



MATERIAL SAFETY DATA SHEET

Industrial Formulators, Inc. 3824 William Street Burnaby, B.C. V5C 3H9

SECTION I - PRODUCT IDENTIFICATION

Product Name: **30-Cure Epoxy PART A**
Previous Revision: April 9, 2001
Product Type: Epoxy Resin Mixture
24-Hr. Emergency Phone:
CANUTEC: 1-613-996-6666

WHMIS Classification: D2B
Date of Prep: May 1, 2003
Reason Revised: Format Change
Information: (604) 294-5723
Prepared By: J. Bartlett

HMIS Ratings:
Health 2
Fire 1
Reactivity 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	AMOUNT	CAS NUMBER	EXPOSURE LIMITS	
			PEL	TLV
Diglycidyl Ether of Bisphenol A (DGEBPA)	90-100%	25068-38-6	none established	none established

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Range: not applicable
Vapor Density: Heavier than Air
Evaporation Rate: Slower than Ether
Appearance and Odour: Colourless, thick liquid with faint epoxy odour.

Specific Gravity: 1.15
Material V.O.C.: None
Water Solubility: Negligible

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 300°F
Method: Pensky-Martens Closed Cup
Flammable Limits in Air By Volume - Lower: N/A Upper: N/A
Extinguishing Media: Foam, Carbon Dioxide, Dry Chemical, Water Fog

Special Firefighting Procedures: When fighting chemical fires wear full protective equipment with self-contained breathing apparatus. Water spray may be used to cool fire-exposed containers. Toxic fumes may be evolved when this substance is burned.

SECTION V - REACTIVITY DATA

Stability: Stable.
Incompatibility: Strong oxidizing agents, Lewis and mineral acids.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon, aldehydes, acids

Conditions to Avoid: Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke resulting in hazardous decomposition products.

SECTION VI - HEALTH HAZARD DATA

ROUTES OF ENTRY: Eye contact, ingestion, skin contact.

ACUTE EFFECTS OF OVEREXPOSURE:

Eye contact: May cause irritation.

Inhalation: None known.

Ingestion: May cause irritation to gastrointestinal tract.

Skin contact: May cause irritation.

Chronic: May cause skin sensitization from prolonged and repeated contact.

Carcinogenicity: Early studies with DGEHPA have been negative. The IARC concluded in 1988 that DGEHPA was not classifiable as a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: Flush with water for 15 minutes holding eyelids open. If irritation persists, get medical attention.

Ingestion: Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water to dilute. If irritation persists, get medical attention.

Skin Contact: Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water. Follow by washing in soap and water. If irritation persists, get medical attention. Contaminated leather articles (shoes) cannot be decontaminated and should be destroyed.

Medical Conditions Generally Aggravated by Exposure: Preexisting skin or eye disorders can be aggravated by repeated and prolonged exposure to this product. No other adverse health effects are known.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

If Material is Spilled: Avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust, or other absorbent, and shoveled into disposal containers.

Waste Disposal Method: Place in an appropriate disposal facility in compliance with all federal, provincial, and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Normally none is required when adequate ventilation is provided. In the absence of proper environmental control, a NIOSH approved respirator for organic vapours is required. For emergencies, a self-contained breathing apparatus or full-faced respirator is recommended.

Ventilation: Provide adequate ventilation in work areas. Confine material in sealed containers when not in use.

Hand Protection: Always wear impervious gloves, neoprene, vinyl or rubber.

Eye Protection: Splash proof goggles or safety spectacles with side shields are recommended. Always wear eye protection when sanding cured epoxy resins to avoid dust in eyes.

Other Protective Equipment: Wear clean, body-covering clothing to avoid skin contact.

SECTION IX - OTHER INFORMATION

Transportation of Dangerous Goods Classification: Not regulated

Consumer warnings: Caution: Irritant, skin sensitizer.

All components in this product are on the Domestic Substances List.

Other Requirements: U.S. EPA:

This product contains no toxic chemicals subject to the report requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.:

The information contained herein is based on the data available to us and is believed to be correct. However, Industrial Formulators, Inc. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. Industrial Formulators assumes no responsibility for injury from the use of the product described herein.



