

**SECTION 1: IDENTIFICATION**

<b>PRODUCT NAME</b>	<b>ENVELO-SEAL™ 2.0 IB W “B” Component</b>
<b>CAS NUMBER</b>	Not available
<b>PRODUCT USE</b>	Polyurethane Foam
<b>MANUFACTURER</b>	Specialty Products, Inc. (SPI)
<b>ADDRESS</b>	2410 104th Street Ct S Suite D, Lakewood, WA 98499
<b>PHONE</b>	253-588-7101 (800) 627-0773
<b>FAX</b>	253-588-7196
<b>EMERGENCY CONTACT</b>	FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL <b>CHEMTREC</b>
<b>TOLL FREE</b>	<b>800-424-9300</b>
<b>INTERNATIONAL</b>	+1-703-527-3887
<b>FAX</b>	913-321-1490

**SECTION 2: HAZARDS IDENTIFICATION**

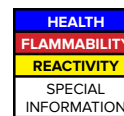
**GHS CLASSIFICATION**

GHS PICTOGRAM



**NEW GHS SCALE**

GHS SCALE	
1	Extreme
2	Serious
3	Moderate
4	Slight



**WARNING**

Personal Protective Equipment



**EMERGENCY OVERVIEW**

HAZARD STATEMENTS		PRECAUTIONARY STATEMENTS	
H315	Causes skin irritation.	P264	Wash hands thoroughly after handling.
H317	May cause an allergic skin reaction.	P280	Wear protective gloves/protective clothing/eye protection/face protection.
H320	Causes eye irritation.	P261	Avoid breathing dust/fumes/gas/mist/vapors /spray.
H303	May be harmful if swallowed.	P271	Use only out doors or in a well-ventilated area.
H335	May cause respiratory irritation.	P272	Contaminated work clothing should not be allowed out of the workplace.
H333	May be harmful if inhaled.	P270	Do not eat, drink, or smoke when using this product.

**APPEARANCE, COLOR, ODOR:** Liquid, pale yellow, slight odor.

**USA:** This material is considered hazardous to health by the OSHA Hazard Communication Standard (29 CFR 1910-1200).

**READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS**

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL NAME	CAS NUMBER	% WEIGHT
Polyether polyol	Not available	13-30
Polyester polyol	Not available	30-60
1,1,1,3,3-pentafluoropropane	460-73-1	7-13
Triethyl phosphate	78-40-0	1-3
Tris (2-chloro-1-methylethyl) phosphate	13674-84-5	1-3
Diethyltoluenediamine	68479-98-1	1-3
Diethanolamine	34354-45-5	1-3
Pentamethylpropylene-triamine	3855-32-1	1-3
Ethylene glycol	107-21-1	0.1-1



#### SECTION 4: FIRST AID MEASURES

<b>EYE:</b>	<b>H320</b>	Causes eye irritation. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>SKIN:</b>	<b>H315/317</b>	Causes skin irritation and may cause an allergic skin reaction. IF ON SKIN: wash with plenty of soap and water. IF SKIN irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before use.
<b>INHALATION:</b>	<b>H333/335</b>	May be harmful if inhaled and may cause respiratory irritation. IF INHALED: remove victim to fresh air and Keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>INGESTION:</b>	<b>H303</b>	May be harmful if swallowed. IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician IF you feel unwell.
<b>NOTES TO PHYSICIAN:</b>		Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.

#### SECTION 5: FIRE FIGHTING MEASURES

<b>FLASH POINT:</b>	Closed cup: 460°F (238°C)
<b>HAZARDS WHEN ON FIRE OR NEAR FLAME:</b>	May produce toxic fumes of carbon dioxide or carbon monoxide.
<b>SUITABLE EXTINGUISHING MEDIA:</b>	Dry chemical, foam, carbon dioxide, or water fog.
<b>UNSUITABLE EXTINGUISHING MEDIA:</b>	None known.
<b>SPECIAL EXPOSURE HAZARDS:</b>	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. If in a fire or heated, a pressure increase will occur and the container may rupture.
<b>SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet, and protective clothing should be worn.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>ACCIDENTAL RELEASE MEASURES:</b>	For major spills call <b>CHEMTREC</b> : Toll free <b>1-800-424-9300</b> for international call <b>1-703-527-3887</b> .
<b>PERSONAL PRECAUTIONS:</b>	Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.
<b>ENVIRONMENTAL PRECAUTIONS:</b>	This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Sources of ignition should be kept clear.
<b>METHODS FOR CONTAINMENT:</b>	Use diking or capping to control migration. Contain and absorb large spillages with a non-flammable absorbent carrier (such as vermiculite, earth, or sand). DO NOT USE combustible materials such as sawdust. Shovel into open-top drums or plastic bags for further decontamination, if necessary. Remove and properly dispose of residues. Dispose of via a licensed waste disposal contractor (See SECTION 13: DISPOSAL CONSIDERATIONS) Notify applicable government authorities if release is reportable.

