

Air Products and Chemicals, Inc.
 7201 Hamilton Boulevard
 Allentown, PA 18195-1502
 Tel (610) 481-4819

Product Data Sheet

CEP Series

Air Products CEP Series represent a set of epoxy systems with varying flexibility intended for use in composite adhesive and structural applications. These experimental systems include both a resin component utilizing Ancarez 2364 (an epoxy flexibilizer), and a curative component composed of Air Products proprietary amines.

	CEP series							
	Adhesive			Structural				
	100	200	300	400	500	600	700	800
Curative use level (phr)	18	18	15	36	26	25	21	20
Cure schedule	Room temp cure, 7 days				80 °C 2hrs, 150 °C 3hrs			
Mixed Viscosity @25°C (cP)	625	793	3250	1431	768	862	562	812
Pot Life (min) (time to double initial viscosity)	25	53	22	9	70	47	65	54
Tensile Strength (Mpa)	36	29	19	12	-	-	-	-
% Elongation	24	60	80	160	-	-	-	-

For further information or to request samples of CEP series systems, please contact Pritesh Patel at 610-481-4819 or patelpg@airproducts.com.

Air Products and Chemicals, Inc.
 7201 Hamilton Boulevard
 Allentown, PA 18195-1502

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME YEY-B6C-103//CEP series curative

MANUFACTURER Air Products and Chemicals, Inc.
7201 Hamilton Blvd.,
Allentown, PA 18195-1501

TELEPHONE NUMBER 800-345-3148

EMERGENCY TELEPHONE NUMBER(S)
800-523-9374 (Continental U.S.)
01-610-481-7711 (Outside Continental U.S.)

EMERGENCY OVERVIEW

HMIS HEALTH 3 FLAMMABILITY 1 REACTIVITY 0

PHYSICAL FORM Mobile liquid at processing temperature

COLOR Amber / at processing temperature

HAZARDS Harmful if swallowed. Corrosive to eyes. Corrosive to skin. Severe eye irritant. Severe skin irritant. May cause skin sensitization.

EXTINGUISHING MEDIA Ignition will give rise to a Class B fire. In case of large fire use: alcohol foam, water spray. In case of small fire use: carbon dioxide (CO2), dry chemical, dry sand or limestone.

C.A.S. CHEMICAL NAME Mixture

SYNONYMS None

CHEMICAL FAMILY Cycloaliphatic and aliphatic amines

EMPIRICAL FORMULA Mixture

INTENDED USE No Data

REVISION NOTES None

SECTION 2 - INGREDIENTS

Num % CAS Number and Chemical Name

1. 40-60 cycloaliphatic amines

The remaining composition is trade secret.

OSHA (ACGIH) EXPOSURE LIMITS

	TWA		STEL		CEILING	
	ppm	mg/m3	ppm	mg/m3	ppm	mg/m3
1. OSHA	N/E	N/E	N/E	N/E	N/E	N/E
ACGIH	N/E	N/E	N/E	N/E	N/E	N/E
2. OSHA	N/E	N/E	N/E	N/E	N/E	N/E
ACGIH	N/E	N/E	N/E	N/E	N/E	N/E
3. OSHA	N/E	N/E	N/E	N/E	N/E	N/E
ACGIH	N/E	N/E	N/E	N/E	N/E	N/E
4. OSHA	N/E	N/E	N/E	N/E	N/E	N/E
ACGIH	N/E	N/E	N/E	N/E	N/E	N/E

N/E = Not Established.

SECTION 3 - HEALTH HAZARDS

ROUTES OF EXPOSURE

- Eye Contact
- Skin Contact
- Ingestion
- Skin Absorption

EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients. Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

HEALTH HAZARDS

Harmful if swallowed.
Corrosive to eyes.
Corrosive to skin.
Severe eye irritant.
Severe skin irritant.
May cause skin sensitization.

TARGET ORGANS

Eye
Skin

SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Burns of the eye may cause blindness. Contact of undiluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury.

Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring.

