

IPS WELD-ON		MATERIAL SAFETY DATA SHEET		Date Revised: FEB 2005 Supersedes: MAR 2004																									
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																													
<b>MANUFACTURER'S NAME</b> IPS Corporation <b>ADDRESS</b> 17109 S. Main St., P.O. Box 379, Gardena, CA. 90248			<b>Transportation Emergencies:</b> CHEMTREC: (800) 424-9300 <b>Medical Emergencies:</b> 3 E COMPANY (24 Hour No.) (800) 451-8346 <b>Business: (310) 898-3300</b>																										
<b>CHEMICAL NAME and FAMILY</b> Acrylic Reactive Cement Mixture of Acrylic Resin and Methyl Methacrylate Monomer			<b>TRADE NAME:</b> WELD-ON 40 (2-Component) Kit <b>FORMULA:</b> Proprietary																										
SECTION II - HAZARDOUS INGREDIENTS																													
None of the ingredients below are listed as carcinogens by IARC, NTP or OSHA																													
	<b>CAS#</b>	<b>APPROX %</b>	<b>ACGIH-TLV</b>	<b>ACGIH-STEL</b>	<b>OSHA-PEL</b>	<b>OSHA-STEL</b>																							
<i>Component "A" Base Resin (90%)</i>																													
Acrylic Synthetic Resin	NON/HAZ	30 - 40	N/A		N/A																								
Methyl Methacrylate Monomer	80-62-6	55 - 65*	100 PPM		100 PPM																								
<i>Component "B" Catalyst/Initiator (10%)</i>																													
10% Benzoyl Peroxide	94-36-0	1 - 10*	5 mg/m <sup>3</sup>		5 mg/m <sup>3</sup>																								
in Dibutyl Phthalate	84-74-2	90 - 99*	5 mg/m <sup>3</sup>		5mg/m <sup>3</sup>																								
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.																													
Under some circumstances, mutagenic changes have been observed with Methyl Methacrylate in animal studies. Precautions should be taken to avoid unnecessary exposure to this cement.																													
<b>BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER</b> DOT Shipping Name: Adhesive DOT Hazard Class: 3 Identification Number: UN 1133 Packaging Group: II Label Required: Flammable Liquid			<b>SPECIAL HAZARD DESIGNATIONS</b> <table border="1"> <thead> <tr> <th></th> <th>HMIS</th> <th>NFPA</th> <th>HAZARD RATING</th> </tr> </thead> <tbody> <tr> <td>HEALTH:</td> <td>"A" -2, "B"-1</td> <td>"A" -2, "B"-1</td> <td>0 - MINIMAL</td> </tr> <tr> <td>FLAMMABILITY:</td> <td>"A" -3, "B"-1</td> <td>"A" -3, "B"-1</td> <td>1 - SLIGHT</td> </tr> <tr> <td>REACTIVITY:</td> <td>"A" -1, "B"-1</td> <td>"A" -1, "B"-1</td> <td>2 - MODERATE</td> </tr> <tr> <td>PROTECTIVE</td> <td></td> <td></td> <td>3 - SERIOUS</td> </tr> <tr> <td>EQUIPMENT:</td> <td>B - H</td> <td></td> <td>4 - SEVERE</td> </tr> </tbody> </table> B = Eye, Hand/Skin (for normal adhesive-welding, small spill, clean-up activities) H = Eye, Hand/Skin, Respiratory Protection and Impermeable Apron (splash/immersion risks)				HMIS	NFPA	HAZARD RATING	HEALTH:	"A" -2, "B"-1	"A" -2, "B"-1	0 - MINIMAL	FLAMMABILITY:	"A" -3, "B"-1	"A" -3, "B"-1	1 - SLIGHT	REACTIVITY:	"A" -1, "B"-1	"A" -1, "B"-1	2 - MODERATE	PROTECTIVE			3 - SERIOUS	EQUIPMENT:	B - H		4 - SEVERE
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<b>SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER</b> DOT Shipping Name: Consumer Commodity DOT Hazard Class: ORM-D																													
SECTION III - PHYSICAL DATA																													
<b>APPEARANCE</b> "A" White, heavy viscous liquid "B" Oily, colorless liquid		<b>ODOR</b> "A" Distinct Odor, "B" Essentially Odorless		<b>BOILING POINT (°F/°C)</b> 214°F (102°C) Based on Methyl Methacrylate Monomer- "A"; 644°F (340°C)-"B"																									
<b>SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°)</b> Typical 1.03 ± 0.040		<b>VAPOR PRESSURE (mm Hg.)</b> 29 mm Hg. @ 20°C (68°F) based on Methyl Methacrylate Monomer- "A"; 1.0 mm Hg. @147°C (298°C)- "B"		<b>PERCENT VOLATILE BY VOLUME (%)</b> Approx: 50 -70 %																									
<b>VAPOR DENSITY (Air = 1)</b> 3.46 based on Monomer-"A" 9.6-"B"		<b>EVAPORATION RATE (BUAC = 1)</b> Approx. 3		<b>SOLUBILITY IN WATER</b> "A", 1.6 wt. % (1.6g/100g) Based on Monomer "B", 0.3 g/l																									
VOC STATEMENT: Maximum VOC emissions: 75 grams/liter (when components mixed). Meets SCAQMD Rule 1168 VOC emission limits for Plastic Cement Welding.																													
SECTION IV - FIRE AND EXPLOSION HAZARD DATA																													
<b>FLASH POINT</b> "A" 51°F (10.6°C) T.C.C.; "B" 375°F (190°C) C.O.C			<b>FLAMMABLE LIMITS</b> (Percent by Volume)		<b>LEL</b> "A" 2.1, "B" 0.47	<b>UEL</b> "A" 12.5, "B" -																							
<b>FIRE EXTINGUISHING MEDIA</b> Appropriately sized ABC dry chemical, carbon dioxide, or foam extinguishers can be used. Use of a water fog by trained personnel can avoid large amounts of water or water streams distributing the burning material over a large area, into sewers or storm drains.																													
<b>SPECIAL FIRE FIGHTING PROCEDURES</b> Full protective equipment, including self-contained breathing apparatus, is recommended. Cool containers of material exposed to heat with cold water spray. with cold water spray. For large fires, evacuate the area and fight fires from a safe distance or protected area.																													
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS</b> Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to source(s) of ignition at or near ground or lower level(s) and flash back. Susceptible to spontaneous heating. Considered a fire hazard because of low flash point. Peroxides and decomposition products are flammable and can ignite with explosive force if confined.																													