<b>METHODS FOR CLEANING UP:</b>	Only proceed with clean up by taking the appropriate personal protection measures required and ensure surrounding area does not contain further hazards that could worsen the spill, cause migration, or cause further harm (i.e. eliminate any ignition sources). Move any non-contaminated, non-leaking containers from the spill zone if it can be done safely. Dike, dam, or further restrict and stop active leaks without posing further damage or harm to individuals, the environment, and/or structures. Contain and collect spillage. See SECTION 13: DISPOSAL CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for recommended Personal Protective Equipment (PPE). Obey all local, state, and federal regulations during clean up.
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## SECTION 7: HANDLING & STORAGE

<b>GENERAL:</b>	Ideal storage temperature is 60-90°F (15-32°C). Handling and storage shall be in accordance with local, state/provincial, or federal regulations.
<b>HANDLING:</b>	Before opening this package, read and follow warning labels on all components. Avoid contact with the product or reaction mixture. Put on appropriate personal protective equipment. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded, use respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for details). Do not ingest. Eating, drinking, and smoking shall be prohibited in areas where this material is handled, stored, and processed. Workers shall wash hands and face before eating, drinking, and smoking. Persons with a history of skin sensitization problems, asthma, allergies, or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in the original container or an approved alternative made from a compatible material. Kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse containers.
<b>STORAGE:</b>	Keep container tightly closed and properly sealed when stored. When possible, store product indoors in a dry, well-ventilated area. Store in original container protected from direct sunlight, away from incompatible materials, and away from food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers and use appropriate containment to avoid environmental contamination.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>EXPOSURE LIMITS:</b>		
<b>COMPONENT NAME</b>	<b>CAS NUMBER</b>	<b>EXPOSURE LIMITS</b>
Polyether polyol	Not available	Not available
Polyester polyol	Not available	Not available
1,1,1,3,3-pentafluoropropane	460-73-1	<b>AIHA WEEL (United States, 1/2006)</b> TWA: 300 ppm
Triethyl phosphate	78-40-0	Not available
Tris (2-chloro-1-methylethyl) phosphate	13674-84-5	Not available
Diethyltoluenediamine	68479-98-1	Not available
Diethanolamine	34354-45-5	Not available
Pentamethylpropylene-triamine	3855-32-1	Not available
Ethylene glycol	107-21-1	<b>ACGIH TLV (United States, 1/2006)</b> CEIL: 100 mg/m <sup>3</sup> 0 hours. Form: Aerosol <b>OSHA PEL 1989 (United States, 3/1989)</b> CEIL: 125 mg/m <sup>3</sup> 0 hours CEIL: 50 ppm 0 hours

<b>ENGINEERING CONTROLS:</b>	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<b>HYGIENE MEASURES:</b>	Wash hands, forearms, and face thoroughly with plenty of soap and water after handling chemical products, before eating, smoking, and using the restroom and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminants on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing, washing/cleaning and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.
<b>PERSONAL PROTECTIVE EQUIPMENT (PPE):</b>	
<b>EYE PROTECTION:</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.
<b>SKIN PROTECTION:</b>	Personal protective equipment for the body should be selected based on the task being performed, the risks involved, and should be approved by an industrial hygiene specialist before handling this product.
<b>HANDS PROTECTION:</b>	Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber, or polyvinyl alcohol. Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure the protective properties remain intact. It is noted that the time to breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection factors of the chemical resistant gloves.
<b>RESPIRATORY PROTECTION:</b>	Ensure adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>ENVIRONMENTAL EXPOSURE CONTROLS:</b>	Dispose of raw and spent materials and wastes in compliance with all local, state, and federal regulations to prevent potential environmental contamination. Industrial air monitoring may be required to determine any potential environmental hazards to the atmosphere. This monitoring may result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b>	Liquid	<b>FLASH POINT:</b>	460°F (238°C)
<b>COLOR:</b>	Pale yellow	<b>AUTO-IGNITION TEMPERATURE:</b>	Not available
<b>ODOR:</b>	Slight odor	<b>DECOMPOSITION TEMPERATURE:</b>	Not available
<b>ODOR THRESHOLD:</b>	Not available	<b>EXPLOSIVE LIMITS:</b>	Not explosive
<b>pH:</b>	Not applicable	<b>FLAMMABILITY:</b>	Not available
<b>WATER SOLUBILITY:</b>	Not available	<b>BOILING POINT:</b>	Not available
<b>PARTITION COEFFICIENT:</b>	Not available	<b>BOILING RANGE:</b>	Not available
<b>SPECIFIC GRAVITY:</b>	1.14±0.005 g/cc @ 77°F (25°C)	<b>MELTING/FREEZING POINT:</b>	Not available
<b>VISCOSITY:</b>	550±50 cps @ 77°F (25°C)	<b>VAPOR PRESSURE:</b>	Not available
<b>EVAPORATION RATE:</b>	Not available	<b>VAPOR DENSITY:</b>	Not available
<b>VOC:</b>	Not available	<b>RELATIVE DENSITY:</b>	9.5±0.05 lbs/gal