MATERIAL SAFETY DATA SHEET

Industrial Formulators, Inc. 3824 William Street Burnaby, B.C. V5C 3H9

SECTION I - PRODUCT IDENTIFICATION

Product Name: **30-Cure Hardener**
Previous Revision: April 9, 2001
Product Type: Amine Hardener Mixture
24-Hr. Emergency Phone:
CANUTEC: 1-613-996-6666

WHMIS Classification: D2B
Date of Prep: May 1, 2003
Reason Revised: Format Change
Information: (604) 294-5723
Prepared By: J. Bartlett

HMIS Ratings:
Health 3
Fire 1
Reactivity 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	AMOUNT	CAS NUMBER	OSHA PEL	ACGIH TLV
Mercaptan-terminated polymer (Mixture is trade secret)	80-90%	-----	none established	none established
(Dimethylamino)methylphenol	10-20%	25338-55-0	none established	none established
Phenol	1-2%	108-95-2	5 ppm	5 ppm

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Range: Not determined. Specific Gravity: 1.1
Vapor Density: Heavier than Air Material V.O.C.: None
Evaporation Rate: Not applicable. Water Solubility: Negligible
Appearance and Odor: Straw yellow mobile liquid with ammonia-like odour.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not applicable. Method: Not applicable.
Flammable Limits in Air By Volume: Lower: N/A Upper: N/A
Extinguishing Media: Foam, Carbon Dioxide, Dry Chemical, Water Fog

Special Firefighting Procedures:

When fighting chemical fires wear full protective equipment with self-contained breathing apparatus. Water spray may be used to cool fire-exposed containers. Toxic fumes will be evolved when this substance is burned.

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke.

Incompatibility: Strong oxidizing agents, mineral acids.

Hazardous Decomposition Products: Oxides of carbon, sulfur, nitrogen

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

ROUTES OF ENTRY: Eye contact, ingestion, skin contact.

ACUTE EFFECTS OF OVEREXPOSURE:

Eye contact: may cause severe irritation or corrosive damage.

Inhalation: Severe irritation to nose, throat, respiratory tract.

Ingestion: May cause gastrointestinal irritation.

Skin contact: Prolonged contact may cause skin burns.

CHRONIC EFFECTS OF OVEREXPOSURE: May cause skin sensitization from prolonged and repeated contact.

Carcinogenicity: No ingredients in this product are registered with IARC, NTP, or OSHA as a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: Flush with water for 15 minutes holding eyelids open. If irritation persists, get medical attention.

Ingestion: Dilute with no more than 2 glasses of milk or water. If irritation persists, get medical attention.

Skin Contact: Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned.

Contaminated leather articles (shoes) cannot be decontaminated and should be destroyed.

Medical Conditions Generally Aggravated by Exposure: Other than skin sensitization which appears to be permanent, epoxy resin does not appear to cause long term health effects. Nor, does it appear to aggravate other medical conditions.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

If Material is Spilled: Avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust, or other absorbent, and shoveled into disposal containers.

Waste Disposal Method: Place in an appropriate disposal facility in compliance with federal, provincial, and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Normally none is required when adequate ventilation is provided. In the absence of proper environmental control a NIOSH approved respirator for organic vapour is required. For emergencies, a self-contained breathing apparatus or full-faced respirator is recommended.

Ventilation: Provide adequate ventilation in work areas. Confine material in sealed containers when not in use.

Hand Protection: Always wear impervious gloves, neoprene, vinyl or rubber.

Eye Protection: Splash proof goggles or safety spectacles with side shields are recommended. Always wear eye protection when sanding cured epoxy resins to avoid dust in eyes.

Other Protective Equipment: Wear clean, body-covering clothing to avoid skin contact.

SECTION IX – OTHER INFORMATION

T.D.G. Classification: AMINES, LIQUID, CORROSIVE, N.O.S., (ETHYLENE AMINE), 8, UN2735, PG III

Consumer Warnings: CAUTION! Skin irritant.

Canada NSNR: All substances in this product are on the Domestic Substances List.

U.S. EPA Right-To-Know SARA Title III:

This product contains the following toxic chemicals subject to the report requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Phenol	1-2%	108-95-2	5 ppm	5 ppm
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