SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Polyshield Hi-E™ Elastomeric Polyurea
Component: "B"

Company: **Specialty Products, Inc. (SPI)**
2410 – 104th St Ct S, Ste D
Lakewood, WA 98499
Phone: 253.588.7101
Toll Free: 800.627.0773
Fax: 253.588.7196

EMERGENCY CONTACT: For Spills, Leaks, Fire or Exposure call **CHEMTREC**
Toll Free: 800.424.9300
International Calls: 703.527.3887
Fax: 913.321.1490

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS#	% W
Polyoxypropylenediamine	9046-10.0	61 – 89
Chemical Identity is Proprietary	N/A	10 – 40
Chemical Identity is Proprietary	N/A	2 - 20

SECTION 3: HAZARDS IDENTIFICATION

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency Overview:

Danger!
CAUSES EYE AND SKIN BURNS.
HARMFUL IF SWALLOWED.
CAUSES RESPIRATORY TRACT IRRITATION.

Toxic if swallowed. Corrosive to eyes and skin. Causes burns. Irritating to respiratory system. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Section 3 Notes: **Read the entire MSDS for a more thorough evaluation of the hazards.**

SECTION 4: FIRST AID MEASURES

Eye Contact:	Get medical attention immediately. Immediately flush eyes with plenty of water for a minimum of 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician. Continue flushing for an additional 15 minutes if medical attention is not immediately available.
Skin Contact:	Get medical attention immediately. Flush contaminated skin with plenty of water. Continue to rinse skin with large amounts of running water for at least 10 minutes. Remove contaminated clothing and shoes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion:	Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.
Inhalation:	Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Notes to Physician:	Symptomatic treatment and supportive therapy as indicated. Administer oxygen if necessary. Following severe exposure the patient should be kept under medical review for at least 48 hours as delayed pulmonary oedema may develop.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point:	Closed cup: >365°F (185°C).
Extinguishing Media:	
Suitable:	Use an extinguishing agent suitable for the surrounding fire.
Not Suitable:	None known.
Special Exposure Hazards:	No Specific Hazard.
Special Protective Equipment for Firefighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:	For major spills call **CHEMTREC** Toll Free 1.800.434.9300 or for International call 1.703.527.3887.
Personal Precautions:	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable

protective equipment.

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for Cleaning Up: If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contained material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

General: Ideal storage temperature is 60-100°F (16-38°C). Handling and storage should be in accordance with Local, State/Provincial or Federal regulations.

Handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 container.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and 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. Use appropriate containment to avoid environmental contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

Preventive Measures: Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering Controls: Use local exhaust ventilation to maintain airborne concentrations below the TVL. Suitable respiratory equipment should be used in cases of insufficient ventilation or where

operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of 'Industrial Ventilation, a manual of Recommended Practice.'

Personal Protection

Eye Protection:	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.
Skin Protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory Protection:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Work Hygienic Practices:	Follow the usual precautionary measures for handling chemicals. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin and clothing. Wash hands after use. Wash all contaminated clothing and shoes before reuse.
Other Protection:	Consult your supervisor or S.O.P. for special handling instructions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

General Appearance Information

Physical State:	Liquid
Color:	Various colors
Odor:	Amine odor
Odor Threshold:	Not available

Important Health, Safety and Environmental Information

pH:	10.5
Boiling Point:	Not available
Melting Point:	Not available
Flash Point:	Closed Cup: >365°F (185°C)
Oxidizing Properties:	Not available
Relative Density:	0.99
Solubility:	Partially soluble in the following materials: cold water. Very slightly soluble in the following materials: methanol.
Viscosity:	Kinematic: 2.48 cm^2/s (248 cSt at 25°C)
Vapor Density:	Not available

Other Information:
Volatile Organic Compounds (VOC): 0 grams/liter

SECTION 10: STABILITY AND REACTIVITY

Stability and Reactivity: The product is stable.

Incompatibility
(Materials to Avoid): Will react with acids.

Hazardous Polymerization: Not available.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity Data

	Test	Result	Route	Species
Polyoxypropylenediamine	LD50	2090 mg/kg	Dermal	Rabbit
	LD50	480 mg/kg	Oral	Rat

Potential Acute Health Effects
Ingestion: Toxic if swallowed. May cause burns to mouth, throat and stomach.
Inhalation: Irritating to respiratory system.
Eyes: Corrosive to eyes. Causes burns.
Skin: Corrosive to the skin. Causes burns.

Potential Chronic Health Effects
Target Organs: None known.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental Effects: No known significant effects or critical hazards
Fertility Effects: No known significant effects or critical hazards.

SECTION 12: ECOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

SECTION 14: TRANSPORTATION INFORMATION

EMERGENCY CONTACT: For Spills, Leaks, Fire or Exposure call **CHEMTREC**
Toll Free: 800.424.9300
International Calls: 703.527.3887

DOT Classification
- Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)
- Hazard Class: 8
- UN Number: UN2735
- Packing Group: III

TDG Classification
- Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)
- Hazard Class: 8
- UN Number: UN2735
- Packing Group: III

IMDG Class
- Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)
- Hazard Class: 8
- UN Number: UN2735
- Packing Group: III

IATA-DGR Class
- Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)
- Hazard Class: 8
- UN Number: UN2735
- Packing Group: III

SECTION 15: REGULATORY INFORMATION

United States
- HCS Classification: Toxic Material, Corrosive Material
- US Federal Regulations: **United States Inventory (TSCA 8b):** All components are listed or exempted.

CERCLA: Hazardous Substances: No ingredients listed.

SARA 313: No ingredients listed.

This product does not contain nor is it manufactured with ozone depleting substances.

California Prop 65 — No ingredients listed.

Canada

WHMIS: Class D-1B: Material causing immediate and serious toxic effects (toxic).
Class E: Corrosive material.

CEPA: **Canada Inventory**: All components are listed or exempted.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

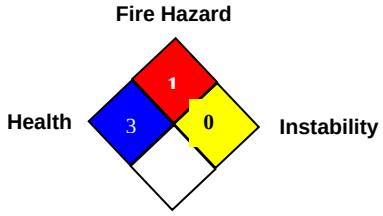
SECTION 16: OTHER INFORMATION

Label Requirements:
CAUSES EYE AND SKIN BURNS.
HARMFUL IF SWALLOWED.
CAUSES RESPIRATORY TRACT IRRITATION.

HAZARDOUS MATERIAL INFORMATION SYSTEM (U.S.A.)

Health	3
Fire Hazard	1
Reactivity	0

NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)



For Your Protection: 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.

Preparation Information: This MSDS supersedes ALL previous MSDS versions.