**SECTION 10: STABILITY & REACTIVITY**

<b>STABILITY:</b>	The product is stable.
<b>INCOMPATIBILITY:</b>	No specific data.
<b>HAZARDOUS REACTION:</b>	No specific data.
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur.
<b>HAZARDOUS DECOMPOSITION:</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: TOXICOLOGY INFORMATION**

<b>ACUTE HEALTH EFFECTS:</b>	
<b>EYE CONTACT:</b>	Causes eye irritation.
<b>SKIN CONTACT:</b>	Causes skin irritation and may cause an allergic skin reaction.
<b>INHALATION:</b>	May be harmful if inhaled and may cause respiratory irritation.
<b>INGESTION:</b>	May be harmful if swallowed.

<b>ACUTE TOXICITY:</b>				
COMPONENT NAME	CAS NUMBER	LD <sub>50</sub> Oral (mg/kg)	LD <sub>50</sub> Dermal (mg/kg)	LC <sub>50</sub> Inhalation (mg/m <sup>3</sup> /4hrs)
Polyether polyol	Not available	2,000-5,000 (rat)	1,000-2,000 (rabbit)	Not available
Polyester polyol	Not available	Not available	Not available	Not available
1,1,1,3,3-pentafluoropropane	460-73-1	Not available	>2,000 (rat)	>1,096 (rat) vapor
Triethyl phosphate	78-40-0	1,310 (rat)	Not available	>2,000 (rat) vapor (6 hrs)
Tris (2-chloro-1-methylethyl) phosphate	13674-84-5	2,800-4,200 (rat)	>5,000 (rabbit)	>460 (rat) dust and mist
Diethyltoluenediamine	68479-98-1	>500 (rat)	>2,000 (rabbit)	Not available
Diethanolamine	34354-45-5	Not available	Not available	Not available
Pentamethylpropylene-triamine	3855-32-1	788 (rat)	1,000-1,500 (rabbit)	Not available
Ethylene glycol	107-21-1	1.1 (human) 4,000-6,140 (rat)	>2,000 (rabbit)	Not available

<b>POTENTIAL CHRONIC EFFECTS:</b>	
<b>CHRONIC EFFECTS:</b>	Diethylene glycol may cause target organ damage, based on animal data.
<b>TARGET ORGANS:</b>	Contains material which may cause damage to the following organs: kidney, the nervous system, cardiovascular system, central nervous system, and pancreas.
<b>CARCINOGENICITY:</b>	Diethyltoluenediamine is listed by the National Toxicology Program as a possible human carcinogen.
<b>MUTAGENICITY:</b>	No known significant effects or critical hazards.
<b>TERATOGENICITY:</b>	Contains material which can cause birth defects.
<b>FERTILITY EFFECTS:</b>	Diethylene glycol may impair female fertility, based on animal data.
<b>DEVELOPMENTAL EFFECTS:</b>	No known significant effects or critical hazards.
<b>MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:</b>	Existing respiratory/pulmonary conditions may be aggravated by overexposure.

**SECTION 12: ECOLOGICAL INFORMATION**

<b>ENVIRONMENTAL EFFECTS:</b>	Based on a review of the individual components this product may be immediately harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment and is not readily biodegradable.
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## SECTION 13: DISPOSAL CONSIDERATION

<b>WASTE DISPOSAL:</b>	By-product wastes or process waste generation should be eliminated and/or minimized when possible. Do not dispose of any contaminants into sanitary sewer systems, storm drains, Publicly Owned Treatment Works (POTW), or any other municipal waste water treatment facility without written approval and agreements for processing wastes with such enterprises. Dispose of raw or unused materials, wastes, and/or by-products in accordance with all applicable local, state, and federal laws. Employ the expertise and knowledge of qualified personnel or contractors in disposal of any and all variants of this product. Ensure material containers are cleaned to the applicable standards before recycling, disposing, or reusing containers. Take special precautions to avoid any cross contamination and potential unknown effects from mixing with other substances. Refer to SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION of this document for personal protection requirements. Disposal to the environment or in violation of environmental protection laws and statutes must be prevented.
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## SECTION 14: TRANSPORT INFORMATION

