IPS Date Revised: JAN 2008 MATERIAL SAFETY DATA SHEET WELD-ON Supercedes: Original Information on this form is furnished solely for the purpose of compliance with the U.S. Occupational Safety and Health Act, the Canadian Hazardous Products Act and Controlled Products Regulations and shall not be used for any other purpose. IPS Corporation urges the customers receiving this 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 - PRODUCT INFORMATION MANUFACTURER'S NAME Transportation Emergencies: **IPS** Corporation CHEMTREC: (800) 424-9300 ADDRESS Medical Emergencies: 3 E COMPANY (24 Hour No.) (800) 451-8346 17109 S. Main St., P.O. Box 379, Gardena, CA. 90248 U.S.A. Business: (310) 898-3300 CHEMICAL NAME and FAMILY TRADE NAME: Mixture of PVC Resin and Organic Solvents WELD-ON 2795 Low VOC Cement for Flex PVC Plastic Pipe SECTION II - HAZARDOUS INGREDIENTS, EXPOSURE LIMITS, TRANSPORT & WHMIS DATA None of the ingredients below are listed as **APPROX %** ACGIH ACGIH OSHA OSHA carcinogens by IARC, NTP, OSHA or ACGIH. BY WEIGHT TLV CAS# STEL TLV STEL LD50 LC50 Chlorinated Polyvinyl Chloride Resin (PVC) N. AP. NON-HAZ N. AP N. AP N. AP Tetrahydrofuran (THF) 200 PPM 109-99-9 35 - 45 50 PPM# Skin 100 PPM 250 PPM Oral: 2880 mg/kg (rat) Inhalation 3 hrs 21.000 PPM (rat) Methyl Ethyl Ketone (MEK) 200 PPM 200 PPM 78-93-3 5 - 15 300 PPM 300 PPM Oral: 3.98 g/kg (rat) Inhalation 4 hrs. 4.000 PPM (rat) Dermal: 8-10 mg/kg (rabbit) Cyclohexanone 108-94-1 5 - 15 20 PPM Skin 50 PPM Oral: 1900 mg/kg (rat) Inhalation LCLO, Dermal: 1.0 g/kg (rabbit) 4 hrs: 2000 PPM rat) 67-64-1 750 PPM Acetone 5 - 15 500 PPM 750 PPM 1000 PPM Oral: 9.75 g/kg (rat) Inhalation LCLO Dermal: 20 g/kg (rabbit) 4 hrs: 16,000 PPM (rat) All of the constituents of Weld-On adhesive products are either listed on the TSCA inventory of chemical substances maintained by the US EPA and the Canadian Domestic Substance List or are exempt therefrom. Invista and BASF mfg's Acceptable Exposure Limit (AEL) guidelines for 8 hour and 12 hour TWA, Invista/BASF recommended STEL for 15 minute TWA: 75PPM. DOT, IATA, IMO/IMDG SHIPPING INFORMATION SPECIAL HAZARD DESIGNATIONS Adhesives HMIS NFPA HAZARD RATING Proper Shipping Name: EXCEPTION: Case quantities of cement in 2 Hazard Class: 3 containers of less than one liter may be HEALTH: 2 0 - MINIMAL Identification Number: UN 1133 shipped as LIMITED QUANTITY or FLAMMABILITY: 3 3 1 - SLIGHT Packing Group: Ш CONSUMER COMMODITY, ORM-D **BEACTIVITY**. 0 2 - MODERATE 1 Label Required: PROTECTIVE 3 - SERIOUS Flammable Liquid TDG INFORMATION EQUIPMENT: B - H 4 - SEVERE

UN NUMBER: 1133, PG II WHMIS CLASSIFICATION: CONTROLLED PRODUCT

FLAMMABLE LIQUID 3

ADHESIVES (TETRAHYDROFURAN)

CLASS B DIVISION 2 CLASS D, DIVISION 2B

TDG CLASS:

SHIPPING NAME

SECTION III - PHYSICAL DATA

SECTION	JN III - PH 13K	JAL DATA					
APPEARANCE			ODOR			DINT	
Green, blue opr clear, medium syrupy liquid		Ethereal (Threshold = 2-50 PPM)			-163 °F (-108.5	5°C)	
				Based on THF			
SPECIFIC GRAVITY @ 73 °F ± 3.6 ° (23 °C ± 2 °) VAPC			VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)		
Typical 0.930 ± 0.040		143 mm Hg. based on first boiling			Approx: 60 - 75 %		
	component, THF @ 68	°F (20 ℃)					
VAPOR DENSITY (Air = 1) EVAPORAT			APORATION RATE (BUAC = 1)		SOLUBILITY IN WATER		
2.49		> 1.0			Solvent portion completely soluble in water.		
		Resin portion separates out.					
RIBUTION	PH INFORMATION	VOC STATEMENT Maximum VOC emissions as applied and tested per SCAQMD Rule					
	N. AP.	1168, Test Method 316A: 510 grams/liter. After drying and curing there are negligible or no emissions.					
SECTION IV	- FIRE AND EX	KPLOSION H	AZARD) DATA			
AUTO IGNITION TEMP	P.			FLAMMABLE LIMITS	LEL	UEL	
609.8 ℉ (321 ℃), THF				(PERCENT BY VOLUME)	2.0	11.8	
	ribution SECTION IV AUTO IGNITION TEMF	ODOR (liquid 23°C ± 2°) VAPOR PRESSURE (n 143 mm Hg. based on f component, THF @ 68' EVAPORATION RATE > 1.0 TRIBUTION PH INFORMATION N. AP. SECTION IV - FIRE AND EX AUTO IGNITION TEMP.	/ liquid Ethereal (Threshold = 2-50 PPM) 23°C ± 2°) VAPOR PRESSURE (mm Hg.) 143 mm Hg. based on first boiling component, THF @ 68°F (20°C) EVAPORATION RATE (BUAC = 1) > 1.0 RIBUTION PH INFORMATION N. AP. SECTION IV - FIRE AND EXPLOSION H AUTO IGNITION TEMP.	ODOR V liquid 23 °C ± 2 °) VAPOR PRESSURE (mm Hg.) 143 mm Hg. based on first boiling component, THF @ 68 °F (20 °C) EVAPORATION RATE (BUAC = 1) > 1.0 TRIBUTION PH INFORMATION N. AP. 1168, Test Method 316A: 510 grams/lite SECTION IV - FIRE AND EXPLOSION HAZARD AUTO IGNITION TEMP.	ODOR BOILING POINT (*f/*C) / liquid Ethereal (Threshold = 2-50 PPM) 151 °F (67 °C) 23 °C ± 2 °) VAPOR PRESSURE (mm Hg.) PERCENT VOLATILE BY V 143 mm Hg. based on first boiling component, THF @ 68 °F (20 °C) Approx: 60 - 75 % EVAPORATION RATE (BUAC = 1) SOLUBILITY IN WATER Solvent portion completely s Resin portion separates out * 1.0 VOC STATEMENT Maximum VOC emissions as applied and tested 1168, Test Method 316A: 510 grams/liter. After drying and curing there are SECTION IV - FIRE AND EXPLOSION HAZARD DATA AUTO IGNITION TEMP. FLAMMABLE LIMITS	ODOR BOILING POINT (°F/°C) FREEZING POINT (°F/°	

activities)

B = Eye, Hand/Skin Protection (Normal use or application & spill clean-up

H = Eye, Hand/Skin and Respiratory Protection plus Impermeable Apron

(When risk of immersion and/or splashing is present)

-4 °F (-20 °C) T.C.C. Based on THF FIRE EXTINGUISHING MEDIA

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.

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 water fog by trained personnel can extinguish small/large fires and avoid water flow or water streams distributing burning material or contaminated water over a large area or into sewers or storm drains. Fight fires from a safe distance or protected area.

