

IPS WELD-ON		MATERIAL SAFETY DATA SHEET		Date Revised: AUG 2005 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																													
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 -- 600 Series Adhesives WELD-ON SS 605 LV (Low Viscosity), SS 620 LV, SS 630 LV 2-Component Cartridge or Clip Pack 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, Stabilized	80-62-6	40 - 65*	100 PPM		100 PPM																								
Methacrylic Acid	79-41-4	1 - 15	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 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 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.																													
BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER			SPECIAL HAZARD DESIGNATIONS																										
DOT Shipping Name: Adhesive DOT Hazard Class: 3 Identification Number: UN 1133 Packaging Group: II Label Required: Flammable Liquid			<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 EQUIPMENT:</td> <td>B - H</td> <td></td> <td>3 - SERIOUS</td> </tr> <tr> <td></td> <td></td> <td></td> <td>4 - SEVERE</td> </tr> </tbody> </table> 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)				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 EQUIPMENT:	B - H		3 - SERIOUS				4 - SEVERE
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SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER																													
DOT Shipping Name: Consumer Commodity DOT Hazard Class: ORM-D																													
SECTION III - PHYSICAL DATA																													
APPEARANCE	ODOR	BOILING POINT (°F/°C)																											
"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"																											
SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°)	VAPOR PRESSURE (mm Hg.)	PERCENT VOLATILE BY VOLUME (%)																											
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"																											
VAPOR DENSITY (Air = 1)	EVAPORATION RATE (BUAC = 1)	SOLUBILITY IN WATER																											
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																													
FLASH POINT		FLAMMABLE LIMITS		LEL	UEL																								
"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" -																								
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) 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	X	CONDITIONS TO AVOID
	WILL NOT OCCUR		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. 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.

PROTECTIVE GLOVES 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.	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.