



## SAFETY DATA SHEET

**PRODUCT NAME:** Fortress 4000 Hardener B (Part B) All versions  
Chemical Family: Polyethelenepolyamine Mixture

Part No.: 4000 B

Date: 03/27/2015

### Section 1 – Identification

Manufacturer's Name: Fortress Stabilization Systems  
Address: 184 West 64<sup>th</sup> St., Holland, MI 49423  
Information Phone: 800-207-6204  
Emergency Contact: (chemtrec) 800-424-9300

### Section 2 – Hazards Identification

**EMERGENCY OVERVIEW:** Corrosive epoxy hardener. Certain individuals may have pre-existing skin or respiratory conditions causing a sensitivity or allergy which manifests as various reactions. Heating or spraying this product or the mixed parts increases potential health hazards. Health and Safety personnel should examine the handling procedures and remedy any existing or potential health and safety hazards.

#### **POTENTIAL HEALTH EFFECTS:**

##### **EYE:**

Can cause irritation. Significant, prolonged, or repeated contact can damage the cornea.

##### **SKIN:**

Can cause irritation. Significant, prolonged, or repeated exposure can cause severe irritation.

##### **INGESTION:**

Can inflame or damage the G.I. tract. Ingestion can be harmful.

##### **INHALATION:**

Can cause irritation. Significant, prolonged, or repeated exposure to mist or vapor can damage the respiratory system.

##### **CHRONIC EFFECTS:**

Repeated exposure can cause irritation and sensitization.

##### **SIGNS & SYMPTOMS:**

Skin rash, irritation, reddening, or eczema; Breathing irritation or difficulty. Sensitization.

### Section 3 – Composition/ Information on Ingredients

INGREDIENT	%	CAS #	EXPOSURE LIMITS
Polyoxypropylenediamine	<45	39423-51-3	N/E
Isophoronediamine	<20	2855-13-2	N/E
Rubber Polymer	>5	68683-29-4	N/E
Proprietary Amine Blend	<20	N/A	N/E
Petroleum Distillates	<1	64742-46-7	N/E * (* 300 ppm supplier recommended)

### Section 4 – First-Aid Measures

#### ◆ USE APPROPRIATE BLOOD-BORNE PATHOGENS PROTECTIONS ◆

##### **EYE:**

Hold eyelids apart and flood with copious amounts of water. Seek medical attention.

##### **SKIN:**

Remove excess product. Wash thoroughly with soap and water. If irritation persists, seek medical attention.

##### **INGESTION:**

Do not induce vomiting unless directed by medical personnel. Seek medical attention.

##### **INHALATION:**

Remove to fresh air. Seek medical attention.



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### **Section 5 – Fire-Fighting Measures**

FLASH POINT: >138°C >280°F UEL: N.D.A.% LEL: N.D.A. VAPOR DENSITY: N.D.A.  
NFPA FLAMMABILITY RATING: 1 AUTOIGNITION: N.D.A.  
COMBUSTION PRODUCTS: CO, CO<sub>2</sub>, NO<sub>x</sub>, & misc. hydrocarbons  
SPECIAL HAZARDS: Firefighters should wear butyl rubber boots, gloves, and body suit with SCBA. May generate toxic and irritating combustion products. Use DOT Response Guide #153.  
EXTINGUISHING MEDIA: Use foam, CO<sub>2</sub>, dry chemical, water fog.  
FIRE FIGHTER INSTRUCTIONS: Stay upwind. Wear at least full bunker gear and SCBA.

### **Section 6 – Accidental Release Measures**

Isolate spill area. Keep out of sewer and storm drains. Stop the leak and contain the spill. Vacuum, scoop, or absorb spill with noncombustible materials. Clean up spill residues with soap and water.

### **Section 7 – Handling and Storage**

Avoid skin and eye contact and breathing vapors or mists by appropriate measures. Do not eat or smoke while handling this product. Wash thoroughly after handling or exposure to this product.

Store in original sealed container at ambient temperatures (65°-80°F) in dry, well-ventilated areas.

### **Section 8 – Exposure Constorls/Personal Protection**

For Personal exposure Limits (PEL), Threshold Limit Values (TLV), or other exposure limits, see Sec. 3.  
GENERAL: Provide adequate ventilation that will keep airborne concentration at a minimum.  
EYE/FACE: Safety glasses or splash goggles with face shield.  
SKIN: Chemical resistant gloves. Don chemical resistant clothing where exposure may occur.  
RESPIRATORY: NIOSH approved respirator with organic vapor/HEPA filter cartridges.  
OTHER: Decontaminate or discard clothing and materials that have come in contact with this product.

### **Section 9 – Physical and Chemical Properties**

APPEARANCE: Blue paste	ODOR: faint amine	PHYSICAL STATE: paste
pH: alkaline	VAPOR PRESS: N.D.A.	VAPOR DENSITY: N.D.A. SPECIFIC GRAVITY: 1.07
BOILING PT: N.D.A.	MELT PT: N/A	SOLUBILITY IN H <sub>2</sub> O: moderate

### **Section 10 – Stability and Reactivity**

CHEMICAL STABILITY: Stable.  
INCOMPATIBILITY: Strong oxidizers, acids, epoxy resins in uncontrolled conditions; contact with other unpolymerized monomers or polymers.  
HAZARDOUS POLYMERIZATION: Will not occur.  
HAZARDOUS DECOMPOSITION: None known, other than Sec. 5's Combustion Products.

### **Section 11 – Toxicological Information**

Oral: N.D.A.  
Dermal: N.D.A.  
Inhalation: N.D.A.  
Carcinogens under OSHA, ACGIH, NTP, IARC, or Other: None ≥ 0.1%.



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### **Section 12 – Ecological Information**

N.D.A.

### **Section 13 – Disposal Considerations**

Dispose of in accordance with applicable federal, state, and local laws and regulations.

### **Section 14 – Transport Information**

DOT: UN 2735, Amines, Liquid, Corrosive, n.o.s. (Polyoxypropylenediamine), 8, PGIII  
IATA: Regulated.  
IMO: Regulated.

### **Section 15 – Regulatory Information**

OSHA: 1910.1200 Hazardous Chemical "Irritant", "Sensitizer".  
TSCA: Contains listed ingredients.  
SARA III: Sec311 & 312 Immediate Health Hazard; Sec313 Chemicals above de minimus level: None.  
CA PROP. 65 NOTICE: None Listed.  
VOLATILE ORGANIC COMPOUND (VOC) %: Zero.  
NFPA: HEALTH 3 FIRE 1 REACTIVITY 0 OTHER N/A  
WHMIS: Hazard Classification: Class D Division 2A, Class D Division 2B, Class E Corrosive.  
WHMIS Symbols: Stylized T.  
Trade Secrets: N/A.  
Hazardous Products Act Information: This product SDS contains ingredients which are Controlled and/or on the Ingredient Disclosure List (HPA sections 13 and 14).

### **Section 16 – Other Information**

ABBREVIATIONS: N/A = not applicable; N.D.A. = no data available; NE = not established

Disclaimer: The data set forth in this sheet are based on information provided by the suppliers of the raw material and chemicals used in the manufacture of the aforementioned product. Fortress Stabilization Systems make no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof.