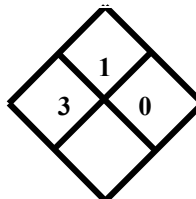


DISTRIBUTED BY FREEMAN MFG & SUPPLY CO. 800-321-8511

24-Hour Emergency Phone: 1-888-354-3323

Effective Date: 1/20/04**Material Safety Data Sheet**

MSDS No: 6186

1. PRODUCT IDENTIFICATION**Trade Name:** TDT 177-113 Hardener**Chemical Family:** Amine

NFPA RATING

Health:	3
Flammability:	1
Reactivity:	0
Personal Protection:	

HMIS RATING

Intended Use or Product Type: Amine Paste Hardener.**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS					CARCINOGEN STATUS		
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	111-40-0 Common Name:	1,2-Ethanediamine, N-(2-aminoethyl)-Diethylenetriamine	1 ppm	NE	NE	NE	NE	NR	NR	NR
*	112-24-3 Common Name:	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-Triethylenetetramine	NE	NE	NE	NE	NE	NR	NR	NR
*	80-05-7 Common Name:	Phenol, 4,4'-(1-methylethylidene)bis-Bisphenol A	NE	NE	NE	NE	TLV 5 mg/m3	NR	NR	NR

* = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Corrosive - Causes skin and eye burns. Causes respiratory irritation. May cause allergic skin and respiratory reactions.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.**Acute Exposure:** Corrosive. Causes skin and eye burns.

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4. FIRST AID MEASURES

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

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

Inhalation: Remove to fresh air. Call a physician.

Eyes: Immediately flush eyes with water for at least 15 minutes. Call a physician.

Overexposure Effects: Corrosive - causes skin and eye burns. Causes respiratory irritation. May cause allergic skin and respiratory reactions.

Medical Conditions Aggravated by Exposure: Skin, eye and pulmonary conditions.

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

5. FIRE FIGHTING MEASURES

Flash Point: > 200°F (> 93 °C)

Flash Point Method Used: Estimated

Flammable Limits in Air (Lower - % by volume): Not established

Flammable Limits in Air (Upper - % by volume): Not established

Fire Fighting 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.

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

Signal Word: Danger!

Precautions: Corrosive - causes skin and eye burns. Causes irritation if inhaled and can cause allergic respiratory reaction and 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin Protection: Wear impermeable gloves.

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

Eye Protection: Wear splash-proof chemical goggles.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Deep Wine
Odor:	Amine
Physical State:	Paste
Solubility in Water:	Slight
Vapor Pressure:	0.34 mm Hg at 25°C (77 °F)
Specific Gravity:	0.58 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
VOC:	4.647 Lbs/Gallon
pH:	Not Determined

Percent Volatile: Negligible.

10. STABILITY AND REACTIVITY

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

Stability: Stable.

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.

11. TOXICOLOGICAL INFORMATION

Sensitization: Causes allergic skin and respiratory sensitivity in some people.

Skin Irritation: Corrosive. Causes burns.

Eye Irritation: Corrosive. Causes burns.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

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

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14. TRANSPORT INFORMATION**DOT: Non-Bulk**

Proper Shipping Name:	Polyamines, liquid, corrosive, N.O.S.
Technical Shipping Name (If n.o.s.):	Diethylene triamine, Triethylene tetramine
Hazard Class:	8
ID Number:	UN 2735
Packing Group:	PG II
Label:	Corrosive

15. 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 contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-

Common Name: Bisphenol A

Percent in Composition: 5.6 % by wt

Comment:

TSCA Section 8(b) - Inventory Status: Chemical components listed on TSCA Inventory.

TSCA Section 12(b) - Export Notification: This product contains the following chemical(s) that are subject to a Section 12(b) export notification:

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-

Common Name: Diethylenetriamine

CAS Number: 111-40-0

Chemical Name: Cyclotetrasiloxane, Octamethyl-

Common Name: Octamethylcyclotetrasiloxane

CAS Number: 556-67-2

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Chemical Name: Formaldehyde

Common Name: Formaldehyde

Effective Date: 1/20/04

CAS Number: 50-00-0

Percent in Composition: 0.0002 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Amides, from Me Epoxyhydroxyoctadecanoate, Tetraethylenepentamine and Vegetable-oil Fatty Acids

Common Name: Fatty amidoamine

CAS Number: 68443-08-3

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, polymer with formaldehyde

Common Name: Phenol Novolac Resin

CAS Number: 9003-35-4

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Benzenesulfonamide, N-ethyl-4-methyl-

Common Name: Substituted Benzenesulfonamide

CAS Number: 80-39-7

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: N-Ethyl, 2-Methyl Benzenesulfonamide

Common Name: Substituted benzenesulfonamide

CAS Number: 1077-56-1

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-

Common Name: Bisphenol A

CAS Number: 80-05-7

Comment: Environmental Hazardous Substance

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-

Common Name: Triethylenetetramine

CAS Number: 112-24-3

Comment: Hazardous Substance

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-

Common Name: Diethylenetriamine

CAS Number: 111-40-0

Comment: Hazardous Substance

Chemical Name: Silica

Common Name: Fumed Silica

CAS Number: 7631-86-9

Comment: Hazardous Substance

16. OTHER INFORMATION**MSDS No:**

6186

Approved By:

Kenneth L. Payne

Title:

E,H&S Manager

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