVOID: X Keep away from heat, sparks, open flame and other sources of ignition.

POLYMERIZATION:
- WILL NOT OCCUR: CONDITIONS TO AVOID: X Keep away from heat, sparks, open flame and other sources of ignition.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
- Eliminate all ignition sources. Avoid breathing of vapors. Keep liquid out of eyes. Flush with large amount of water. Contain liquid with sand or earth. Absorb with sand or nonflammable absorbent material and transfer into steel drums for recovery or disposal. Prevent liquid from entering drains.

WASTE DISPOSAL METHOD
- Follow local, State and Federal regulations. Consult disposal expert. Can be disposed of by incineration. Excessive quantities should not be permitted to enter drains. Empty containers should be air dried before disposing.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
- Atmospheric levels should be maintained below established exposure limits contained in Section II. If airborne concentrations exceed those limits, use of a NIOSH approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus.

VENTILATION
- Use only with adequate ventilation. Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits set forth in Section II. Use only explosion proof ventilation equipment.

PROTECTIVE GLOVES
- PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile surgical gloves or solvent resistant barrier creme should provide adequate protection when normal solvent cementing practices and procedures are used for solvent welding of plastic sheet/pipe joints.

EYE PROTECTION
- Splashproof chemical goggles, face shield, safety glasses with brow guards and side shields, etc. as appropriate for exposure.

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES
- Impervious apron and a source of running water to flush or wash the eyes and skin in case of contact.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
- Store in the shade between 40°F - 110°F (5°C - 43°C). Keep away from heat, sparks, open flame and other sources of ignition. Avoid prolonged breathing of vapor. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Train employees on all special handling procedures before they work with this product.

OTHER PRECAUTIONS
- Follow all precautionary information given on container label, product bulletins and our solvent cementing literature. All handling equipment should be electrically grounded.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.