

Section 1. Identification

Product Name: EP 420 Part B
Supplier: CSNRI | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491
Emergency Phone Number: +1 703.527.3887
Product Description: Pipe Wrap SDS
Product Use: Epoxy curing agent

Section 2. Hazards Identification

Classification of the substance or mixture

Skin corrosion/irritation	Category 1
Eye damage/irritation	Category 1
Sensitization - Skin	Category 1
Carcinogenicity	Category 2
Chronic aquatic toxicity	Category 3

Hazard pictograms:



Signal word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards: None known.

Section 3. Composition/Information on Ingredients

Substance/Mixture: Preparation

Chemical nature: Epoxy constituents

Hazardous components:

Component	CAS #	% Composition
m-phenylenebis(methylamine)	1477-55-0	>= 20 - < 30
triethylenetetramine	112-24-3	>= 20 - < 30
Titanium Dioxide	13463-67-7	>= 0.1 - < 1

Section 4. First Aid Measures

Description of first-aid measures:

General advice: Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.

Inhalation: Call a physician or poison control centre immediately. If unconscious place in recovery position and seek medical advice.

Skin contact: Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes.

Eye contact: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed: May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. Causes severe burns.

Section 5. Fire-fighting Measures

Unsuitable extinguishing media: High volume water jet.

Specific hazards during fire-fighting: Do not allow run-off from fire-fighting to enter drains or water courses.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for fire-fighting if necessary.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing dust.

Environmental precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and cleaning up: Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Advice on protection against fire and explosion: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling: Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Section 8. Exposure Controls/Personal Protection

Components with workplace control parameters:

Component	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible Concentration	Basis
m-phenylenebis(methylamine)	1477-55-0	C	0.1 mg/m ³	ACGIH
		C	0.1 mg/m ³	NIOSH REL
		C	0.1 mg/m ³	OSHA P0
triethylenetetramine	112-24-3	TWA	1 ppm	US WEEL
Titanium Dioxide	13463-67-7	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (total dust)	10 mg/m ³	OSHA P0
		TWA	10 mg/m ³ (Titanium Dioxide)	ACGIH

Personal protection equipment:

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter. Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

Section 9. Physical and Chemical Properties

Appearance:	Paste
Colour:	Black
Odour:	Ammoniacal
pH:	>10
Flash point:	122 °C
Relative density:	0.92
Water solubility:	Water = 1 Soluble

Section 10. Stability and Reactivity

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: No decomposition if stored and applied as directed.

Possibility of hazardous reactions: No decomposition if stored and applied as directed.

Conditions to avoid: No data available.

Section 11. Toxicological Information

Acute toxicity: Not classified based on available information.

Dermal: Acute toxicity estimate: 4,326 mg/kg
Method: Calculation method

Skin corrosion/irritation: Causes severe burns. Extremely corrosive and destructive to tissue.

Serious eye damage/irritation: Causes serious eye damage. May cause irreversible eye damage.

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity: Not classified based on available information.

Carcinogenicity: Suspected of causing cancer.

IARC Group 2B: Possibly carcinogenic to humans.
Titanium Dioxide

13463-67-7

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



Reproductive Toxicity: Not classified based on available information.
STOT - single exposure: Not classified based on available information.
STOT - repeated exposure: Not classified based on available information.
Aspiration Toxicity: Not classified based on available information.

Section 12. Ecological Information

Toxicity: No additional information available.
Persistence and degradability: No additional information available.
Bioaccumulative potential: m-phenylenebis(methylamine): Partition coefficient: n-octanol/water: log Pow: 0.18 (25 °C)
Mobility in soil: No additional information available.
Other adverse effects: Ozone-Depletion Potential: Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances. Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

Section 13. Disposal Considerations

Disposal methods: Waste from residues: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

Section 14. Transport Information

International Regulation

IATA-DGR

UN/ID No.:	UN 2735
Proper shipping name:	Corrosive liquid, n.o.s. (Aliphatic amine)
Class:	8
Packing group:	III
Labels:	Corrosive
Packing instruction (cargo aircraft):	856
Packing instruction (passenger aircraft):	852

IMDG-CODE

UN/ID No.:	UN 1760
Proper shipping name:	Corrosive liquid, n.o.s. (Aliphatic amine)
Class:	8
Packing group:	III
Labels:	8
EmS Code:	F-A, S-B
Marine pollutant:	No



Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable for product as supplied.

National Regulations

49 CFR

UN/ID No.:	UN 1760
Proper shipping name:	Corrosive liquid, n.o.s. (Aliphatic amine)
Class:	8
Packing group:	III
Labels:	Corrosive
ERG Code:	154
Marine pollutant:	No

Section 15. Regulatory Information

EPCRA - Emergency Planning and Community Right - to - Know Act

CERCLA Reportable Quantity: This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity: This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Chronic Health Hazard. Acute Health Hazard.

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act: This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3. This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

California Prop 65: WARNING! This product contains a chemical known to the State of California to cause cancer.

Titanium Dioxide	13463-67-7
carbon black	1333-86-4

Section 16. Other Information

The information contained herein is based on the data available to us and is believed to be accurate. The data is offered in good faith as typical values and not as product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. CSNRI makes no warranty either expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The recommended industrial hygiene and safe handling procedures are believed to be genuinely applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. CSNRI assumes no



SAFETY DATA SHEET

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responsibility for injury from the use of the product described herein. The information is intended only to assist in the safe handling of this material. CSNRI DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR FREEDOM FROM PATENT INFRINGEMENT. CSNRI WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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