## SECTION V - HEALTH HAZARD DATA

### PRIMARY ROUTES

OF ENTRY:  Inhalation  Skin Contact  Eye Contact  Ingestion

### EFFECT OF OVEREXPOSURE

#### ACUTE:

Inhalation: Exposure may result in nausea, drowsiness, dizziness, headache and other CNS effects. Can cause irritation of eyes and nasal passages.

Skin Contact: Skin irritant. Potential skin sensitizer. Repeated or prolonged contact may result in skin irritation, contact dermatitis, rash, itching, swelling.

Eye Contact: Direct exposure to liquids or vapors may result in reversible corneal or conjunctival irritation/inflammation.

Ingestion: Moderately toxic. Do not induce vomiting and obtain prompt medical attention.

#### CHRONIC:

Inhalation Toxicity described in animals exposed by inhalation include inflammation of the nasal cavity and changes in nasal sensory cells and slight decrease in body weight. No reported human neurotoxic effects when exposure is below OSHA - PEL/ACGIH - TLV limits.

Ingestion Toxicity described in animals exposed by ingestion include decreased body weight and increased relative kidney weight at high dose levels.

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

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: This material may aggravate an existing dermatitis. Individuals with pre-existing diseases of the lungs, liver or kidney may have increased susceptibility to the toxicity of excessive exposures.

### EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Remove patient to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Contact physician immediately.

Eye Contact: Immediately flush eyes with flowing water for 15 minutes and contact a physician.

Skin Contact: Remove contaminated clothing and shoes. Wash skin with 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:	EXPOSURE TO FIRE, HEAT, SPARKS, OPEN FLAME AND OTHER SOURCES OF IGNITION, DIRECT SUNLIGHT OR CONTACT WITH OXIDIZING MATERIALS.
		X		
INCOMPATIBILITY	(MATERIALS TO AVOID) Reducing and oxidizing agents. (Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.)		ACTIVE OXYGEN CONTENT (Component "B") < 1%	Not considered an EPA hazardous Waste, Number D003, Reactive Waste

### HAZARDOUS DECOMPOSITION PRODUCTS

This product gives out carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and smoke upon combustion. Generates heat when mixed with oxidizing materials.

HAZARDOUS POLYMERIZATION	MAY OCCUR	WILL NOT OCCUR	CONDITIONS TO AVOID
		X	Keep away from heat Above 130°F (55°C), sparks, open flame and other sources of ignition. Do not store above 100°F (38°C)

## SECTION VII - SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Avoid exposure of personnel to toxic concentration of vapor and guard against accidental fire and explosion. Contain liquid with sand, earth or nonflammable absorbent material sweep and scoop up using non-sparking tools and transfer into steel drums for recovery or disposal. Prevent liquid from entering drains.

### WASTE DISPOSAL METHOD

Follow local, State and Federal regulations concerning health and environmental exposures. Material should not be allowed to drain into domestic sewer or storm drains. Consult authorities or disposal expert.

## 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 creme should provide adequate protection when normal solvent-cement welding and/or mixing 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

Good industrial hygiene practices and 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 a cool dark place below 70°F (21°C). Keep away from all sources of heat, sparks, open flame and other sources of ignition. Close container after each use. Ground containers when pouring. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. 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.