



Value beyond chemistry

Effective Date: 2/8/00

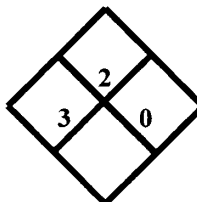
Material Safety Data Sheet

MSDS No: 5804

1. PRODUCT IDENTIFICATION

Trade Name: Hardener HW 8595

Chemical Family: Amine/Polyamidoamine



NFPA RATING

Health	3
Flammability	2
Reactivity	0
Protective Equipment	

HMIS RATING

Synonyms:
XMH 8595 HARDENER

Intended Use or Product Type: Epoxy adhesive 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				
*	103-83-3	Benzenemethanamine, N,N-dimethyl- Benzyl dimethylamine Common Name:	NE	NE	NE	NE	NE	NR	NR	NR
*	111-40-0	1,2-Ethanediamine, N-(2-aminoethyl)- Diethylenetriamine Common Name:	1 ppm	NE	ppm	NE	NE	NR	NR	NR
*	140-31-8	1-Piperazineethanamine Aminoethylpiperazine Common Name:	NE	NE	NE	NE	NE	NR	NR	NR
*	68683-29-4	Pentanoic Acid, 4,4'-Azobis(4-Cyano-, polymer with 1,3-Butadiene, 1-Piperazine Ethanamine and 2-Propenenitrile) Synthetic Rubber Common Name:	NE	NE	NE	NE	NE	NR	NR	NR
*	80-05-7	Phenol, 4,4'-(1-methylethylidene)bis- Bisphenol A Common Name:	NE	NE	NE	NE	TLV 5 mg/m3	NR	NR	NR
*	31326-29-1	Phenol, 4,4'-(1-	NE	NE	NE	NE	NE	NR	NR	NR

Effective Date: 2/8/00

	Common Name:	methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane DETA/Epoxy resin adduct								
*	68605-86-7 Common Name:	Fatty acids, tall-oil, polymers with linoleic acid dimers and tetraethylenepentamine Amine adduct	NE	NE	NE	NE	NE	NR	NR	NR

* = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Combustible. Corrosive - causes skin and eye burns. Can be fatal if inhaled. Causes severe irritation if inhaled. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin or if swallowed.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

Acute Exposure: Danger! Corrosive. Causes skin and eye burns.

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. Can be fatal if inhaled. Causes severe irritation if inhaled. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin or if swallowed.

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: > 175°F (> 79 °C)

Effective Date: 2/8/00

Flash Point Method Used: PMCC
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

Precautions: Danger! Combustible. Keep away from heat and flame. Corrosive - causes skin and eye burns. Can be fatal if inhaled. Causes severe irritation if inhaled. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin or if swallowed. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use only 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.

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:	Amber
Odor:	Amine
Physical State:	Liquid
Solubility in Water:	Moderate
Specific Gravity:	0.94 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
pH:	Not Determined

Percent Volatile: Negligible.

Effective Date: 2/8/00

10. STABILITY AND REACTIVITY**Conditions to Avoid:** Excessive heat for prolonged periods of time.**Stability:** Stable.**Incompatibility:** Strong oxidizing agents, acids, metal-organic compounds.**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.**14. TRANSPORT INFORMATION****DOT: Non-Bulk****Proper Shipping Name:**

Polyamines, liquid, corrosive, N.O.S.

Technical Shipping Name (If n.o.s.):

Benzyldimethylamine, N-aminoethyl piperazine

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.

Effective Date: 2/8/00

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: 3.3998 % 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

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: Benzene, methyl-
Common Name: Toluene
CAS Number: 108-88-3
Percent in Composition: 0.0016 % by wt
Comment: Warning! This chemical is known to the State of California to cause birth defects or other reproductive harm.

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

Chemical Name: Pentanoic Acid, 4,4'-Azobis(4-Cyano-, polymer with 1,3-Butadiene, 1-Piperazine Ethanamine and 2-Propenenitrile)
Common Name: Synthetic Rubber
CAS Number: 68683-29-4
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Fatty acids, tall-oil, polymers with linoleic acid dimers and tetraethylenepentamine
Common Name: Amine adduct
CAS Number: 68605-86-7
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane
Common Name: DETA/Epoxy resin adduct
CAS Number: 31326-29-1
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1-Piperazineethanamine

Effective Date: 2/8/00

Common Name: Aminoethylpiperazine

CAS Number: 140-31-8

Comment: Hazardous Substance

Chemical Name: Benzenemethanamine, N,N-dimethyl-

Common Name: Benzyl dimethylamine

CAS Number: 103-83-3

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-(2-aminoethyl)-

Common Name: Diethylenetriamine

CAS Number: 111-40-0

Comment: Hazardous Substance

16. OTHER INFORMATION

MSDS No: 5804
Approved By: Kenneth L. Payne
Title: E,H&S Manager

Disclaimer: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.