Product is absorbed through the skin and may cause nausea, headache and general discomfort.

SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects)

Repeated and/or prolonged exposure may cause allergic reaction/sensitization.

Repeated and/or prolonged exposures may result in: adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as rash, irritation or corrosion).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Eye disease
Skin disorders and Allergies

CARCINOGENS UNDER OSHA, ACGIH, NTP, IARC

This product contains no listed carcinogens in concentrations of 0.1 percent or greater.

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at

least 15 minutes. Seek medical advice.

SKIN CONTACT

Remove contaminated clothing and shoes. Remove product and immediately flush affected area with water for at least 15 minutes. Destroy contaminated leather apparel. Cover the affected area with a sterile dressing or clean sheeting and transport for medical care. Do not apply greases or ointments. Control shock, if present. Launder contaminated clothing prior to reuse.

INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Seek medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

INGESTION

In the event of ingestion, administer 3-4 glasses of milk or water. Do not induce vomiting. Seek medical advice.

SECTION 5 - FIRE AND EXPLOSION DATA

FLASH POINT (closed cup) >110C

UPPER EXPLOSION LIMIT (UEL) No Data

LOWER EXPLOSION LIMIT (LEL) No Data

AUTOIGNITION TEMPERATURE No Data

FIRE HAZARD CLASSIFICATION (OSHA/NFPA)

Class IIIB

EXTINGUISHING MEDIA

Ignition will give rise to a Class B fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO₂), dry chemical, dry sand or limestone.

SPECIAL FIRE FIGHTING PROCEDURES

A face shield should be worn. Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus. Retain expended liquids from fire fighting for later disposal.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May generate toxic or irritating combustion products.
Contact of liquid with skin must be prevented.

Sudden reaction and fire may result if product is mixed with an oxidizing agent.

May generate carbon monoxide gas. May generate toxic nitrogen oxide gases. May generate ammonia gas.

Personnel in vicinity and downwind should be evacuated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc)

Stop the leak, if possible. Reduce vapor spreading with a water spray.

Shut off or remove all ignition sources. Construct a dike to prevent spreading (includes molten liquids until they freeze).

CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

OTHER EMERGENCY ADVICE

Wear protective clothing, boots, gloves, and eye protection.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from: acids, oxidizers. Keep in cool, dry, ventilated storage and in closed containers. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store in reactive metal containers.

HANDLING

Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke. Avoid using in any spray application without strict conformance to all applicable electrical codes and the OSHA limit for maximum allowable airborne concentrations.

OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible.

Adhere to work practice rules established by government regulations (e.g. OSHA). Do not use sodium nitrite or other nitrosating agents in

formulations containing this product. Cancer-causing nitrosamines could be formed.

SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

EYE PROTECTION

Full face shield with goggles underneath.

HAND PROTECTION

Neoprene rubber gloves. Impermeable gloves. Cuffed butyl rubber gloves. Nitrile rubber gloves. Rubber Gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

RESPIRATORY PROTECTION

Not required under normal conditions in a well-ventilated workplace. Under the following conditions a respirator may be required: when product vapor concentration exceeds the limits listed in section 2, during repair and cleaning of equipment, during transfer or discharge of the product, sampling, spray applications. Types of respirators that may be used include the following: Chemical Cartridge Respirator with face piece to protect against the organic vapor, Supplied air respirator with full face piece (NIOSH Approved), Self-contained breathing apparatus in pressure demand mode. In emergency conditions use a self-contained breathing apparatus in pressure demand mode.

PROTECTIVE CLOTHING

Impervious clothing. Slicker Suit. Rubber boots. Full rubber suit (rain gear). Butyl or latex protective clothing.

ENGINEERING CONTROLS

Maintain air concentrations in work spaces in accord with standards outlined in Sections 2 and 3.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Discard contaminated leather articles.

SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM

Mobile liquid

COLOR	Amber /
ODOR	
pH	Alkaline
VAPOR PRESSURE (mm Hg at 21C (70F))	< 1.0
VAPOR DENSITY (Air = 1)	No Data
BOILING POINT	>200.00 C (>392.00 F)
MELTING POINT	No Data
SPECIFIC GRAVITY (Water = 1)	0.96
MOLECULAR WEIGHT	Mixture

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable

CONDITIONS TO AVOID (if unstable)

Not applicable

INCOMPATIBILITY (Materials to Avoid)

Mineral acids (i.e. sulfuric, phosphoric, etc.). Organic acids (i.e. acetic acid, citric acid etc.). Oxidizing Agents (i.e. perchlorates, nitrates etc.). Reactive metals (i.e. sodium, calcium, zinc etc.). Sodium or Calcium Hypochlorite. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. Nitrites, nitrosating agents. A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).

Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm). Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric acid in a fire. nitrosamines. Aldehydes. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID (if polymerization may occur)

Not applicable

SECTION 11 - TOXICOLOGICAL PROPERTIES

ACUTE ORAL TOXICITY (LD50, RAT)

>367.00 mg/kg (Estimate)

ACUTE DERMAL TOXICITY (LD50, RABBIT)

>1000.00 mg/kg (Estimate)

ACUTE INHALATION TOXICITY (LC50, RAT)

No Data

OTHER DATA

Toxicity data from similar products.

OTHER ACUTE EFFECTS

No Data

IRRITATION EFFECTS DATA

Irritation data from similar products.

CHRONIC/SUBCHRONIC DATA

Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity. Component has caused allergic skin sensitization in animals.

SECTION 12 - ECOLOGICAL INFORMATION

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Comply with all Federal, State and Local Regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT NON-BULK SHIPPING NAME UN 2735, Amines, liquid, corrosive, n.o.s.,
(Contains cycloaliphatic and aliphatic amines), 8, PG II

DOT BULK SHIPPING NAME Refer to Bill of Lading.

IMO SHIPPING DATA Refer to Bill of Lading.

ICAO/IATA SHIPPING DATA Amines, liquid, corrosive, n.o.s.
(Contains cycloaliphatic amines)// 8 //
UN2735 // II // Shipment per 49 CFR 171.11
// NAERG Guide No: 153

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA)-

All components are included in the EPA Toxic Substances Control Act
(TSCA) Chemical Substance Inventory.

TOXIC SUBSTANCE CONTROL ACT (TSCA) 12(b) COMPONENT(S)

None

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)

Corrosive. Sensitizer.

EPA SARA Title III Section 312 (40CFR370) hazard class

Immediate Health Hazard. Delayed Health Hazard.

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimis" level are

None

PROPOSITION 65 SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")

None

NEW JERSEY TRADE SECRET REGISTRY NUMBER(S)

SECTION 16 - INTERNATIONAL REGULATIONS

CANADA

DSL

Included on Inventory.

WHMIS HAZARD CLASSIFICATION

Class D Division 2B, Class E Corrosive,

WHMIS INGREDIENT DISCLOSURE LIST

Cycloaliphatic and aliphatic Amines

WHMIS SYMBOLS

Test tube/hand, Stylized T,

EUROPEAN ECONOMIC COMMUNITY (EEC)

EINECS/ELINCS MASTER INVENTORY

Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.

EEC SYMBOL

CORROSIVE (C), DANGEROUS FOR THE ENVIRONMENT, (N).

EEC RISK (R) PHRASES

Very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment (R50/53). May cause sensitization by skin contact (R43). Causes burns (R34).

Harmful in contact with skin and if swallowed (R21/22).

EEC SAFETY PHRASES

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26). This material and/or its container must be disposed of as hazardous waste (S60). Wear suitable protective clothing, gloves and eye/face protection (S36/37/39). Avoid release to the environment. Refer to special instructions/Safety data sheet (S61). In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45).

AUSTRALIA

AICS

Included on Inventory.

JAPAN MITI

Included on Inventory.

PHILIPPINES PICCS

Not on Inventory.

KOREA ECL

Not on Inventory.

CHINA SEPA

Included on Inventory.

