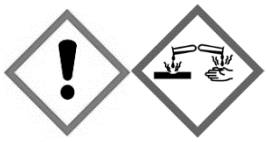
Section 1. Product and Company Identification

Product Name: PPR-590
Supplier: CSNRI | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491
Emergency Phone Number: 800.424.9300 (CHEMTREC)
+1 703.741.5970 (Outside the US)
Product Description: Fiberglass cloth impregnated with epoxy resin.
Product Use: Intended to repair pipes
Chemical Name or Synonym: N/A

Section 2. Hazards Identification

Classification of the substance or mixture:
Skin corrosion/irritation – Category 1B
Skin sensitization - Category 1
Eye damage/eye irritation – Category 1
Acute toxicity/inhalation – Category 4

Label Elements:



Hazard Statements:
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H332 Harmful if inhaled

Signal Word: Danger
Precautionary Statement:
P264 Wash thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P262 Do not get in eyes, on skin, or on clothing.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P361+P353 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P308+P311 If exposed or concerned: Call a Poison Center/doctor.
Other Hazards: N/A

Section 3. Composition/ Information on Ingredients

Chemical Name	CAS-No	Weight %
Fibrous Glass (E-type)	65997-17-3	40 – 70
1,1'-(Methylenedi-4,1-phenylene) bismaleimide	13676-54-5	20 – 30

4,4'-Isopropylidenebis[2-allyphenol]	1745-89-7	15 – 20

Section 4. First Aid Measures

First Aid Measures for Accidental:
Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Ingestion: Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Most important symptoms/effects, acute and delayed: Serious eye irritation or damage.
Indication of immediate medical attention and special treatment needed: No specific treatment. Treat symptomatically. Call medical doctor or poison control center immediately if large quantities have been ingested.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Dry chemical powder.
Unsuitable Extinguishing Media: Do not use high volume water jet on the fire as this may spread the area of the fire.
Special Protective Equipment and Precautions for Fire-fighters: Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode to protect against potential harmful and/or irritating fumes. Use water to keep fire exposed containers cool.
Specific Hazards Arising from the Chemical (Under Fire Conditions): Combustion products may include carbon monoxide, carbon dioxide.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental Precautions: Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas.
Methods and Materials for Containment and Cleaning Up: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for Safe Handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse empty container.

Conditions for safe storage including any incompatibilities: Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls / Personal Protection

Control Parameters (Exposure Limits):

Component	Exposure Limits		
	ACGIH-TLV	NIOSH	OSHA-PELs
Fibrous Glass (E-Type)	10 mg/m^3	3 fibers/cc	15 mg/m^3 TWA (total dust) 5mg/m^3 TWA (respirable dust)

Appropriate Engineering Controls: Ventilation must be adequate for most operations.

Personal Protective Equipment:

Respiratory Protection: In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eye / Face Protection: Wear safety glasses with side shields or chemical splash goggles when exposure is more likely.

Skin Protection: Wear liquid-proof, chemical resistant gloves (nitrile-butyl rubber, neoprene, butyl rubber or natural rubber) and full body-covering clothing.

Additional protective measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and Chemical Properties

Physical State:	Solid
Colour:	Yellow impregnated tape.
Odour:	Mild
Melting Point/ Freezing Point:	No data available
Boiling point:	No data available
Flammability (solid, gas):	No data available
Lower and Upper Explosion limits/ Flammability Limits:	No data available
Flash Point:	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available

pH:	No data available
Kinematic Viscosity:	No data available
Solubility:	Insoluble in water
Evaporation rate (ether=1):	No data available
Flammability Limits in Air:	Not established for this product
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Vapour Pressure:	No data available
Density and/or Relative Density:	No data available
Relative Vapour Density:	No data available
Particle Characteristics:	No data available

Section 10. Stability and Reactivity

Reactivity: Stable
Chemical Stability: Stable under standard normal conditions.
Possibility of Hazardous reactions: None under normal processing. Hazardous polymerization will not occur by itself.
Conditions to Avoid: To avoid thermal decomposition, do not overheat. Incompatible products.
Incompatible Materials / Chemicals: Keep uncured material away from strong acids, strong bases, oxidizing agents.
Hazardous Decomposition Products: Uncontrolled exothermic reaction of resin releases carbon monoxide, carbon dioxide.