<b>PROPER SHIPPING NAME:</b>	
<b>DOT:</b>	Other regulated substance, liquid, n.o.s. (contains: Hydrofluorocarbon, trans-Dichloroethylene) * Reportable Quantity is 38,023 lbs. (17,247 kg)
<b>TDG:</b>	Not regulated.
<b>IMDG:</b>	Not regulated.
<b>IATA:</b>	Aviation regulated liquid, n.o.s. (contains: Hydrofluorocarbon, trans-Dichloroethylene)

This product could potentially contaminate aquatic and terrestrial environments if not handled in accordance with all precautions, regulations, and laws. Users, transporters, and all other applicable entities must review, follow, and apply any and all necessary precautions and procedures to eliminate and/or minimize potential hazards or risks to aquatic or terrestrial environments.

REGULATORY INFORMATION	UN NUMBER	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
<b>DOT Classification</b>	NA3082	9	III		<b>Reportable Quantity 38,023 lbs. (17,247 kg)</b> For ground, vessel, rail, when in quantities less than the RQ, this product ships non-regulated.
<b>IATA-DGR Classification</b>	UN3334	9	III		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 450 L Packaging Instruction: 964

\*PG: Packaging group



## SECTION 15: REGULATORY INFORMATION

<b>U.S. Federal Regulations</b>			
This material is considered hazardous to health under OSHA Hazard Communication Standard (29 CFR 1910.1200)			
<b>HCS Classification:</b>	Irritant		
<b>TSCA 8b Inventory:</b>	All components are listed on the TSCA inventory or are exempt.		
<b>TSCA 5a (2):</b>	No components listed.		
<b>TSCA 5e:</b>	No components listed.		
<b>TSCA 12b:</b>	No components listed.		
<b>Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):</b>	No components listed.		
<b>Clean Air Act - Ozone Depleting Substances (ODS):</b>	This product does not contain nor is it manufactured with ozone depleting substances.		
<b>SARA 313 Form R - Reporting Requirements:</b>	<b>COMPONENT</b>	<b>CAS NUMBER</b>	<b>CONCENTRATION</b>
	Ethylene glycol	107-21-1	0.1-1%
<b>SARA 311/312:</b>	Immediate (acute) health hazard. Delayed (chronic) health hazard. Fire hazard.		
<b>CERCLA Hazardous substances:</b>			
<b>COMPONENT</b>	<b>Section 304 CERCLA Hazardous Substance</b>	<b>CONCENTRATION</b>	<b>Reportable quantity</b>
Ethylene glycol	Listed	0.1-1%	5,000 lbs
<b>STATE REGULATIONS:</b>			
<b>PENNSYLVANIA/NEW JERSEY/ MASSACHUSETTS - RTK:</b>	<b>COMPONENT</b>	<b>CAS NUMBER</b>	<b>CONCENTRATION</b>
	Ethylene glycol	107-21-1	0.1-1%
<b>California Prop 65:</b>	This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.		
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.			
<b>INTERNATIONAL LISTS:</b>			
<b>Australia inventory (AICS):</b>	Information not available.		
<b>China inventory (IECSC):</b>	Information not available.		
<b>Japan inventory:</b>	Information not available.		
<b>Korea inventory:</b>	Information not available.		
<b>New Zealand inventory of Chemicals (NZIoC):</b>	Information not available.		
<b>Phillipines inventory (PICCS):</b>	Information not available.		

**SECTION 16: OTHER INFORMATION**

NFPA & HMIS	
4	Extreme
3	Serious
2	Moderate
1	Slight
0	No Hazard



**National Fire Protection Association (NFPA)**



<b>HEALTH</b>	1
<b>FLAMMABILITY</b>	1
<b>REACTIVITY</b>	1
SPECIAL INFORMATION	

**Hazardous Material Information System (HMIS)**

<b>HEALTH</b>	1
<b>FLAMMABILITY</b>	1
<b>REACTIVITY</b>	1
SPECIAL INFORMATION	

**Note: The customer is responsible for determining the PPE code for this material. At the time of publishing, the NFPA/HMIS and the New GHS scale had opposite scales of severity. Check the most recent publications for current information.**

<b>Date of Issue:</b>	4/12/2016
<b>Date of previous issue:</b>	10/22/2016
<b>For Your Protection:</b>	The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by SPI will necessarily differ from the toxicity and risk characteristics that occur when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. The user is responsible to comply with all applicable federal, provincial or municipal laws and regulations. SPI MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
<b>Preparation Information:</b>	This SDS supersedes <b>ALL</b> previous SDS versions.