Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. IPS Corporation urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents and contractors of the information on this sheet.

**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 Electrical Conduit
Mixture of PVC Resin and Organic Solvents

**TRADE NAME**
WELD-ON, DUIT 413™ Plastic Pipe Cement for Electrical Conduit

**FORMULA**
Proprietary

**SECTION II - HAZARDOUS INGREDIENTS**

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

<table>
<thead>
<tr>
<th>Chemical Name</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>Polyvinyl Chloride Resin (PVC)</td>
<td>NON-HAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetrahydrofuran (THF)**</td>
<td>109-99-9</td>
<td>5 - 15</td>
<td>50 PPM#Skin</td>
<td>100 PPM</td>
<td>200 PPM</td>
<td>250 PPM</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone (MEK)</td>
<td>78-93-3</td>
<td>20 - 40*</td>
<td>200 PPM</td>
<td>300 PPM</td>
<td>200 PPM</td>
<td>300 PPM</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-94-1</td>
<td>15 - 35</td>
<td>20 PPM Skin</td>
<td>50 PPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>5 - 15</td>
<td>500PPM</td>
<td>750 PPM</td>
<td>750 PPM</td>
<td>1000 PPM</td>
</tr>
</tbody>
</table>

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

**SECTION III - PHYSICAL DATA**

**APPEARANCE**
Clear or Gray, medium syrupy liquid

**ODOR**
Ethereal

**BOILING POINT (°F/°C)**
133°F (57°C) Based on first boiling component: Acetone

**SPECIFIC GRAVITY @ 73° F ± 3.6° (20° C ± 2°)**
Typical 0.910 ± 0.040

**VAPOR PRESSURE (mm Hg.)**
143 mm Hg, based on first boiling component. THF @ 68°F (20°C)

**PERCENT VOLATILE BY VOLUME (%)**
Approx: 85 - 95%

**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.

**VOC STATEMENT**: VOC as manufactured: 730 Grams/Liter (g/L). A reactive diluent per SCAQMD Rule 1168. Maximum VOC emission as applied and tested per SCAQMD Rule 1168. Test Method 316A: 510 g/L.

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT**
-4°F (-20°C); T.C.C. Based on THF

**FLAMMABLE LIMITS (PERCENT BY VOLUME)**

<table>
<thead>
<tr>
<th>LEL</th>
<th>UEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>11.8</td>
</tr>
</tbody>
</table>

**FIRE EXTINGUISHING MEDIA**
Ansul "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 flash back.
SECTION V - HEALTH HAZARD DATA

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

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 potenitlze 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.

REPRODUCTIVE EFFECTS  TERATOGENICITY  MUTAGENICITY  EMBRYOTOXICITY  SENSITIZATION TO PRODUCT  SYNERGISTIC PRODUCTS
N. AP.  N. AP.  N. AP.  N. AP.  N. AP.  N. AP.

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
X UNSTABLE  CONDITIONS TO AVOID
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 POLYMERIZATION
MAY 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
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 with adequate 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.

VENTILATION
use only with adequate ventilation. Do not use in close quarters or conne (modified)

PROTECTIVE GLOVES
PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile surgical gloves or solvent resistant barrier cream should provide acceptable 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 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 - 44°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.

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.

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