

IPS		MATERIAL SAFETY DATA SHEET		Date Revised: OCT 2004	
WELD-ON				Supersedes: DEC 2003	
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 600 Ellis road, Durham, NC 27703			Transportation Emergencies: CHEMTREC: (800) 424-9300 Medical Emergencies: 3 E COMPANY (24 Hour No.) (800) 451-8346 Business: (919) 598-2400		
CHEMICAL NAME and FAMILY Acrylic Reactive Adhesive Mixture of Polymer Resins and Methyl Methacrylate Monomer		TRADE NAME: WELD-ON STRUCTURAL SERIES -- 100 Series Adhesive Cartridge SS 115, SS 140, SS 160 Adhesives - (2-Component) Cartridge			
		FORMULA: 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, Inhibited	80-62-6	55 - 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	7 - 14*	5 mg/m ³		5 mg/m ³
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 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 Pla 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.					
BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER			SPECIAL HAZARD DESIGNATIONS		
DOT Shipping Name: Adhesive			HMIS	NFPA	HAZARD RATING
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 EQUIPMENT: B - H		3 - SERIOUS
					4 - SEVERE
SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER			B = Eye, Hand/Skin Protection (Normal use or application & spill clean-up activities) H = Eye, Hand/Skin and Respiratory Protection plus Impermeable Apron (When risk of immersion and/or splashing is present)		
DOT Shipping Name: Consumer Commodity					
DOT Hazard Class: ORM-D					
SECTION III - PHYSICAL DATA					
APPEARANCE "A"- all, white, heavy viscous liquid "B"- all, white, viscous liquid	ODOR "A" Distinct Odor, "B" Essentially Odorless		BOILING POINT (°F/°C) 214°F (102°C) Based on Methyl Methacrylate Monomer - "A"; 644°F (340°C) - "B"		
SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°) Typical 0.960 ("A"), 1.087 ("B") ± 0.040	VAPOR PRESSURE (mm Hg.) 29 mm Hg. @ 68°F (20°C) based on Methyl Methacrylate Monomer- "A"; 1.0 mm Hg. @ 298°F (147°C) - "B"		PERCENT VOLATILE BY VOLUME (%) Approx: 50 -70 % - "A"; 6 - 10% - "B"		
VAPOR DENSITY (Air = 1) 3.46 based on Monomer -"A" 9.6-"B"	EVAPORATION RATE (BUAC = 1) "A" - Approx. 3; "B" - N/A		SOLUBILITY IN WATER "A", Slight "B", Insoluble		
SECTION IV - FIRE AND EXPLOSION HAZARD DATA					
FLASH POINT "A" 51°F (10.6°C) T.C.C.; "B" 340°F (172.5°C) C.O.C	FLAMMABLE LIMITS (Percent by Volume)		LEL	UEL	
			"A" 2.1, "B" 0.47	"A" 12.5, "B" -	
FIRE EXTINGUISHING MEDIA Foam, carbon dioxide, dry chemical, water fog (by trained personnel).					
SPECIAL FIRE FIGHTING PROCEDURES 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.					
UNUSUAL FIRE AND EXPLOSION HAZARDS Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to source(s) 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 peroxide 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 passage.

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

Eye Contact: Direct exposure may result in irritation or burning feeling with corneal or conjunctival 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 a 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 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 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	<u>UNSTABLE</u>			CONDITIONS TO AVOID: Exposure to fire, heat, sparks, open flame and other sources of ignition, direct sunlight, contact with oxidizing materials or contamination.
	<u>STABLE</u>	X		

INCOMPATIBILITY (MATERIALS TO AVOID) Reducing and oxidizing agents.	ACTIVE OXYGEN CONTENT (Component "B") < Not considered an EPA hazardous Waste, Number D003, Reactive Waste
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HAZARDOUS DECOMPOSITION PRODUCTS
This product gives out carbon monoxide (CO), carbon dioxide (CO²) and smoke upon combustion. Generates heat when mixed with oxidizing materials.

HAZARDOUS POLYMERIZATION	<u>MAY OCCUR</u>			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)
	<u>WILL NOT OCCUR</u>	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 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 for disposal.

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 contained breathing apparatus.

VENTILATION
Use with adequate ventilation (approximately ten (10) or more air changes per hour). Provide sufficient ventilation in volume and pattern to keep contaminant concentration below applicable exposure limits set forth in Section II. Open doors and/or windows usually ensure airflow and air changes. Use local exhaust ventilation to remove contaminants from employee breathing zone. If mechanical ventilation is necessary, use only explosion-proof ventilation equipment.

PROTECTIVE GLOVES For frequent dipping or immersion, Component "A" - PVA coated rubber; Component "B" or neoprene rubber. Use of latex/nitrile surgical gloves or solvent resistant barrier creme should provide adequate protection for spill clean-up or when normal adhesive bonding practices and procedures are used for small quantity mixing and/or application on various substrates.	EYE PROTECTION 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.