

# MATERIAL SAFETY DATA SHEET

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**For Chemical Emergency:**  
**Domestic North America – Call Chemtrec 800-424-9300**  
**International, Call 703-527-3887**

## 1. PRODUCT IDENTIFICATION

PRODUCT NAME: Hi-Tech Polyurea PE-85 "B"

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NUMBER	%	EXPOSURE LIMITS	
			OSHA PEL	ACGIH TLV
DIPROPYLENE GLYCOL	25265-71-8	0%-5%	Not Established	Not Established

## 3. HAZARD IDENTIFICATION

### WARNING!

*COLOR: Characteristic. FORM: Liquid. ODOR: Slight*

Harmful by inhalation, in contact with skin and if swallowed. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Irritating gases/fumes may be given off during burning or thermal decomposition.

### POTENTIAL HEALTH EFFECTS

EYE- Causes irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Chronic exposure to prolonged vapor contact may cause conjunctivitis.

SKIN- Causes irritation with symptoms of reddening, itching, and swelling. Chronic exposure may cause Dermatitis.

INGESTION- May be harmful if swallowed. May cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration into lungs may occur during ingestion or vomiting, resulting in lung injury.

INHALATION- At ambient temperatures, prolonged exposure may develop sore throat. At elevated temperatures or by aerosol spray, the inhalation risk is increased. Symptoms include difficulty in breathing, and respiratory irritation.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Abrasions or cuts on the skin will lead to increased absorption through the skin.

### CARCINOGENICITY

NTP CARCINOGEN-*No*

IARC MONOGRAPHS-*No*

OSHA CARCINOGEN-*No*

TERATOLOGY (BIRTH DEFECT) INFORMATION: *Information not available.*

REPRODUCTION INFORMATION: *Information not available.*

EINECS: EUROPEAN SAFETY AND RISK PHRASES: S36/37/39: Wear suitable protective clothing, gloves and eye/face protection. R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

HMIS CODES: *H F R P = 1\*10G*

#### 4. FIRST AID MEASURES

INHALATION- Move to an area free from risk of further exposure. Get medical attention immediately. Administer oxygen or artificial respiration as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reaction can be life threatening.

SKIN- Was affected areas thoroughly with soap and water. If skin irritation persists seek medical attention.

EYE- Eye Contact: In case of contact, immediately flush eyes with plenty of water for 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention.

INGESTION- DO NOT INDUCE VOMITING. Wash mouth out with water. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Consult physician.

#### 5. FIRE FIGHTING MEASURES

*FLAMMABLE PROPERTIES:*

*FLASH POINT: 250 F      METHOD: TOC*

*FLAMMABLE LIMITS:*

*LOWER FLAMMABLE LIMIT: 2.2%*

*UPPER FLAMMABLE LIMIT: 0%*

AUTOIGNITION TEMPERATURE: APROX 800 F

HAZARDOUS COMBUSTION PRODUCTS: Carbon Dioxide (CO<sub>2</sub>), Carbon Monoxide (CO), Oxides of Nitrogen (NO<sub>x</sub>), Dense black smoke, other undetermined compounds.

EXTINGUISHING MEDIA: use dry chemical foam, carbon dioxide, water fog or fine spray. Do not use direct water spray as it will spread the fire.

FIREFIGHTING INSTRUCTIONS: Use positive pressure, self contained breathing apparatus (SCBA) and protective fire fighting clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Eliminate ignition sources. Wear appropriate personal protection during cleanup, such as impervious gloves, boots, and coveralls. Material can cause slippery conditions. Dike or dam spilled material and control further spillage, if possible. Cover spill with inert material (e.g. dry sand or earth, silica gel, acid binder, universal binder, sawdust). Collect and place in appropriately marked sealable containers for disposal. Wash spill area with soap and water.

LARGE SPILL: Major Spill or Leak (Standing Liquid): Released material may be pumped into closed, but not sealed, metal container for disposal. Process can generate heat. Large Spill and Leak Procedures: Evacuate non-emergency personnel. Isolate the area and prevent access. Remove ignition sources. Notify management. Put on protective equipment. Control source of the leak. Ventilate. Contain the spill to prevent spread into drains, sewers, water supplies, or soil.

#### 7. HANDLING & STORAGE

PRECAUTIONS:

Keep product below 140F(60C). Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Keep container closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture. Avoid breathing of vapor or mist.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

*DIPROPYLENE GLYCOL*

*25265-71-8 0%-5%*

ENGINEERING CONTROLS: Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery to control levels of exposure.

RESPIRATORY PROTECTION: None required under normal use: Use NIOSH approved air supplied respirator during die cleaning, high temperature processing, air-spray environment or when thermal decomposition is suspected. Formaldehyde generation is possible if temperatures exceed 300F.

SKIN PROTECTION: Permeation-resistant gloves such as Butyl rubber gloves, Nitrile rubber gloves and Neoprene gloves should be used to protect the hands from contacting the product.

