

Material Safety Data Sheet

Product Name: CBC 6 Segmental Epoxy, Normal Set, A Component (55°75°)

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Pilgrim Permocoat, Inc. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name

CBC 6 Segmental Epoxy, Normal Set, A Component (55°75°)

COMPANY IDENTIFICATION

Pilgrim Permocoat, Inc.

402 S. 22nd Street

Tampa, Florida 33605

USA

Customer Information Number: 800-637-3328

Chemtec: 800.262.8200

2. Hazards Identification

Emergency Overview

Color: Off White

Physical State: GEL

Odor: Mild

Hazards of product:

WARNING! May cause allergic skin reaction. May cause eye irritation. May cause skin irritation.

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause eye irritation. Corneal injury is unlikely.

Skin Contact: Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin irritation with local redness.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Skin Sensitization: Has caused allergic skin reactions in humans.

Vapors are unlikely due to physical properties.

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Cancer Information: Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBA). Indeed, the most recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEBA is not classified as a carcinogen. Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBA is carcinogenic.

3.Component		
Component	CAS#	Amount
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	25085-99-8	>60%
Silica	14808-60-7	<40%
Wolastinite	13983-17-0	<5%
TIO2	13463-67-7	<5%

4. First-aid measures

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: Remove material from skin immediately by washing with soap and plenty of water.

Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists.

Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Ingestion: No emergency medical treatment necessary.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for

fire extinguishment.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound

from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation.

Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Dense smoke is emitted when burned without sufficient oxygen.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Absorb with materials such as: Sand. Polypropylene fiber products. Polyethylene fiber products. Remove residual with soap and hot water. Collect in suitable and properly labeled containers. Residual can be removed with solvent. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed. Consult appropriate solvent Safety Data Sheet for handling information and exposure guidelines. See Section 13, Disposal Considerations, for additional

information.

Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. Handling and Storage

Handling

General Handling: Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Avoid contact with skin and clothing. Wash thoroughly after handling. Avoid use of electric band heaters.

Failures of electric band heaters have been reported to cause drums of liquid epoxy resin to explode and catch fire. Application of a direct flame to a container of liquid epoxy resin can also cause explosion and/or fire.

Storage

Keep containers tightly closed. Keep out of reach of children.

Shelf life: Use within Storage temperature:

24 Months 2 - 43 °C

8. Exposure Controls / Personal Protection

Exposure Limits

None established

Personal Protection

Eye/Face Protection: Use safety glasses.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Nitrile. Neoprene. Polyvinyl chloride ("PVC" or "vinyl").
NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the

instructions/specifications provided by the glove supplier.

Respiratory Protection: No respiratory protection should be needed.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Good general ventilation should be sufficient for most conditions.

9. Physical and Chemical Properties

Physical State	Gel
Color	Off White
Odor	Mild
Flash Point - Closed Cup	252 °C (486 °F) <i>PMCC, ASTM D93</i>
Flammable Limits In Air Lower:	Not applicable
Upper:	Not applicable
Autoignition Temperature	Not applicable
Vapor Pressure	< 0.01 mmHg @ 25 °C <i>Literature</i>
Boiling Point (760 mmHg)	> 100 °C (> 212 °F) <i>Literature</i> .
Vapor Density (air = 1)	Not applicable
Specific Gravity (H2O = 1)	1.16 <i>Literature</i>
Freezing Point	Not determined
Melting Point	Not determined
Solubility in Water (by weight)	Insoluble
pH	Not determined
Dynamic Viscosity	900-1200 mPa.s @ 25 °C <i>ASTM D445</i>

10. Stability and Reactivity

Stability/Instability

Stable under recommended storage conditions. See Storage, Section 7.

Conditions to Avoid: Avoid temperatures above 300°C (572°F) Potentially violent decomposition can occur above 350°C (662°F) Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid.

Incompatible Materials: Avoid contact with oxidizing materials. Avoid contact with: Acids. Bases.

Avoid unintended contact with amines.

Hazardous Polymerization

Will not occur by itself. Masses of more than one pound (0.5 kg) of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build-up.

Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials.

Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

11. Toxicological Information

Acute Toxicity

Ingestion

LD50, Rat > 5,000 mg/kg

Skin Absorption

LD50, Rabbit 20,000 mg/kg

Sensitization

Skin

Has caused allergic skin reactions in humans. Did not cause allergic skin reactions when tested in mice.

Repeated Dose Toxicity

Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

Chronic Toxicity and Carcinogenicity

Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBA). Indeed, the most recent review of the available data by the International

Agency for Research on Cancer (IARC) has concluded that DGEBA is not classified as a carcinogen.

Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBA is carcinogenic.

Developmental Toxicity

Resins based on the diglycidyl ether of bisphenol A (DGEBA) did not cause birth defects or other adverse effects on the fetus when pregnant rabbits were exposed by skin contact, the most likely route of exposure, or when pregnant rats or rabbits were exposed orally.

Reproductive Toxicity

In animal studies, did not interfere with reproduction.

Genetic Toxicology

In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

12. Ecological Information

CHEMICAL FATE

Movement & Partitioning

CBC 6 Segmental Epoxy, Normal Set, A Component (55°75°)

Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Potential for mobility in soil is low (Koc between 500 and 2000).

Henry's Law Constant (H): < 6.94E-09 atm*m3/mole; 25 °C Estimated

Partition coefficient, soil organic carbon/water (Koc): 1,800 - 4,400

Estimated 1,800 - 4,400

Estimated

Persistence and Degradability

Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or

BOD28/ThOD < 2.5%).

Indirect Photodegradation with OH Radicals

Rate Constant

6.69E-11 cm³/s

Atmospheric Half-life

1.92 h

Method

Estimated

OECD Biodegradation Tests:

Biodegradation

12 %

Exposure Time

28 d

Method

OECD 302B Test

Biological oxygen demand (BOD):

BOD 5

BOD 10

BOD 20

< 2.5 %

BOD 28

Theoretical Oxygen Demand: 2.35 mg/mg

ECOTOXICITY

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested). Toxicity to aquatic species occurs at concentrations above material's water solubility.

Fish Acute & Prolonged Toxicity

LC50, fathead minnow (*Pimephales promelas*), 96 h: 3.1 mg/l

Aquatic Invertebrate Acute Toxicity

EC50, water flea *Daphnia magna*, 48 h, immobilization: 1.4 - 1.7 mg/l

Toxicity to Micro-organisms

IC50; bacteria, Growth inhibition, 18 h: > 42.6 mg/l

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. PILGRIM HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF

PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

14. Transport Information

DOT Non-Bulk

NOT REGULATED

DOT Bulk

NOT REGULATED

IMDG

NOT REGULATED

ICAO/IATA

NOT REGULATED

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and

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Community Right-to-Know Act of 1986) Section 313

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

European Inventory of Existing Commercial Chemical Substances (EINECS)

Components of this product are not listed on EINECS because they are polymers or "no-longer polymers" marketed before the enforcement of the 7th Amendment to Directive 67/548/EEC.

US. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

CEPA - Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. Other Information

Product Literature

Additional information on this product may be obtained by calling your Pilgrim sales or customer service contact. Ask for a product brochure.

Hazard Rating System

NFPA	Health	Fire	Reactivity
	1	1	2

Recommended Uses and Restrictions

CBC 6 Segmental Epoxy, Normal Set, A Component (55°75°)

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Used in applications such as: Adhesive. Casting. Tooling. Civil engineering.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

Pilgrim Permocoat, Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

MATERIAL SAFETY DATA SHEET

PILGRIM PERMOCOAT, INC.
402 S. 22ND ST.
TAMPA, FLORIDA 33605

PILGRIM CODE-ver
ISSUE DATE-7/16/91
REVISED-4/23/2020

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME - CBC 6 Segmental Epoxy, Normal Set (55°-75°), B Component

CAS# - MIXTURE

CHEMICAL NAME - ALIPHATIC AMINE BLEND

DOT CLASS -CORROSIVE, N.O.S.