END OF DOCUMENT

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME YEY-B6C-103//CEP series resin

MANUFACTURER Air Products and Chemicals, Inc.
 7201 Hamilton Blvd.,
 Allentown, PA 18195-1501

TELEPHONE NUMBER 800-345-3148

EMERGENCY TELEPHONE NUMBER(S)
 800-523-9374 (Continental U.S.)
 610-481-7711 (Outside Continental U.S.)

EMERGENCY OVERVIEW

HMIS HEALTH 2 FLAMMABILITY 1 REACTIVITY 0

PHYSICAL FORM Viscous liquid at processing temperature

COLOR Light yellow / at processing temperature /

ODOR Faint

HAZARDS Mild eye irritant. Mild respiratory tract irritant.
 Mild skin irritant. May cause skin sensitization.

EXTINGUISHING MEDIA Ignition will give rise to a Class B fire. In case of
 large fire use: alcohol foam, water spray. In case of
 small fire use: carbon dioxide (CO2), dry chemical,
 dry sand or limestone.

C.A.S. CHEMICAL NAME Mixture

SYNONYMS None

CHEMICAL FAMILY Resin

EMPIRICAL FORMULA Mixture

REVISION NOTES None

SECTION 2 - INGREDIENTS

Num % CAS Number and Chemical Name

1. 30-70 25068-38-6 BISPHENOL A DIGLYCIDYL ETHER RESIN

The remaining components are trade secret.

OSHA (ACGIH) EXPOSURE LIMITS

	TWA	STEL	CEILING			
	ppm	mg/m3	ppm	mg/m3	ppm	mg/m3
1. OSHA	N/E	N/E	N/E	N/E	N/E	N/E
ACGIH	N/E	N/E	N/E	N/E	N/E	N/E

N/E = Not Established.

SECTION 3 - HEALTH HAZARDS

ROUTES OF EXPOSURE

- Eye Contact
- Skin Contact
- Ingestion

EXPOSURE STANDARDS

No standards established for the product. Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

HEALTH HAZARDS

- Mild eye irritant.
- Mild respiratory tract irritant.
- Mild skin irritant.
- May cause skin sensitization.

TARGET ORGANS

- Skin

SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Contact with eyes may cause mild irritation and discomfort. Contact with skin causes mild irritation and discomfort. Inhalation of mists may cause irritation in the respiratory tract. Inhalation of vapors may cause irritation in the respiratory tract.

SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects)

Repeated and/or prolonged exposure may cause allergic reaction/sensitization.

Repeated and/or prolonged exposures may result in: adverse skin effects (such as rash, irritation or corrosion).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Skin disorders and Allergies

CARCINOGENS UNDER OSHA, ACGIH, NTP, IARC, OTHER

This product contains no carcinogens in concentrations of 0.1 percent or greater.

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes.

SKIN CONTACT

Remove contaminated clothing and shoes. Wash affected area with soap and water.

INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Seek medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

INGESTION

If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

FLASH POINT (closed cup) >110.00 C (>230.00 F)

UPPER EXPLOSION LIMIT (UEL) No Data

LOWER EXPLOSION LIMIT (LEL) No Data

AUTOIGNITION TEMPERATURE No Data

FIRE HAZARD CLASSIFICATION (OSHA/NFPA)

Class IIIB

EXTINGUISHING MEDIA

Ignition will give rise to a Class B fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO₂), dry chemical, dry sand or limestone.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May generate toxic or irritating combustion products.

Sudden reaction and fire may result if product is mixed with an oxidizing agent.

May generate carbon monoxide gas.

Personnel in vicinity and downwind should be evacuated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc)

Stop the leak, if possible. Shut off or remove all ignition sources.

Construct a dike to prevent spreading (includes molten liquids until they freeze).

CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

OTHER EMERGENCY ADVICE

Wear protective clothing, boots, gloves, and eye protection.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from: oxidizers. Keep in cool, dry, ventilated storage and in closed containers.