UNUSUAL FIRE AND EXPLOSION HAZARDS SENSITIVITY TO MECHANICAL IMPACT: N. AP SENSITIVITY TO STATIC DISCHARGE: 0.25 Millijoules 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.

Hazardous Combustion Products When forced to burn, this product gives out carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

		SEC	TION V - RE	ACTIV	TY DATA						
STABILITY UNSTABLE STABLE											
INCOMPATIBILITY (MATERIALS TO AVOID) Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.											
HAZARDOUS DECOMPOSITION PRODUCTS When forced to burn, this product gives out carbon monoxide, carbon dioxide, hydrogen chloride and smoke.											
HAZARDOUS POLYMERIZATION	MAY OCCUR WILL NOT OCCUR	Х	CONDITIONS TO A Keep away from hea		en flame and other sources	s of ignition.					
SECTION VI - HEALTH HAZARD DATA & TOXICOLOGICAL PROPERTIES											
PRIMARY ROUTES OF ENTRY:	X Inhalation	-	X Skin Co	ontact	Eye Contac	t	Ingestion				
TOXIC EXPOSURE VALUE Refer to table in Section II for Lethal Dose and Lethal Concentration exposure values EFFECT OF OVEREXPOSURE ACUTE:											
<u>Inhalation:</u> <u>Skin Contact:</u>	Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages. Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.										
Skin Absorption:	Prolonged or widespread exposure may result in the absorption of harmful amounts of material.										
Eye Contact: Ingestion:	Overexposure may result in severe eye injury with corneal or conjuctival inflammation on contact with the liquid. Vapors slightly uncomfortable. Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental sluggishness.										
CHRONIC: Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm.											
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing diseases of the eyes, skin or respiratory system may have increased susceptibility to the toxicity of excessive exposures.											
REPRODUCTIVE EFFECT N. AP.	S TERATOGENICI N. AP.			TOXICITY AP.	SENSITIZATION TO PRO N. AP.	DUCT SYNERGISTIC P N. AV.	RODUCTS				
		-	II - PREVEN	TIVE M	EASURES						
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 METH Follow local, State and Fee drains. Empty containers s	eral regulations. Consu				ration. Excessive quantities	s should not be permitted to	o enter				
RESPIRATORY PROTEC Atmospheric exposure level limits, use of a NIOSH app single short-term exposure self-contained breathing app	els in employees' breatl roved organic vapor ca . For emergency and o	rtridge respire	ator with full face-piec	e is recomme	ended. The effectiveness of	an air purifying respirator i					
VENTILATION Use only with adequate ver Use only explosion proof ver		ent ventilation	n in volume and patter	rn to keep co	ntaminants below applicabl	e exposure limits set forth i	n Section II.				
surgical gloves or solvent r	PROTECTIVE GLOVES PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile EYE PROTECTION Splashproof cheres using cal gloves or solvent resistant barrier creme should provide adequate protection when normal solvent-cement velding practices and procedures are used for making plastic welded pipe joints.										
OTHER PROTECTIVE EQ Impervious apron and a so				n case of cor	tact.						
PRECAUTIONS TO BE TA Store in the shade between Use with adequate ventilati	1 40 ℉ - 110 ℉ (5 ℃ - 4	3.7℃). Keep	away from heat, spar								
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.											
		SECTI	ON VIII - FIR	ST AID	MEASURES						
EMERGENCY AND FIRST			for the state of the second		at a sufficial as a factor of the	han alla ta a ta al 'ar ta alla activa					
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: Skin Contact:											
Ingestion:		f water or mil	k. Do not induce vom	iiting. Call ph	ysician or poison control ce	enter immediately.					
SECTION IX - SDS PREPARATION INFORMATION											
Prepared by: IPS Safety, Health & En	vironmental Affairs Dep		Telephone number: (310) 898-3300		e-mail address <ehs@ipscorp.com< td=""><td>></td><td></td></ehs@ipscorp.com<>	>					
The information contained herei thereof.	n is based on data conside	red accurate. H		xpressed or imp	lied regarding the accuracy of the	his data or the results to be obta	ained from the use				