

Thank you for requesting an MSDS for this product.

We have reviewed our products, conducted a hazard determination, and prepared MSDSs in compliance with the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS). Our MSDSs also provide information on any toxic chemical subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

If this product, or any component of it, is considered to be hazardous or carcinogenic under the OSHA Hazard Communication Standard or the WHMIS regulations, information is provided in Section 2: COMPOSITION/INFORMATION ON INGREDIENTS or in Section 3: HAZARDS IDENTIFICATION.

## MATERIAL SAFETY DATA SHEET

REVISION DATE: 01-16-2009

SUPERSEDES: 12-08-2008

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### COMPANY INFORMATION

H.B. Fuller Company  
1200 Willow Lake Boulevard  
Vadnais Heights, MN 55110  
Phone: 651-236-5900

Medical Emergency Phone Number (24 Hours): 1-888-853-1758  
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

#### PRODUCT INFORMATION

PRODUCT NUMBER: FE7004B  
PRODUCT DESCRIPTION: Amine hardener  
PRODUCT IDENTIFIER: 802490PM

### SECTION 2: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

PHYSICAL STATE: Liquid  
COLOR: Dark Amber  
ODOR: Ammonia

Corrosive to eye tissue.  
Causes skin burns. May cause allergic skin reaction.  
Moderate respiratory tract irritant. May cause an allergic respiratory reaction.  
Harmful if swallowed.

#### POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY

EYE: Corrosive to eye tissue. Can cause severe irritation, tearing, and burns that can quickly lead to permanent injury including blindness.

SKIN: Corrosive to skin tissue. Can cause chemical burns. May cause sensitization.  
Component(s) may be absorbed through intact skin, but it is unlikely that harmful effects will occur unless contact is prolonged, repeated, and extensive.

INHALATION: Can cause moderate respiratory irritation. May cause allergic respiratory reaction.

INGESTION: Ingestion is not an anticipated route of exposure. Harmful if swallowed. Corrosive to tissue. Can cause severe and permanent damage to mouth, throat, stomach. Aspiration may lead to lung damage.

#### LONG-TERM (CHRONIC) HEALTH EFFECTS

REPRODUCTIVE: Contains a substance that is a possible reproductive hazard based on animal studies at doses that could be encountered in the workplace.  
TARGET ORGAN(S): No organs known to be damaged from exposure to this product.

#### REGULATED CARCINOGEN STATUS:

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: No medical conditions affected by exposure.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT
Polyamide resin	68410-23-1	70 - 100
Triethylenetetramine	112-24-3	10 - 30

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Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

### SECTION 4: FIRST AID MEASURES

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**IF IN EYES:** Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. This corrosive material can cause immediate and permanent eye damage. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

**IF ON SKIN:** Wash with soap and water under a drench shower. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.

**IF VAPORS INHALED:** Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

**IF SWALLOWED:** Corrosive. Do not induce vomiting! Drink one glass of water followed by milk if available. Seek medical attention immediately. Do not give anything by mouth to an unconscious person. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

### SECTION 5: FIRE FIGHTING MEASURES

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FLASH POINT:	> 204 C (400 F) Cleveland Closed Cup
AUTOIGNITION TEMPERATURE:	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
UPPER EXPLOSIVE LIMIT (% in air):	Not established
EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Material will burn in a fire.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide Nitrogen containing gases

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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**SPECIAL PROTECTION:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, and the area in which the spill occurred. Never exceed any occupational exposure limits.

**CLEAN-UP:** Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

### SECTION 7: HANDLING AND STORAGE

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**Handling:** Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

**Storage:** Store in a cool, dry place.

Consult the Technical Data Sheet for specific storage instructions.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**EYE PROTECTION:** Wear chemical splash goggles when handling this product. Additionally, wear a face shield when the possibility of splashing of liquid exists. Do not wear contact lenses. Have an eye wash station available.

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**SKIN PROTECTION:** Prevent contact with this product. Wear chemically resistant gloves, long sleeved shirt, an apron, and other protective equipment depending on conditions of use.

**GLOVES:** Butyl rubber

**RESPIRATORY PROTECTION:** Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with organic vapor cartridge and dust/mist filter.  
Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

**VENTILATION:** Use local exhaust ventilation or other engineering controls to minimize exposures.

**EXPOSURE LIMITS:**

Chemical Name	ACGIH EXPOSURE LIMITS	OSHA PEL
Polyamide resin	Not established	Not established
Triethylenetetramine	Not established	Not established

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE: Liquid  
 COLOR: Dark Amber  
 ODOR: Ammonia  
 ODOR THRESHOLD: Not established  
 WEIGHT PER GALLON (lbs.): 8.00  
 SPECIFIC GRAVITY: 0.96  
 SOLIDS (% by weight): 100.0

pH: Not established  
 FLASH POINT: > 204 C (400 F) Cleveland Closed Cup  
 BOILING POINT (deg. C): Not established  
 FREEZING/MELTING POINT (deg. C): Not established  
 VAPOR PRESSURE (mm Hg): Not established  
 VAPOR DENSITY: Not established  
 EVAPORATION RATE: Not established  
 OCTANOL/WATER COEFFICIENT: Not established  
 VOC, weight percent: Not determined

**SECTION 10: STABILITY AND REACTIVITY**

STABILITY: Stable under normal conditions.  
 CHEMICAL INCOMPATIBILITY: Not established  
 HAZARDOUS POLYMERIZATION: Will not occur.  
 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide Nitrogen containing gases

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### SECTION 11: TOXICOLOGICAL INFORMATION

COMPONENT	LD50/LC50
Polyamide resin	Not established
Triethylenetetramine	Oral LD50 Rat = 2500 mg/kg Dermal LD50 Rabbit = 805 mg/kg

TOXICOLOGY SUMMARY: Triethylenetetramine is a copper chelator and causes teratogenicity through copper deficiency; copper supplementation prevents teratogenicity.

### SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available

### SECTION 13: DISPOSAL CONSIDERATIONS

This product meets the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. It is corrosive waste class D002. We recommend the required corrosivity testing on product to determine the appropriate waste category. Disposal via incineration is recommended. Consult your state, local, or provincial authorities for more restrictive requirements.

### SECTION 14: TRANSPORTATION INFORMATION

Consult Bill of Lading for transportation information.

DOT: NOT REGULATED

IATA: NOT REGULATED

### SECTION 15: REGULATORY INFORMATION

#### INVENTORY STATUS

- U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
- CANADIAN CEPA DSL: This product is in compliance with the Canadian Domestic Substance List requirements.
- AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.
- JAPAN ENCS: This product is in compliance with the Japanese Existing and New Chemical Substances requirements.
- KOREAN TCCL: This product is in compliance with the Korean Existing Chemicals List requirements.
- PHILIPPINES: This product is in compliance with the Philippine Inventory of Chemicals and Chemical Substances requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at 651-236-5858 (USA) or 450-655-1306 x227 (Canada) to request an export review.

#### FEDERAL REPORTING

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

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### STATE REPORTING

This MSDS is not prepared for distribution in California.

### SECTION 16: ADDITIONAL INFORMATION

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This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 3 FLAMMABILITY -- 1 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.