

IPS WELD-ON		MATERIAL SAFETY DATA SHEET				Revised: APR 2007 Supersedes: OCT 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> Solvent Cement for PVC Plastic Pipe Mixture of PVC Resin and Organic Solvents				<b>TRADE NAME:</b> WELD-ON 2704 Low VOC PVC Plastic Pipe Cement <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>	<b>DUPONT (A) AEL (B) STEL</b>
Polyvinyl Chloride Resin (PVC)	NON/HAZ		N/A		N/A		
Tetrahydrofuran (THF)**	109-99-9	5 - 15	50 PPM	100 PPM	200 PPM	250 PPM	50 PPM 75 PPM
Methyl Ethyl Ketone (MEK)	78-93-3	20 - 40*	200 PPM	300 PPM	200 PPM	300 PPM	
Cyclohexanone	108-94-1	15 - 35	20 PPM Skin		50 PPM		
Acetone	67-64-1	5 - 15	500PPM	750 PPM	750 PPM	1000 PPM	
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.							
(A) Dupont and BASF mfg'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.							
<b>BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER</b>				<b>SPECIAL HAZARD DESIGNATIONS</b>			
DOT Shipping Name: Adhesive				<b>HMIS</b>			
DOT Hazard Class: 3				<b>NFPA</b>			
Identification Number: UN 1133				<b>HAZARD RATING</b>			
Packaging Group: II				HEALTH: 2 2 0 - MINIMAL			
Label Required: Flammable Liquid				FLAMMABILITY: 3 3 1 - SLIGHT			
				REACTIVITY: 0 1 2 - MODERATE			
				PROTECTIVE 3 - SERIOUS			
				EQUIPMENT: B - H 4 - SEVERE			
				B = Eye, Hand/Skin Protection (Normal solvent-welding, spill, clean-up activities)			
				H = Eye, Hand/Skin and Respiratory Protection plus Impermeable Apron (splash/immersion risks present)			
<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> Clear, or gray, medium syrupy liquid		ODOR Ethereal		<b>BOILING POINT (°F/°C)</b> 133°F (57°C) Based on first boiling component: Acetone			
<b>SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°)</b> Typical 0.910 ± 0.040		VAPOR PRESSURE (mm Hg.) 190 mm Hg. based on first boiling component, Acetone @ 68°F (20°C)		<b>PERCENT VOLATILE BY WEIGHT (%)</b> Approx: 85 - 95%			
<b>VAPOR DENSITY (Air = 1)</b> 2.49		EVAPORATION RATE (BUAC = 1) > 1.0		<b>SOLUBILITY IN WATER</b> 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							
<b>FLASH POINT</b> -6°F (-21°C) T.C.C. Based on Acetone				<b>FLAMMABLE LIMITS</b> (PERCENT BY VOLUME)		<b>LEL</b>	<b>UEL</b>
						2.1	13.0
<b>FIRE EXTINGUISHING MEDIA</b> 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.							
<b>SPECIAL FIRE FIGHTING PROCEDURES</b> 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.							
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS</b> 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 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.

REPRODUCTIVE EFFECTS N. AP.	TERATOGENICITY N. AP.	MUTAGENICITY N. AP.	EMBRYOTOXICITY N. AP.	SENSITIZATION TO PRODUCT N. AP.	SYNERGISTIC PRODUCTS N. AV.
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**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
	STABLE	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
POLYMERIZATION	WILL NOT OCCUR	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. 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 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.