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Effective Date: 8/10/06

Material Safety Data Sheet

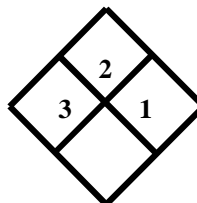
MSDS No: 8925

1. PRODUCT IDENTIFICATION

Trade Name: Araldite 501 HARDENER

Material Code: FPC2450

Chemical Family: Aliphatic Amine



NFPA RATING

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				
*	104-78-9	1,3-PROPANEDIAMINE, N,N-DIETHYL- 3-(Diethylamino)propylamine Common Name: Concentration: 99.00 - 100.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: DANGER!! FLAMMABLE & CORROSIVE Causes severe eye and skin burn and possible allergic skin reaction. Vapor is irritating to eyes, skin and nasal mucous membranes. Harmful if swallowed.

Primary Route(s) of Entry: Dermal, inhalation.

Potential Health Effects: Vapor or mist can cause severe irritation to the nose and throat. Substance can be corrosive to eyes and causes permanent, irreversible eye injury. Substance can be corrosive to skin and cause chemical burns. Substance will cause burning and swelling of mouth, throat, and abdomen on ingestion.

Carcinogenicity (NTP, IARC, OSHA): The chemicals listed in Section 2 are not considered to be carcinogenic by NTP, IARC, or OSHA.

Chronic: Prolonged or repeated exposure can cause allergic reaction.

4. FIRST AID MEASURES

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Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

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

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Note to Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed. It may appear after weeks or even months of frequent and prolonged contact.

Medical Conditions Aggravated by Exposure: Eczema, allergy, eye condition and respiratory disease

5. FIRE FIGHTING MEASURES

Flash Point: 50°C (122 °F) For Component

Fire Fighting Extinguishing Media: Carbon dioxide, foam, dry chemical, water spray.

Fire Fighting Equipment: Use self-contained breathing apparatus and full protective clothing.

Fire and Explosion Hazards: Keep fire-exposed containers cool with water. Do NOT use a solid stream of water. A solid stream of water can spread fire.

Hazardous Combustion Products: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate the spill area. Wear full protective equipment. Dike and absorb spill with inert material (sand, earth, etc.). Transfer to containers suitable for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Thoroughly launder clothing before reuse. Keep spills and runoffs out of municipal sewers and open bodies of water. If spilled on a porous surface, ground contamination must be considered.

7. HANDLING AND STORAGE

Signal Word: DANGER!!! FLAMMABLE & CORROSIVE

Precautions: Keep away from HEAT, SPARKS & FLAMES. Do not get in eyes, on skin, or on clothing. Wear protective clothing when handling. Wash thoroughly after handling. Avoid breathing vapor. Keep containers closed when not in use. Use only with adequate ventilation. Do NOT take internally.

Other Handling Information: In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid contact with eyes and prolonged or repeated skin contact. Do not inhale mists. Use with adequate ventilation. For industrial use only.

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Storage Information: STORAGE TEMPERATURE: 35°C, maximum. Store indoors in a cool, dry area with adequate ventilation away from excessive heat, sources of ignition, and reactive materials. Do NOT store near food or feed. CORROSIVE to copper and brass on long-term storage.

Additional Information: PLEASE READ TECHNICAL DATA SHEET BEFORE HANDLING THE PRODUCT. KEEP OUT OF THE REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Eye bath and safety shower should be available. Wear protective clothing.

Exposure Guidelines: Wash thoroughly after handling and before eating, drinking, or using tobacco products.

Skin Protection: Wear impervious gloves.

Respiratory Protection: Wear respirator (MSHA/NIOSH or approved equivalent) suitable for concentrations and type of air contaminants encountered.

Eye Protection: Wear safety glasses or goggles.

Engineering Controls: Use good general mechanical ventilation and local exhaust.

Emergency Response Protection: Wear breathing apparatus (MSHA/NIOSH-approved, pressure demand, self-contained or equivalent) and full protective gear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color:	Blue
Odor:	Amine
Solubility in Water:	Miscible
Viscosity:	1.4 - 4 MPas at 25°C (77 °F)
Specific Gravity:	0.83 (Water =1)
Boiling Point:	155°C (311 °F)
Evaporation Rate:	< 1 (Butyl Acetate = 1)
Density:	0.83 g/cc at 25°C (77 °F)
VOC:	8 g/L (This is an estimated value.)

10. STABILITY AND REACTIVITY

Conditions to Avoid: Elevated temperatures and epoxy resins

Stability: Stable under normal conditions.

Incompatibility: Acid chlorides, anhydrides and isocyanates

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and oxides of nitrogen.

Hazardous Polymerization: Will not occur.

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11. TOXICOLOGICAL INFORMATION**Sensitization:** Skin sensitizer.**Skin Irritation:** Corrosive. Causes burns.**Eye Irritation:** Corrosive. Causes burns.**12. ECOLOGICAL INFORMATION****Biodegradability:** No information available.**Ecotoxicity:** No information available.**13. DISPOSAL CONSIDERATIONS****Waste Disposal Method:** Incinerate liquid; landfill or incinerate contaminated diking material in accordance with local, state, and federal regulations.**14. TRANSPORT INFORMATION****DOT: Non-Bulk**

Proper Shipping Name:	3-Diethylaminopropylamine
Hazard Class:	3(8)
ID Number:	UN 2684
Packing Group:	PG III
Label:	Flammable & Corrosive

IATA: Non-Bulk

Proper Shipping Name:	3-Diethylaminopropylamine
Hazard Class:	3(8)
ID Number:	UN 2684
Packing Group:	PG III
Label:	Flammable & Corrosive

IMDG: Non-Bulk

Proper Shipping Name:	3-Diethylaminopropylamine
Hazard Class:	3(8)
ID Number:	UN 2684
Packing Group:	PG III
Label:	Corrosive & Flammable liquid
Hazard Labels:	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.

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Resource Conservation and Recovery Act (RCRA): D-001 IGNITABLE, RQ 100 lbs.

SARA Title III: Section 304 - CERCLA: Not listed.

SARA Title III: Section 311/312 - Hazard Communication Standard (HCS): Immediate (acute) health hazard
Flammable (Fire) hazard
Delayed (chronic) health hazard

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain a toxic chemical for routine annual 'Toxic Chemical Release Reporting' under Sec. 313 (40 CFR 372).

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

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

International Regulations:

Australian Inventory Status: This product contains only chemicals which are currently listed on the Australian Inventory of Chemical Substances.

Canadian Inventory Status: This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

European Inventory Status (EINECS): This product contains only chemicals that are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

Japanese Inventory Status: This product contains only chemicals currently listed on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

State Regulations:

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

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

Chemical Name: 1,3-PROPANEDIAMINE, N,N-DIETHYL-

Common Name: 3-(Diethylamino)propylamine

CAS Number: 104-78-9

Comment: Hazardous Substance

16. OTHER INFORMATION

MSDS No:	8925
Reason Issued:	8/06 update - SAP Update ,Renamed from Redux 501 Hardener
Prepared By:	Matthew Austin
Approved By:	Matthew Austin
Title:	EH&S Assistant
Approved Date:	03/17/99
Supersedes Date:	10/17/05

Effective Date: 8/10/06

Other Information: L/M Codes: X (X10020030) C01
Material Code: FPC2450

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