HANDLING

Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in

well ventilated work space. When handling, do not eat, drink, or smoke.

OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible.
Adhere to work practice rules established by government regulations (e.g. OSHA).

SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

EYE PROTECTION

Chemical safety glasses.

HAND PROTECTION

Polyvinyl chloride gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

RESPIRATORY PROTECTION

Not required under normal conditions in a well-ventilated workplace.

PROTECTIVE CLOTHING

Long sleeved clothing.

ENGINEERING CONTROLS

No specific controls needed.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet.

SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Liquid
COLOR	Light yellow /
ODOR	Faint
pH	7.00
VAPOR PRESSURE (mm Hg at 21C (70F))	3.98
VAPOR DENSITY (Air = 1)	No Data
BOILING POINT	>93.33 C (>199.99 F)
MELTING POINT	No Data
SOLUBILITY IN WATER	Insoluble (<0.1%)
SPECIFIC GRAVITY (Water = 1)	1.10
MOLECULAR WEIGHT	Mixture

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable

CONDITIONS TO AVOID (if unstable)

Not applicable

INCOMPATIBILITY (Materials to Avoid)

Oxidizing Agents (i.e. perchlorates, nitrates etc.). Sodium or Calcium Hypochlorite. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).

Carbon Monoxide in a fire. Carbon Dioxide in a fire. Irritating and toxic fumes at elevated temperatures.

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID (if polymerization may occur)

Not applicable

SECTION 11 - TOXICOLOGICAL PROPERTIES

ACUTE ORAL TOXICITY (LD50, RAT)

No Data

ACUTE DERMAL TOXICITY (LD50, RABBIT)

No Data

ACUTE INHALATION TOXICITY (LC50, RAT)

No Data

OTHER ACUTE EFFECTS

No Data

IRRITATION EFFECTS DATA

Irritation data based on estimates.

CHRONIC/SUBCHRONIC DATA

Component has caused allergic sensitization in animals.

SECTION 12 - ECOLOGICAL INFORMATION

No Data

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Comply with all Federal, State and Local Regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT NON-BULK SHIPPING NAME RESIN COMPOUND - Not DOT Regulated

DOT BULK SHIPPING NAME Refer to Bill of Lading.

IMO SHIPPING DATA Refer to Bill of Lading.

ICAO/IATA SHIPPING DATA RESIN COMPOUND - Not IATA Regulated

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA)-

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

TOXIC SUBSTANCE CONTROL ACT (TSCA) 12(b) COMPONENT(S)

None

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)

Sensitizer.

EPA SARA Title III Section 312 (40CFR370) hazard class

Delayed Health Hazard.

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimis" level are

None

PROPOSITION 65 SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement

Act of 1986")

None

SECTION 16 - INTERNATIONAL REGULATIONS

CANADA

DSL

Included on Inventory.

WHMIS HAZARD CLASSIFICATION

Class D Division 2B

WHMIS TRADE SECRET REGISTRY NUMBER(S)

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

None

WHMIS INGREDIENT DISCLOSURE LIST

None

WHMIS SYMBOLS

Stylized T

EUROPEAN ECONOMIC COMMUNITY (EEC)

EINECS/ELINCS MASTER INVENTORY

Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.

EEC SYMBOL

DANGEROUS FOR THE ENVIRONMENT, (N)., IRRITANT (Xi)

EEC RISK (R) PHRASES

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R51/53). May cause sensitization by skin contact (R43). Irritating to eyes and skin (R36/38).

EEC SAFETY PHRASES

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26). Wear suitable protective clothing and gloves (S36/37). Avoid release to the environment. Refer to special instructions/Safety data sheet (S61).

EEC SPECIAL PHRASES

Contains Epoxy constituents. See information supplied by the manufacturer.

AUSTRALIA

AICS

Included on Inventory.

JAPAN MITI

Included on Inventory.

PHILIPPINES PICCS

Not on Inventory.

KOREA ECL

Included on Inventory.
CHINA SEPA
Included on Inventory.

END OF DOCUMENT