

Permatex, Inc.
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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 84109 PERMA POXY 4 MIN MULTI-METAL EPOXY PART 1 25 ML
Item No: PTX202005B
Product Type: Epoxy resin

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH TLV: TWA	OSHA PEL:
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	50-70	Not listed	Not Listed
LIMESTONE 1317-65-3	5-20	Not listed	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable)
IRON 7439-89-6	5-20	Not listed	Not Listed
NEOPENTYL GLYCOL DIGLYCIDYL ETHER 17557-23-2	<5	Not listed	Not Listed
TREATED SILICON DIOXIDE, SYNTHETIC, CRYSTALLINE-FREE 67762-90-7	<5	10 mg/m ³ total dust TLV	10 mg/m ³ total dust
ELASTOMER MODIFIED DIGLYCIDYL ETHER 68909-14-8	<5	Not listed	Not Listed
SILICA, QUARTZ 14808-60-7	0.1-1.0	0.05 mg/m ³ TWA respirable	0.1 mg/m ³ TWA respirable

3. HAZARDS IDENTIFICATION

Toxicity: May cause moderate skin irritation. May cause skin sensitization. Causes moderate eye irritation. At elevated temperatures may cause irritation of the respiratory tract. Ingestion may irritate digestive tract and cause nausea, vomiting and diarrhea.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Contact with product at elevated temperatures can result in thermal burns. Eyes: Exposure to liquid or vapor causes mild eye irritation. Symptoms may include burning, tearing, redness, stinging, blurred vision and corneal injury. Ingestion may cause nausea and vomiting. Repeated skin contact may cause allergic skin reactions.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
SILICA, QUARTZ 14808-60-7	0.1-1.0		A2 - Suspected Human Carcinogen	Group 1; Monograph 68, 1997 (inhaled)

Medical Conditions Recognized as Being Aggravated by Exposure: May aggravate preexisting dermatitis. Persons with respiratory problems such as emphysema and asthma should avoid inhalation.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Obtain medical attention.

Skin Contact: Remove contaminated clothing and launder before reuse. Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): >200°F (93.3°C)

Product Name: 84109 PERMA POXY 4 MIN MULTI-METAL EPOXY PART 1 25 ML

Item No: PTX202005B

5. FIRE FIGHTING MEASURES

Recommended Extinguishing Media:

Special Fire-Fighting Procedures:

Hazardous Products of Combustion:

Unusual Fire/Explosion Hazards:

Carbon Dioxide, Dry Chemicals, Foam.

Firefighters should wear self-contained breathing apparatus. Use water spray to cool exposed containers.

Oxides of carbon, Oxides of nitrogen, Aldehydes, Acid vapors

May decompose above 300 degrees F.; may polymerize above 500 degrees F. in which case closed containers may rupture or explode. Fumes and vapor from thermal and chemical decomposition vary in composition and toxicity. Do not breathe fumes.

Lower Explosive Limit:

Not determined.

Upper Explosive Limit:

Not determined.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:

Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Prevent from entering waterways or sewers.

7. HANDLING AND STORAGE

Storage:

Store away from heat. Store in a cool, dry area.

Handling:

Avoid contact with vapors from heated material. Avoid contact with skin and eyes. Discard contaminated leather gloves and shoes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes:

Safety glasses.

Skin:

Rubber or plastic gloves. Wash contaminated clothing before re-use.

Ventilation:

General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.

Respiratory Protection:

An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Viscous liquid

Odor:

MILD

Boiling Point:

Not determined

pH:

Neutral

Solubility in Water:

Not determined

Specific Gravity:

>1

VOC Content(Wt.%):

0

Vapor Pressure:

Not determined

Vapor Density (Air=1):

>1

Evaporation Rate:

Not determined

10. STABILITY AND REACTIVITY

Chemical Stability:

STABLE

Hazardous Polymerization:

WILL NOT OCCUR.

Incompatibilities:

Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines)
Heat

Conditions to Avoid:

Oxides of carbon, Oxides of nitrogen, Aldehydes, Acid vapors

Hazardous Products of Combustion:

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.

US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

Product Name: 84109 PERMA POXY 4 MIN MULTI-METAL EPOXY PART 1 25 ML

Item No: PTX202005B

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

DOT Shipping Name: Unrestricted
Hazard Class: None
UN/ID Number: None
Marine Pollutant: None

IATA

Proper Shipping Name: Not regulated
Class or Division: None
UN/ID Number: None

IMDG

Proper Shipping: Unrestricted
Hazard Class: None
UN Number: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

CALIFORNIA PROP 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA Inventory Status:

Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 1, REACTIVITY 1.

Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety
Company: Permatex, Inc. 10 Columbus Blvd. Hartford, CT USA 06106

Revision Date: March/25/2008

Revision 2

Number:

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 84109 PERMA POXY 4 MIN MULTI-METAL EPOXY PART 2 25ML
Item No: PTX203008B
Product Type: Curing agent

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH TLV: TWA	OSHA PEL:
MERCAPTAN AMINE BLEND MIXTURE	40-70	Not listed	Not Listed
LIMESTONE 1317-65-3	20-40	Not listed	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable)
TREATED SILICON DIOXIDE, SYNTHETIC, CRYSTALLINE-FREE 67762-90-7	<5	10 mg/m ³ total dust TLV	10 mg/m ³ total dust
SILICA, QUARTZ 14808-60-7	0.1-1.0	0.05 mg/m ³ TWA respirable	0.1 mg/m ³ TWA respirable

3. HAZARDS IDENTIFICATION

Toxicity: Harmful if inhaled. May cause severe skin irritation. May cause skin sensitization. May cause severe eye irritation. May be harmful if swallowed.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Eyes: Exposure to liquid or vapor causes mild eye irritation. Symptoms may include burning, tearing, redness, stinging, blurred vision and corneal injury. Skin: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking and skin burns. Preexisting skin disorders may be aggravated by exposure. Skin absorption is possible, but harmful effects are not expected from this route under normal conditions of handling and use. Repeated skin contact may cause allergic skin reactions. Inhalation of mist or vapor can cause damage to the upper respiratory tract and to the tissue depending on severity of exposure. Effects can range from mild irritation of mucous membranes to severe pneumonitis and destruction of lung tissue. Ingesting may cause abdominal pain and vomiting.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
SILICA, QUARTZ 14808-60-7	0.1-1.0		A2 - Suspected Human Carcinogen	Group 1; Monograph 68, 1997 (inhaled)

Medical Conditions Recognized as Being Aggravated by Exposure: Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Obtain medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

Eye Contact: Flush eyes with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): >200°F (93.3°C) PMCC

Recommended Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Use water spray to cool exposed containers.

Hazardous Products of Combustion: Oxides of carbon, Oxides of nitrogen, Oxides of sulfur, Amines, Ammonia

Unusual Fire/Explosion Hazards: Irritating or toxic gases or fumes may be generated by thermal decomposition or combustion.

Product Name: 84109 PERMA POXY 4 MIN MULTI-METAL EPOXY PART 2 25ML

Item No: PTX203008B

5. FIRE FIGHTING MEASURES

Lower Explosive Limit: Not determined.
Upper Explosive Limit: Not determined.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Prevent from entering waterways or sewers.

7. HANDLING AND STORAGE

Storage: Store in a cool, dry area. Store away from heat.
Handling: Avoid contact with skin and eyes. Do not inhale vapors. Discard contaminated leather gloves and shoes. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.
Skin: Rubber or plastic gloves. Wash contaminated clothing before re-use.
Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.
Respiratory Protection: An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber liquid
Odor: Mercaptan
Boiling Point: Not determined
pH: 9.5 (5% solution or slurry in water)
Solubility in Water: Negligible
Specific Gravity: 1.13
VOC Content(Wt.%): 0
Vapor Pressure: <1 @ 70°F
Vapor Density (Air=1): Not determined
Evaporation Rate: Not determined

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE
Hazardous Polymerization: Will not occur.
Incompatibilities: Strong oxidizers, Amines, Reactive metals (e.g. Na, Ca, zinc), Sodium/calcium hypochlorite, Peroxides, Materials reactive with hydroxyl compounds
Conditions to Avoid: Heat
Hazardous Products of Combustion: Oxides of carbon, Oxides of nitrogen, Oxides of sulfur, Amines, Ammonia

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations
US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

DOT Shipping Name: Unrestricted
Hazard Class: None
UN/ID Number: None
Marine Pollutant: None

Product Name: 84109 PERMA POXY 4 MIN MULTI-METAL EPOXY PART 2 25ML

Item No: PTX203008B

IATA

Proper Shipping Name: Not regulated
Class or Division: None
UN/ID Number: None

IMDG

Proper Shipping: Unrestricted
Hazard Class: None
UN Number: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

CALIFORNIA PROP 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA Inventory Status:

Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 3, FLAMMABILITY 1, REACTIVITY 0.

Estimated HMIS Classification: HEALTH 3, FLAMMABILITY 1, PHYSICAL HAZARD 0

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