Section 11. Toxicological Information

Information in the likely route of exposure:

Potential Acute Health Effects:

Inhalation: No known significant effects or critical hazards
Ingestion: No known significant effects or critical hazards
Skin contact: No known significant effects or critical hazards
Eye contact: No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics:

General: Contains material that may cause target organ damage, based on animal data. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels
Target organs: Contains material which may cause damage to the following organs: kidneys, liver.
Mutagenicity: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Reproductive Toxicity: No known significant effects or critical hazards.
Tetratogenicity: No known significant effects or critical hazards.
Specific Target Organ Toxicity - single exposure (STOT-se): No data available
Specific Target Organ Toxicity - repeated exposure (STOT-re): No data available
Over-exposure signs / symptoms: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Delayed and immediate effects and also chronic effects from short and long-term exposure:

Short term exposure: No specific data.
Long term exposure: No specific data

Numerical measures of toxicity:
Acute toxicity:

Product	Endpoint	Species	Results	Exposure
1,1'-(Methylenedi-4,1-phenylene) bismaleimide	LC50 Inhalation dust and mist LD50 Oral	Rat Rat	0.35 mg/L >5000 mg/kg	4 hours -
4,4'-Isopropylidenebis[2-allyphenol]	LC50 Inhalation Vapor LD50 Dermal	Rat Rat	>2000 mg/L >2000 mg/kg	4 hours -

Section 12. Ecological Information

Ecotoxicity Effects:

Toxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Other adverse effects: No data available.

Section 13. Disposal Considerations

Waste treatment methods: Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Uncleaned packaging: Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

IMDG

Shipping Name: Corrosive solid, n.o.s. (Fiber glass impregnated with 4,4'-Isopropylidenebis[2-allyphenol])
Technical shipping name: Prepreg epoxy resin.
U.N. number: UN 1759
Hazard class: 8
Packing group: II

IATA

Proper Shipping Name: Corrosive solid, n.o.s. (Fiber glass impregnated with 4,4'-Isopropylidenebis[2-allyphenol])
Technical shipping name: Prepreg epoxy resin.
UN-Number: UN1759

Hazard Class: 8
Packing Group: II

DOT
Proper Shipping Name: Corrosive solid, n.o.s. (Fiber glass impregnated with 4,4'-Isopropylidenebis[2-allyphenol])
Technical shipping name: Prepreg epoxy resin.
UN-Number: UN1759
Hazard Class: 8
Packing Group: II

Section 15. Regulatory Information

U.S. Federal Regulations
TSCA 8(b) inventory: United States inventory (TSCA 8b): All components are listed or exempted
TSCA 5(a)2 final significant new use rule (SNUR): No ingredients listed.
TSCA 5(e) substance consent order: No ingredients listed.
TSCA 12(b) export notification: No ingredients listed.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical Inventory - hazard identification: No products were found.
CERCLA Hazardous substances: No ingredients listed.
Clean Air Act - Ozone Depleting Substances (ODS): No ingredients listed.

State regulations
Pennsylvania -RTK: No ingredients listed.
California Prop 65: 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.

International list:
Australia inventory (AICS): This material is listed or exempted.
China inventory (IECSC): This material is listed or exempted.
Japan inventory: This material is listed or exempted.
Korea inventory: This material is listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): This material is listed or exempted.
Philippines inventory (PICCS): This material is listed or exempted.

Section 16. Other Information

Key Legend Information:
N/A – Not Applicable
ND – Not Determined
OSHA – Occupational Safety and Health Administration
NIOSH – National Institute for Occupational Safety and Health

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