EYE PROTECTION: Safety glasses with side shields or chemical goggles should be worn

## 9. PHYSICAL / CHEMICAL PROPERTIES

APPEARANCE (physical form, color, texture, etc.)	Liquid at room temperature
MELTING POINT:	Not available
BOILING POINT:	450 F
VAPOR PRESSURE (mm Hg):	.0170 F
VAPOR DENSITY (Air = 1)	Heavier than air
SPECIFIC GRAVITY (H <sub>2</sub> O = 1):	1.034

## 10. STABILITY & REACTIVITY

CHEMICAL STABILITY (CONDITIONS TO AVOID): Stable

INCOMPATIBILITY: Avoid oxidizing agents, strong acids, and strong bases.

Product reacts exothermally with isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide (CO<sub>2</sub>), Carbon Monoxide (CO), Oxides of Nitrogen (NO<sub>x</sub>), Dense black smoke, other undetermined compounds.

HAZARDOUS POLYMERIZATION: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

NOTE: NOT MEANT TO BE ALL-INCLUSIVE.

Toxicity Data for Polymer: Acute oral toxicity: LD50:>1,000 mg/kg (mouse. LD50:1,800 mg/kg (rat).

## 12. ECOLOGICAL INFORMATION

NOTE: NOT MEANT TO BE ALL-INCLUSIVE.

. Polyether triol: Fish 96hr. LC50: >100mg/l, based on available data and comparison to similar compounds. Does not bioaccumulate.

## 13. DISPOSAL CONSIDERATIONS

This product should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil. Recycling is the preferred method for disposing of material. Otherwise, follow all applicable state, federal and local regulations in waste classification, transportation and disposal. It is the responsibility of the waste generator to do this.

## 14. TRANSPORTATION INFORMATION

LAND TRANSPORT – DOT  
NOT REGULATED

DOT-Air Transport- ICAO/IATA  
NOT REGULATED

DOT- Sea Transport- IMDG  
NOT REGULATED

## 15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

OSHA: This product is classified as a hazardous material under the criteria outlined in the OSHA Hazard Communication Standard (HCS) (29CFR1910.1200)

TSCA (Toxic Substances Control Act): All ingredients are on the TSCA Chemical Substance Inventory.

CERCLA: SARA HAZARD CATEGORY: This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: Acute Health Hazard, Chronic Health Hazard.

COMPONENTS:

DIPROPYLENE GLYCOL 26265-71-8 0%-5%

SECTION 313: \*\*\* No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: WHMIS classification depends on hazard and flash point. If sufficient hazard and flash point are not present, it is not given a classification.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): CEPA/Canadian Domestic Substances List (DSL): The substances(s) in this product is/are on the Canadian Domestic Substances List (CEPA DSL). This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and this MSDS contains all the information required by the CPR.

EINECS: EUROPEAN SAFETY AND RISK PHRASES: Information not available.

STATE REGULATIONS:

Regulations/Legislation that apply to this product:

Massachusetts Right-to-Know

Pennsylvania Right-to-Know

New Jersey Right-to-Know

CALIFORNIA PROP 65: WARNING: To the best of our knowledge, this product does not contain any of the listed chemicals, which the State of California has found to cause cancer, birth defects or other reproductive harm.

VOLATILE ORGANIC COMPOUNDS: 0.0 lb/gl

**16. OTHER INFORMATION**

WARNING! This product is intended to be used as a two-component (2K) system. The mixing of these two components (part A and part B) will have hazards associated with both part A and part B. Refer to the MSDS of each for complete hazard information when working with the mixture. ARTICLE: 29CFR 1910.1200 (b)(6)(iv) exempts "Articles" from the hazardous communication standard and an MSDS is not required. "Article" means a manufactured item: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

HMIS CODES: H F R P =1\*10G

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PREPARED BY: Technical Service.

ACGIH=American Conference of Governmental Industrial Hygienists.

TLV=Threshold Limit Value.

OSHA=Occupational Safety and Health Administration.

NIOSH=National Institute for Occupational Safety and Health.

TWA=8-hour Time Weighted Average.

STEL=Short Term Exposure Limit.

NE=None Established.

F=Fahrenheit.

C=Celsius or Centigrade.

PMCC=Pensky Martins Closed Cup.

TCC=Tag Closed Cup.

TOC=Tag Open Cup.

PPM=parts per million.

MG/M3=Milligrams per cubic meter.

LB/GL=pounds per gallon.

N/A=Not Applicable.

NF=Not Found.

NL=None Listed.

HMIS=Hazardous Materials Identification System provided by the American

Coatings Association (ACA). Hazards are identified by H=Health, \*=chronic,

F=Fire, R=Reactivity, P=personal protection needed. Ratings are 1-4 with the higher the number the greater the hazard. For complete description please contact the ACA.