HMIS: H-3, F-1, R-0

FORMULA -TRADE SECRET

MOLECULAR WEIGHT - NA

EMERGENCY CONTACT - CHEMTREC 800 262 8200

DAY PHONE - 813-248-3328

EMERGENCY OVERVIEW

HMIS HEALTH RATING 3 FLAMMABILITY 1 REACTIVITY 0

PHYSICAL FORM Gel

COLOR Black

ODOR Amoniacal

HEALTH HAZARDS Severe eye irritant; severe skin irritant; severe respiratory tract irritant; corrosive liquid; may cause skin sensitization

EXTINGUISHING MEDIA Ignition will give rise to a Class B fire. In case of fire use: Water Spray, Carbon Dioxide (CO2) , Dry Chemical, Alcohol Foam

C.A.S. CHEMICAL NAME Mixture
SYNONYMS None
CHEMICAL FAMILY Aliphatic Amines
EMPIRICAL FORMULA Mixture
INTENDED USE Epoxy Curing Agent

SECTION 2 - INGREDIENTS

%	CAS Number and Chemical Name	
09	1477-55-0	Benzene-1, 3-dimethanamine
08	3236-53-1	Trimethylhexamethylenediamine
15	98-54-4	Paratertiarybutylphenol
05	9046-10-0	Amino Terminated Polyether
15	25154-52-3	Nonylphenol
10	13983-17-0	Wolansite
30	68131-74-8	Alumina Silicate

OSHA (ACGIH) EXPOSURE LIMITS

CAS#	TWA ppm	STEL ppm	mg/m3	CEILING ppm	mg/m3
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1477-55-0	NE (N/E)	N/E (N/E)	NE (N/E)	N/E (N/E)	N/E (N/E)	O.1 SKIN (0.1) SKIN
3236-53-1	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)
98-54-4	N/E	N/E (N/E)	N/E (N/E)	N/E	N/E (N/E)	N/E (N/E)
9046-10-0	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)
25154-52-3	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)
13983-17-0	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)
68131-74-8	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)	N/E (N/E)

OSHA (ACGIH) EXPOSURE LIMITS

N/E = Not Established

SECTION 3- HEALTH HAZARDS

ROUTES OF EXPOSURE

Ingestion
Skin Absorption
Inhalation

EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients

HEALTH HAZARDS

Severe eye irritant; Severe skin irritant; Severe respiratory tract irritant; Corrosive Liquid; May cause skin sensitization

TARGET ORGANS

Eye; Respiratory system; Skin.

SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere.

Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. The effect is transient and has no known residual effect

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

Burns of the eye may cause blindness.

Inhalation of vapors may cause irritation in the respiratory tract.

Inhalation of aerosol, mist or fog may cause harm if inhaled.

Ingestion may cause bleeding of the gastrointestinal tract and vomiting of blood.

SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects)

Repeated and/or prolonged exposures may result in: adverse skin effects (such as defatting, rash, or irritation); adverse eye effects (such as conjunctivitis or corneal damage); or adverse respiratory effects (such as cough, tightness of chest or shortness of breath) Repeated and/or prolonged exposure may cause allergic reaction/sensitization.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Chronic respiratory disease (e.g. Bronchitis, Emphysema); Eye disease; Skin disorders and Allergies.

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 product and immediately flush area with water for at least 15 minutes. Seek medical advice. 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. Contaminated leather wear should be discarded. Victims of a major skin area contact should remain under medical observation for at least 24 hours due to possible delayed effects.

INHALATION

In case of inhalation or suspected inhalation, move the patient at once to fresh air and call a physician. Keep patient absolutely quiet and start oxygen inhalation through suitable equipment.

Prevent aspiration of vomit. Turn victim's head to the side.

INJECTION

In the event of injection, administer 3-4 glasses of milk or water. **DO NOT INDUCE VOMITING.** Seek medical advice.

SECTION 5 - FIRE AND EXPLOSION DATA

CHARACTERISTICS:

FLASH POINT (closed cup)	110C (230F)
FLASH POINT METHOD	Pensky-Martin Closed Cup
UPPER EXPLOSION LIMIT (UEL)	No Data
LOWER EXPLOSION LIMIT (LEL)	No Data
AUTOIGNITION TEMPERATURE	No Data
FIRE HAZARD CLASSIFICATION (OSHA/NFPA)	
CLASS III B	

EXTINGUISHING MEDIA

Ignition will give rise to a class B fire. In case of fire use: Water Spray, Carbon Dioxide(CO₂), Dry Chemical, Alcohol Foam.

SPECIAL FIRE FIGHTING PROCEDURES

Retain expended liquids from fire fighting for later disposal. Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus. Water spray is also useful in cooling fire-exposed tanks and in dispersing vapors.

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.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc) Stop the leak if possible. Ventilate the space involved. Shut off or remove all ignition sources. Construct a dike to prevent spreading.

CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent (sodium bisulfate) and place in a container or dumpster pending disposal.

Flush area with water spray.

OTHER EMERGENCY ADVICE

Avoid contamination of ground and surface waters. Notify local health authorities and other appropriate agencies if such contamination should occur. Potential for carbon monoxide and/or nitrous oxides generation in a fire must be recognized.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from oxidizers, heat or flames, 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.

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. Splash-proof eye goggles.
Contact lenses should not be worn.

HAND PROTECTION

Nitrile rubber gloves. In emergency situations, wear impermeable gloves with cuffs to prevent spread of material to area above the wrists.

RESPIRATORY PROTECTION

An organic vapor respirator National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors is recommended under emergency conditions.

PROTECTIVE CLOTHING

Clean unsoiled clothing

ENGINEERING CONTROLS

Adequate general and local exhaust

WORK AND HYGIENIC PRACTICES

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.
Examine protective gloves before using. Discard if find evidence of holes or cracks.

SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Gel
COLOR	Black
ODOR	Ammoniacal
pH	Alkaline
VAPOR PRESSURE	No Data
VAPOR DENSITY	No Data
BOILING POINT	230C (446F)
MELTING POINT	<-18C (0.4F)
SOLUBILITY IN WATER	<1% @ 25C (77F)
SPECIFIC GRAVITY (Water =1)	0.876 @ 21C (70F)
viscosity (CPS)	250,000 @ 25C (77F)
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.).

Cleaning solutions, such as chromerge (sulfuric acid/dichromate) and aqua regia.

A reaction accompanied by large heat release occurs when the product is mixed with acids.

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

Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm).

Combustion of product under oxygen-starved conditions can be expected to produce numerous toxic products including: nitriles, amides.

Irritating and toxic fumes at elevated temperatures.

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID (if polymerization may occur)

Not applicable

PROPERTIES

SECTION 11 - TOXICOLOGICAL**ACUTE TOXICITY EFFECTS DATA**

Oral LD50 (rat): 1750 mg/kg

OTHER ACUTE EFFECTS

No Data

IRRITATION EFFECTS DATA

Corrosive

CHRONIC/SUBCHRONIC DATA

No delayed, subchronic or chronic test data are known.

SECTION 12 - ECOLOGICAL INFORMATION

No Data

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Comply with all Federal, State and local Regulations, Incinerate in admixture with fuel equipped with a scrubber to remove nitrogen oxides, to remove carbon monoxide.

SECTION 14 - TRANSPORT INFORMATION

DOT NON-BULK SHIPPING NAME	Amines, liquid, corrosive, n.o.s. (BENZENE-1,3-DIMETHANEAMINE (MXDA)/TRIMETHYLHEXAMETHYLENEDIAMINE (TMD)) // 8 // UN2735 // PG II
IMO SHIPPING DATA	Amines, liquid, corrosive, n.o.s. (BENZENE-1,3-DIMETHANEAMINE (MXDA)/TRIMETHYLHEXAMETHYLENEDIAMINE (TMD)) // 8 // UN2735 // PG II // Marine Pollutant (Alkylphenols, liquid, n.o.s. // IMDG page 8109-2 // F.P. 93.3 C // Placarded Corrosive // Haz
ICAO/IATA SHIPPING DATA	Amines, liquid, corrosive, n.o.s. (BENZENE-1,3-DIMETHANEAMINE (MXDA)/TRIMETHYLHEXAMETHYLENEDIAMINE (TMD)) // 8 // UN2735 // II // F.P.> 93.3 C // Shipment per 49 CFR 171.11

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.

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

Corrosive

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

Immediate Health Hazard

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

None

STATE REGULATIONS

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
