

5121 San Fernando Road West
Los Angeles, CA 90039

8am to 5pm Phone: (818) 247-6210
24-Hour Health/Environmental Emergency Phone: 1-888-354-3323

Effective Date: 7/26/01

Material Safety Data Sheet

MSDS No: 61449

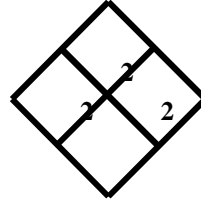
1. PRODUCT IDENTIFICATION

Trade Name: Hardener 77/1050 US

Material Code: FP7173

MSDS Category: Commercial Product

Chemical Family: Epoxy resin and acrylate ester in solvent



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				
*	108-65-6	2-Propanol, 1-methoxy-, acetate Common Name: Propylene Glycol Monomethyl Ether Acetate Concentration: 0.00 - 10.00 % by wt	NE	NE	NE	NE	TLV 100 ppm	NR	NR	NR
*	15625-89-5	2-Propenoic acid, 2-ethyl-2-[[1-(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester Triacrylate esters Common Name: Triacrylate esters Concentration: 0.00 - 10.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	34590-94-8	Propanol, 1(or 2)-(2-methoxymethylethoxy)- Dipropylene glycol monomethyl ether Common Name: Dipropylene glycol monomethyl ether Concentration: 10.00 - 30.00 % by wt	100 ppm	150 ppm	100 ppm	150 ppm	NE	NR	NR	NR
	60506-81-2	2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[1-(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[1-(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester Acrylate esters Common Name: Acrylate esters Concentration: 10.00 - 30.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
	Confidential	Substituted Epoxy Resin Concentration: 30.00 - 60.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	Confidential	esters	NE	NE	NE	NE	NE	NR	NR	NR

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	Concentration	0.00 - 10.00 % by wt								
*	108-78-1 Common Name: Concentration	1,3,5-Triazine-2,4,6-triamine Melamine 0.00 - 10.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
	14302-13-7 Common Name: Concentration	Pigment Green 36, C.I. 74265 Pigment green 36 0.00 - 10.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
	Confidential Concentration	Paint additive 0.10 - 1.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR

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

3. HAZARDS IDENTIFICATION

Emergency Overview: WARNING!! COMBUSTIBLE. Causes severe eye irritation. Causes skin irritation and possible allergic reaction. Harmful if inhaled. Harmful if swallowed.

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

Potential Health Effects: Vapor or mist will severely irritate the nose and throat and cause dizziness and loss of coordination. Liquid or vapor can cause substantial irritation to eyes. Substance can cause moderate irritation to skin. Possibly harmful if swallowed.

Chronic: Prolonged or repeated exposure can cause allergic reaction to skin and respiratory tract.

4. FIRST AID MEASURES

Ingestion: If swallowed dilute by giving two (2) glasses water to drink. See a physician. Never give anything by mouth to an unconscious person.

Skin: For skin contact, wash affected areas with plenty of water, and soap, if available, for several minutes. Get medical attention if irritation occurs.

Inhalation: If inhaled, remove from area to fresh air. If not breathing, give artificial respiration. Get immediate medical attention. If breathing is difficult, transport to medical care and, if available, give supplemental oxygen.

Eyes: For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get 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: Allergy, eczema, eye or respiratory conditions.

5. FIRE FIGHTING MEASURES

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Flash Point: 75°C (167 °F)
Flash Point Method Used: Closed Cup

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: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Eliminate ignition sources. Ventilate area. Avoid breathing vapor. Evacuate the spill area. Wear full protective equipment. Dike and absorb spill with inert material. Transfer to containers suitable for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Thoroughly launder clothing before re-use. Keep spills and cleaning 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: Combustible.

Precautions: Keep away from heat, sparks and open flame. Avoid contact with eyes, skin and clothing. Avoid breathing vapor, mist or spray. Use only with good ventilation. Individuals should wash thoroughly after handling. Store in closed containers in cool, well-ventilated area. Ground and bond metal containers for liquid transfer to avoid static sparks. For industrial use only.

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.

Storage Information: Storage Temperature: Maximum 18° C - Minimum 6° c. Store indoors in a cool, dry area with adequate ventilation.

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 splash-proof chemical goggles.

Engineering Controls: Good general mechanical ventilation and local exhaust recommended.

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:	Paste
Color:	Green
Odor:	Slight
Solubility in Water:	Slight
Viscosity:	10000 - 60000 cps at 25°C (77 °F)
Vapor Pressure:	~ 1 mm Hg at 20°C (68 °F)
Specific Gravity:	1.2 - 1.3 (Water =1)
Evaporation Rate:	< 1 (Butyl Acetate = 1)
Vapor Density:	> 1 (Air = 1)

10. STABILITY AND REACTIVITY

Conditions to Avoid: Heat, UV radiation, free radical initiators and inert gases.

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents.

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

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Sensitization: Potential skin and respiratory sensitizer.

Skin Irritation: Moderate irritation.

Eye Irritation: Moderate - severe.

12. ECOLOGICAL INFORMATION

Biodegradability: No information available.

Ecotoxicity: No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in approved equipment. Landfill or incinerate contaminated material in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT: Non-Bulk

Proper Shipping Name:

Resin compounds, N.O.I.

IATA: Non-Bulk

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Proper Shipping Name: Resin compounds, N.O.I.**Department of Transportation:** Combustible liquid (not applicable in containers having a rated capacity of 110 gallons or less.)**15. REGULATORY INFORMATION****US Federal Regulations:****Occupational Safety and Health Act (OSHA):** This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).**Resource Conservation and Recovery Act (RCRA):** This product is considered to be a hazardous waste under RCRA (40 CFR 261).**SARA Title III: Section 311/312 - Hazard Communication Standard (HCS):** Immediate (acute) 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:** All chemical(s) comprising this product are listed on the 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: Acetic acid, butyl ester

Common Name: n-Butyl Acetate

CAS Number: 123-86-4

Chemical Name: 1- Propanol, 2-methyl-

CAS Number: 78-83-1

International Regulations:**Australian Inventory Status:** This product contains one or more chemicals currently not on the Australian Inventory of Chemical Substances.**Canadian Inventory Status:** This product contains one or more chemicals currently not 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:

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Chemical Name: Substituted Epoxy Resin
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 2-Propenoic acid, 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester
Common Name: Acrylate esters
CAS Number: 60506-81-2
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Propanol, 1(or 2)-(2-methoxymethylethoxy)-
CAS Number: 34590-94-8
Comment: Hazardous Substance

Chemical Name: 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester
Common Name: Triacrylate esters
CAS Number: 15625-89-5
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,3,5-Triazine-2,4,6-triamine
Common Name: Melamine
CAS Number: 108-78-1
Comment: Environmental Hazardous Substance

16. OTHER INFORMATION

MSDS No:	61449
Reason Issued:	update label information
Approved By:	Matthew Austin
Title:	EH&S Chemist
Approved Date:	09/13/00
Supersedes Date:	03/09/01

Other Information: L/M Codes: (W10020030) [W1]
Material Code: FPC7173

Revision Summary:

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