

# Material Safety Data Sheet

## Freeman 801 Hardener

Date of Preparation: January 3, 2007

Revision:

### Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** Freeman 801 Hardener

**Chemical Family:** Amine

**CAS Number:** N/A

**Other Designations:** N/A

**Intended Use or Product Type:** Casting Hardener.

**Manufacturer:** Freeman Manufacturing and Supply Company, 1101 Moore Road, Avon, OH 44011,  
Phone (440)934-1902, FAX (440)934-7200, Hours of Operation 8-5, Emergency Phone Number 800-424-9300

**HMIS**

**H** 3

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**PPE**<sup>†</sup>

<sup>†</sup>Sec. 8

#### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Corrosive - Causes skin and eye burns. May cause allergic skin reaction.

### Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number
* Tetraethylenepentamine	112-57-2
* 2,4,6-Tris (Dimethylaminomethyl) phenol	90-72-2
* Polyaminoamide	68953-36-6

\* = OSHA Hazardous Ingredient

Ingredient					MFR
	PEL	STEL	TWA	STEL	TLV
Tetraethylenepentamine	none estab.	none estab.	none estab.	none estab.	none estab.
2,4,6-Tris (Dimethylaminomethyl) phenol	none estab.	none estab.	none estab.	none estab.	5 ppm
Polyaminoamide	none estab.	none estab.	none estab.	none estab.	none estab.

### Section 3 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance and Odor:** Thin; Amber color; Ammonia like odor.

**Vapor Pressure:** 0.001 mm Hg at 77 °F (25 °C)

**Vapor Density (Air=1):** Not determined

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 0.96

**Water Solubility:** Slight

**Boiling Point:** >300 F (>149 C)

**% Volatile:** Negligible

**Evaporation Rate:** Not determined

**VOC:** 950 g/l

**pH:** Not determined

### Section 4 - Fire-Fighting Measures

**Flash Point:** 225 °F (107 °C)

**Flash Point Method:** PMCC

**LEL:** Not established

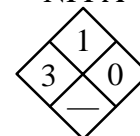
**UEL:** Not established

**Extinguishing Media:** Carbon dioxide, dry chemical, foam, water

**Fire Fighting Equipment:** Use self-contained breathing apparatus.

**Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

NFPA



**Section 5 - Stability and Reactivity**

**Stability:** Stable

**Conditions to Avoid:** Excessive heat for prolonged periods of time.

**Incompatibility:** Strong oxidizers, acids, and bases.

**Hazardous Decomposition Products:** Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

**Hazardous Polymerization:** Will not occur.

**Section 6 - Health Hazard Information****Potential Health Effects**

**Primary Entry Routes:** Dermal; heated product may produce inhalable vapors.

**Acute Effects:** Corrosive. Causes skin and eye burns.

**Overexposure Effects:** Corrosive – causes skin and eye burns. May cause allergic skin reaction.

**Medical Conditions Aggravated by Exposure:** Skin and eye conditions.

**Additional Information:** Referral to a physician is recommended if there is any question about the seriousness of any injury.

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**Emergency and First Aid Procedures**

**Inhalation:** Remove to fresh air. Call a physician.

**Eye Contact:** Immediately flush eyes with water for at least 15 minutes. Call a physician.

**Skin Contact:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes.

**Ingestion:** If conscious, give 2-4 glasses of water to drink. Do not induce vomiting. Call a physician.

**Section 7 - Spill, Leak, and Disposal Procedures**

**Accidental Release Measures:** Remove spillage by absorbing in absorbent material.

**Waste Disposal Method:** Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

**Ecological Information:** N/A

**Toxicological Information:**

**Sensitization:** Possible in susceptible individuals.

**Skin Irritation:** Corrosive. Causes burns.

**Eye Irritation:** Corrosive. Causes burns.

**Regulatory Information:****US Federal Regulations:**

**Occupational Safety and Health Act (OSHA):** This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261) but handle with care due to corrosive effect on skin and eyes.

**SARA Title III: Section 313 Toxic Chemical List (TCL):** This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

**Revision:**

**Freeman 801 Hardener**

**TSCA Section 8(b) - Inventory Status:** All chemical components of this product are in compliance with TSCA inventory requirements.

**TSCA Section 12(b) – Export Notification:** This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

**State Regulations:**

**California Proposition 65:** This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

Tetraethylenepentamine (CAS # 112-57-2) is on the New Jersey and Pennsylvania Right to Know Lists

**Section 8 - Exposure Controls / Personal Protection**

**Engineering Controls:** General mechanical and local exhaust in accordance with ACGIH recommendations.

**Respiratory Protection:** Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

**Skin Protection:** Wear impermeable gloves.

**Eye Protection:** Wear splash-proof chemical goggles.

**Section 9 - Special Precautions and Comments**

**Handling and Storage:**

**Signal Word:** Danger!

**Precautions:** Corrosive - causes skin and eye burns. Can cause allergic skin reaction. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or mist. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

**Other Handling Information:** Nuisance dust may be generated when sanding or sawing cured material.

**DOT Transportation Data (49 CFR 172.101):**

**Shipping Name:** Polyamines, liquid, corrosive, N.O.S.

**Technical Shipping Name (If n.o.s.):** Tetraethylenepentamine, Aliphatic polyaminoamide

**Hazard Class:** 8

**ID No.:** UN 2735

**Packing Group:** PG III

**Label:** Corrosive

**Packaging Authorizations**

a) **Exceptions:**

b) **Non-bulk Packaging:**

c) **Bulk Packaging:**

Non-Bulk

**Quantity Limitations**

a) **Passenger, Aircraft, or Railcar:**

b) **Cargo Aircraft Only:**

**Vessel Stowage Requirements**

a) **Vessel Stowage:**

b) **Other:**

**Prepared By:**

**Revision Notes:**

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