SECTION I

MANUFACTURER'S NAME
IPS Corporation
ADDRESS
17109 S. Main St., P.O. Box 379, Gardena, CA. 90248

CHEMICAL NAME and FAMILY
Solvent Cement for PVC Plastic Pipe
Mixture of PVC Resin and Organic Solvents

TRADE NAME:
WELD-ON 700 for PVC Plastic Pipe

FORMULA: Proprietary

SECTION II - HAZARDOUS INGREDIENTS

None of the ingredients below are listed as carcinogens by IARC, NTP or OSHA

<table>
<thead>
<tr>
<th>CAS#</th>
<th>APPROX %</th>
<th>ACGIH-TLV</th>
<th>ACGIH-STEL</th>
<th>OSHA-PEL</th>
<th>OSHA-STEL</th>
<th>DUPONT (A) AEL</th>
<th>DUPONT (B) STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinyl Chloride Resin (PVC)</td>
<td>NON/HAZ</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>35 - 50</td>
<td>750 PPM</td>
<td>1000 PPM</td>
<td>750 PPM</td>
<td>1000 PPM</td>
<td>N/A</td>
</tr>
<tr>
<td>Tetrahydrofuran (THF)**</td>
<td>109-99-9</td>
<td>15 - 30</td>
<td>200 PPM</td>
<td>250 PPM</td>
<td>200 PPM</td>
<td>250 PPM</td>
<td>50 PPM</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-94-1</td>
<td>10 - 25</td>
<td>20 PPM Skin</td>
<td>50 PPM</td>
<td>50 PPM Skin</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone (MEK)</td>
<td>78-93-3</td>
<td>0 - 5*</td>
<td>200 PPM</td>
<td>300 PPM</td>
<td>200 PPM</td>
<td>300 PPM</td>
<td>N/A</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 such listing.

*A 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.

(A) Dupont and BASF mf's Acceptable Exposure Limit (AEL) guidelines for 8 hour and 12 hour TWA. (B) Dupont/BASF recommended STEL for 15 minute TWA.

**Information found in a report from the National Toxicology Program (NTP) on an inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.

SECTION III - PHYSICAL DATA

APPEARANCE
Clear, regular syrupy liquid

ODOR
Ethereal (Threshold = 2-50 PPM)

BOILING POINT (°F/°C)
133°F (57°C)

FREEZING POINT
-139°F (-95°C)

SPECIFIC GRAVITY @ 73°F ± 3.6°F (23°C ± 2°C)
Typical: 0.895 ± 0.040

VAPOR PRESSURE (mm Hg.)
190 mm Hg. based on first boiling component, Acetone @ 68°F (20°C)

PERCENT VOLATILE BY VOLUME (%)
Approx: 80 - 90 %

VAPOR DENSITY (Air = 1)
2.49

EVAPORATION RATE (BUAC = 1)
> 1.0

SOLUBILITY IN WATER
Solvent portion completely soluble in water. Resin portion separates out.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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

FLAMMABLE LIMITS (PERCENT BY VOLUME)
LEL 2.1
UEL 13.0

FIRE EXTINGUISHING MEDIA
Ansur "Purple K" potassium bicarbonate dry chemical, any appropriately sized ABC dry chemical, carbon dioxide or foam extinguisher can be used for small fires. Use of a water fog by trained personnel can extinguish small/large fires.

SPECIAL FIRE FIGHTING PROCEDURES
Evacuate enclosed areas. Stay upwind. Close quarters or confined spaces require self-contained breathing apparatus, positive pressure mask or airline mask. Use of a water fog by trained personnel can extinguish small/large fires and avoid water flow or water streams/spray distributing burning material or contaminated water over a large area or into sewers or storm drains. 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 may flash back.
### SECTION V - HEALTH HAZARD DATA

**PRIMARY ROUTES OF ENTRY:**
- X Inhalation
- X Skin Contact
- Eye Contact
- Ingestion

**EFFECT OF OVEREXPOSURE**

**ACUTE:**
- Inhalation:
  - Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
- Skin Contact:
  - Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
- Eye Contact:
  - Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid. Vapors slightly uncomfortable.
- Ingestion:
  - Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental sluggishness.

**CHRONIC:**
- Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm.

<table>
<thead>
<tr>
<th>REPRODUCTIVE EFFECTS</th>
<th>TERATOGENICITY</th>
<th>MUTAGENICITY</th>
<th>EMBRYOTOXICITY</th>
<th>SENSITIZATION TO PRODUCT</th>
<th>SYNERGISTIC PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. AP.</td>
<td>N. AP.</td>
<td>N. AP.</td>
<td>N. AP.</td>
<td>N. AP.</td>
<td>N. AV.</td>
</tr>
</tbody>
</table>

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing diseases of the eyes, skin or respiratory system may have increased susceptibility to the toxicity of excessive exposures.

**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 control center immediately.

### SECTION VI - REACTIVITY

**STABILITY**
- UNSTABLE
- STABLE

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

**INCOMPATIBILITY**

- Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

**HAZARDOUS DECOMPOSITION PRODUCTS**
- When forced to burn, this product gives off carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

**HAZARDOUS POLYMERIZATION**
- MAY OCCUR
- WILL NOT OCCUR

**CONDITIONS TO AVOID**
- 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**

### 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. Do not use in close quarters or confined spaces. 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 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 cream should provide adequate protection when normal solvent-cement welding practices and procedures are used for solvent welding of plastic sheet/pipe joints.

**EYE PROTECTION**
- Splashproof chemical goggles, face shield, safety glasses (spectacles) with brow guards & 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 - 43.7°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 material handling equipment should be electrically grounded.

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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.