

Date Prepared: 10/31/02  
Supersedes: 08/01/01  
Product Name: Polytops HF Grout (Part B-Hardener)

# ChemMasters

## Material Safety Data Sheet

### 1. Chemical Product and Company Information

**Product Name:** Polytops HF Grout (Part B-Hardener)  
**Product Description:** Polytops HF Grout is a 3 Part, 100% Solid Epoxy Grout with Exceptional Flowability.

ChemMasters  
300 Edwards Street  
Madison, Ohio 44057  
440-428-2105

Emergency Telephone Number  
800/424-9300

### 2. Composition / Information on Ingredients

Hazardous Components	CAS #	Exposure Limits			% by Wt
		OSHA(PEL/TWA)	ACGIH (TLV/TWA)	OTHER	
Triethylenetetramine	112-24-3	NE	NE	---	100

### 3. Hazards Identification

WARNING  
CORROSIVE LIQUID  
Causes Eye Burns  
Causes Skin Burns and/or Allergic Skin Reaction  
May Cause Allergic Respiratory Reaction

#### Potential Health Hazards - Acute

Eye: Corrosive to the eyes and may cause severe damage including blindness. Vapors may be irritating.  
Skin: Corrosive to the skin. May cause skin sensitization. May be toxic if absorbed through skin.  
Inhalation: Vapors/Mists may be corrosive to upper respiratory tract. Repeated exposure may result in lung damage.  
Ingestion: Not expected to be a relevant route of exposure. Moderately toxic if swallowed. Corrosive and may cause severe and permanent damage to mouth, throat and stomach.

#### Potential Health Effects - Chronic

Triethylenetetramine (TETA) has been found to be a direct acting mutagen in the ames assay. It gave positive results with and without activation.  
TETA was fetotoxic and teratogenic when fed to rats at 0.83% and 1.67% of diet. When applied dermally to the skin of pregnant guinea pigs, there was a 90% abortion rate or death of fetus with developmental anomalies. These effects are believed to be secondary to copper deficiency, resulting from the chelating activity of TETA.

Carcinogenicity:	NTP NO	IARC Monographs NO	OSHA Regulated NO
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### 4. First Aid Measures

Eye: Immediately flush with plenty of water for at least 15 minutes. Get medical attention.  
Skin: Flush immediately with plenty of water (soap if available) for at least 15 minutes while removing contaminated clothing. Get medical attention.  
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.  
Ingestion: Do NOT induce vomiting. Give victim a glass of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.

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## 5. Fire Fighting Measures

Flash Point (method used): >200°F (TCC)  
Flammable Limits (% volume in air): Lower = Not applicable Upper = Not applicable  
Auto Ignition Temperature: Not applicable  
Extinguishing Media: Dry chemicals, CO<sub>2</sub>, Halon, water spray or foam.  
Hazard Combustion Products: Carbon dioxide, carbon monoxide and/or oxides of nitrogen.  
Fire Fighting Instructions: Remove all ignition sources. Wear self contained breathing apparatus and complete personal protective equipment when entering confined areas where potential exposure to vapors or products of combustion exists.

## 6. Accidental Release Measures

Spill: Absorb with inert material, then place in chemical waste container for later disposal.

## 7. Handling and Storage

Handling: Use with adequate ventilation. Avoid contact with skin and eyes. Always use good industrial hygiene practices and safety guidelines when dealing with this potentially hazardous product.  
Storage: Keep containers closed and store in a dry, well ventilated area.

## 8. Exposure Controls / Personal Protection

Exposure Controls: Mechanical exhaust should be used. A source of clean water should be available for flushing eyes and skin.  
Personal Protection: Protective clothing, chemical splash goggles, rubber gloves and a vapor respirator .

## 9. Physical and Chemical Properties

Appearance: Clear, light amber liquid of moderate viscosity  
Odor: Ammoniacal odor  
Boiling Point: >360°F  
Melting Point: Not applicable  
Vapor Pressure (mm/Hg): <5.0 @ 20°C  
Vapor Density (Air = 1): >1  
Solubility in Water: Partially  
Specific Gravity (H<sub>2</sub>O = 1): 1.00  
Evaporation Rate (n-Butyl Acetate = 1): Not applicable

## 10. Stability and Reactivity

Chemical Stability: Stable  
Conditions to Avoid: Excessive heat  
Incompatibility (materials to avoid): Contamination with strong acids, bases, epoxy resins or isocyanates can cause polymerization.  
Hazardous Decomposition or By-products: Thermal decomposition may include carbon monoxide, carbon dioxide and/or oxides of nitrogen.  
Hazardous Polymerization: Will not occur

## 11. Toxicological Information

Components	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Triethylenetetramine	2.5 g/kg	805 mg/kg	No Data

## 12. Ecological Information

TETA is resistant to biodegradation in biological waste water treatment plants. It could be toxic to biomass in a treatment plant and could be toxic to fish.

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### 13. Disposal Considerations

Dispose of in accordance with all federal, state and local regulations. If uncertain of local regulations in your area, contact the proper environmental authorities for disposal.

Under RCRA 40 CFR 261 this material is hazardous waste number D002.

### 14. Transportation Information

For U S National, International & Air Shipments:

Shipping Description: Triethylenetetramine, 8, UN2259, II

Emergency Response Guide Number: 153

Hazard Class: Corrosive

### 15. Regulatory Information

OSHA: This material is hazardous by definition of Hazardous Communications Standard (29 CFR 1910.1200)

CERCLA Reportable Quantity: Not applicable

SARA Title III:

Section 311/312 hazard categories: acute health, delayed health

Section 313 reportable ingredients:

Components	CAS #	Maximum %
None		

### 16. Other Information

MSDS Status: Revised

Industrial Abbreviation Legend on page 4 of this MSDS.

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### Industrial Abbreviation Legend

ACGIH	American Conference of Governmental Industrial Hygienists	mg/m <sup>3</sup>	milligrams per cubic meter
CAA	Clean Air Act (EPA)	NIOSH	National Institute for Occupational Safety and Health
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980 (Superfund) (EPA)	NTP	National Toxicology Program
CNS	Central Nervous System	OSHA	Occupational Safety and Health Administration
CWA	Clean Water Act (EPA)	PEL	Permissible Exposure Limit
DOT	Department of Transportation	ppm	parts per million
EPA	Environmental Protection Agency	RCRA	Resource Conservation and Recovery Act (EPA)
g/kg	grams per kilogram	SARA	EPA's Superfund Amendment and Reauthorization Act (EPA)
IARC	Internal Agency for Research on Cancer	STEL	Short-Term Exposure Limit, ACGIH terminology
LC50	Lethal Concentration in which 50% of the test animals are expected to die	TLV	Threshold Limit Value
LD50	Lethal Dose in which 50% of the test animals are	TWA	Time-Weighted Average

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