

IPS WELD-ON		MATERIAL SAFETY DATA SHEET		Date Revised: OCT 2004 Supersedes: AUG 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> 600 Ellis Road, Durham, NC 27703			<b>Transportation Emergencies:</b> CHEMTREC: (800) 424-9300 <b>Medical Emergencies:</b> 3 E COMPANY (24 Hour No.) (800) 451-8346 <b>Business: (919) 598-2400</b>			
<b>CHEMICAL NAME and FAMILY</b> Acrylic Reactive Adhesive Mixture of Polymer Resins and Methyl Methacrylate Monomer		<b>TRADE NAME: WELD-ON</b>		<b>STRUCTURAL SERIES</b> 300 Series 2-Component Cartridge or Kit WELD-ON SS 305, SS 315, SS 340 Adhesives <b>FORMULA:</b> Proprietary		
SECTION II - HAZARDOUS INGREDIENTS						
None of the ingredients below are listed as carcinogens by IARC, NTP or OSHA						
	CAS#	APPROX %	ACGIH-TLV	ACGIH-STEL	OSHA-PEL	OSHA-STEL
<i>Component "A" (90%) -- Base Resin</i>						
Synthetic Polymer Resin	NON/HAZ		N/A		N/A	
Methyl Methacrylate Monomer, Stabilized	80-62-6	39 - 65*	100 PPM		100 PPM	
Methacrylic Acid	79-41-4	1 - 5	20 PPM (Skin)	N/E	N/E	N/E
<i>Component "B" (10%) -- Activator</i>						
Synthetic Polymer Resin	NON/HAZ					
Blended mixture of Benzoate Esters	NON/HAZ	55 - 70*	N/A		N/A	
55% Benzoyl Peroxide paste in proprietary plasticizer	94-36-0	10 - 25*	5 mg/m <sup>3</sup>		5 mg/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 and the Canadian Domestic Substances List (DSL), or are exempt therefrom.						
*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.						
<b>SHIPPING INFORMATION: 2 Components Shipped together</b>			<b>SPECIAL HAZARD DESIGNATIONS</b>			
DOT Shipping Name:	Adhesive	CONTAINERS LARGER THAN ONE LITER	<b>HMIS</b>	<b>NFPA</b>	<b>HAZARD RATING</b>	
DOT Hazard Class:	3		HEALTH:	"A" -2, "B"-1	"A" -2, "B"-1	0 - MINIMAL
Identification Number:	UN 1133		FLAMMABILITY:	"A" -3, "B"-1	"A" -3, "B"-1	1 - SLIGHT
Packaging Group:	II		REACTIVITY:	"A" -1, "B"-1	"A" -1, "B"-1	2 - MODERATE
Label Required:	Flammable Liquid		PROTECTIVE			3 - SERIOUS
<b>SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER</b>			EQUIPMENT:	B - H		4 - SEVERE
DOT Shipping Name:	Consumer Commodity		B = Eye, Hand/Skin Protection (Normal use or application & spill clean-up activities)			
DOT Hazard Class:	ORM-D		H = Eye, Hand/Skin and Respiratory Protection plus Impermeable Apron (When risk of immersion and/or splashing is present)			
<b>SHIPPING INFORMATION IF COMPONENTS SHIPPED SEPARATELY:</b>						
"A": Same as above						
"B": Not regulated, requires no special handling/marketing/labeling as a hazardous or dangerous material						
SECTION III - PHYSICAL DATA						
<b>APPEARANCE</b>		<b>ODOR</b>		<b>BOILING POINT (°F/°C)</b>		
"A"- Off-White, viscous liquid or paste; "B"- White, viscous liquid;		"A" Distinct Strong Odor, "B" Essentially Odorless		214°F (102°C) Based on Methyl Methacrylate Monomer - "A"; N/A -"B"		
<b>SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°)</b>		<b>VAPOR PRESSURE (mm Hg.)</b>		<b>PERCENT VOLATILE BY VOLUME (%)</b>		
Typical 0.940 ("A"), 1.087 ("B") ± 0.040		29 mm Hg. @ 68°F (20°C) based on Methyl Methacrylate Monomer- "A"; 1.0 mm Hg. @ 298°F (147°C)- "B"		Approx: 50 -75 % - "A"; 0 - "B"		
<b>VAPOR DENSITY (Air = 1)</b>		<b>EVAPORATION RATE (BUAC = 1)</b>		<b>SOLUBILITY IN WATER</b>		
3.46 based on Monomer-"A" N/A -"B"		"A" - <1; "B" - N/A		"A", Slight "B", Insoluble		
SECTION IV - FIRE AND EXPLOSION HAZARD DATA						
<b>FLASH POINT</b>		<b>FLAMMABLE LIMITS</b>		<b>LEL</b>	<b>UEL</b>	
"A" 51°F (10.6°C) T.C.C.; "B" 420°F (217°C) C.O.C		(Percent by Volume)		"A" 2.1, "B" 0.47	"A" 12.5, "B" -	
<b>FIRE EXTINGUISHING MEDIA</b>						
Foam, carbon dioxide, dry chemical, water fog (by trained personnel).						
<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. Use of a water fog by trained personnel can avoid large amounts of water or water streams distributing burning material or contaminated water over a large area, into sewers or storm drains. Fight fires from appropriate distance or from 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:                        X     Inhalation        X     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 may result in irritation or burning feeling with corneal or conjunctival inflammation.  
Ingestion:                        Moderately toxic. Do not induce vomiting. 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. Extremely high concentrations have caused embryotoxic effects in laboratory animals.  
Ingestion                        Toxicity described in animals exposed by ingestion include decreased body weight and increased relative kidney weight at high dose levels and damage to the sperm producing cells of the testis.

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:                    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		CONDITIONS TO AVOID:	Exposure to fire, heat, sparks, open flame and other sources of ignition, direct sunlight, contact with oxidizing materials or contamination.
	STABLE	X		

INCOMPATIBILITY (MATERIALS TO AVOID) Reducing and oxidizing agents.	ACTIVE OXYGEN CONTENT (Component "B") < 1% Not considered an EPA hazardous Waste, Number D003, Reactive Waste
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**HAZARDOUS DECOMPOSITION PRODUCTS**  
Oxides of carbon, oxides of nitrogen, hydrogen cyanide, hydrocarbons, dense smoke and gases upon combustion.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID	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)
	WILL NOT OCCUR	X		

## 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. 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. For emergency conditions, 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.

<b>PROTECTIVE GLOVES</b> For frequent dipping or immersion, Component "A" - PVA coated rubber; Component "B" - Nitrile or neoprene rubber. Use of latex/nitrile surgical gloves or solvent resistant barrier creme should provide adequate protection when normal adhesive bonding practices and procedures are used for small quantity mixing and/or application on various substrates.	<b>EYE PROTECTION</b> Splashproof chemical goggles, face shield, safety glasses with brow guards and side shields, etc. as appropriate for exposure.
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**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 the shade between 40°F - 100°F (5°C - 38°C). Keep away from heat, sparks, open flame and other sources of ignition. Close container after each use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Train employees on all special handling procedures before they work with product.

**OTHER PRECAUTIONS**  
Follow all precautionary information given on container label, product bulletins and application instructions. 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.