Permatex, Inc.
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Hartford, CT 06106 USA
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Emergency: 800-255-3924
International Emergency: 813-248-0585

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: **84212 PERMA POXY 90 MIN MULTI-METAL EPOXY PART 1 2OZ TB**
Item No: **PTX202007C**
Product Type: **Epoxy resin**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Weight Percent	ACGIH TLV:	OSHA PEL:
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	50-80	Not Listed	Not Listed
PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER 28064-14-4	5-15	Not Listed	Not Listed
ALKYL GLYCIDYL ETHER 68609-97-2	1-10	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye and skin irritation. May cause skin irritation in sensitive individuals. At elevated temperatures may cause irritation of the respiratory tract. May cause gastrointestinal irritation.

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. Repeated skin contact may cause allergic skin reactions.

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: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get 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 Method: Estimate

Recommended Extinguishing Media: Carbon dioxide, Dry chemical, foam

Special Fire-Fighting Procedures: Firefighters shoud wear self-contained breathing apparatus and protective clothing to prevent all skin and eye contact

Hazardous Products of Combustion: Oxides of carbon, Chlorine

Unusual Fire/Explosion Hazards: Heating above 300°F in the presence of air may cause slow oxidation decomposition and above 500°F may cause polymerization.

Lower Explosive Limit: n/d

Upper Explosive Limit: n/d

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store away from heat. Keep away from oxidizers.
Handling: Avoid contact with skin and eyes. Avoid contact with vapors from heated material. Use only in a well ventilated area. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses or goggles.
Skin: Neoprene or nitrile gloves recommended.
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: Slight
Boiling Point: >400°F
pH: Not applicable
Solubility in Water: Negligible
Specific Gravity: 1.1-1.3
VOC Content(Wt.%): Not determined
Vapor Pressure: Not determined
Vapor Density (Air=1): >1
Evaporation Rate: <1 (butyl acetate = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE
Hazardous Polymerization: WILL NOT OCCUR
Incompatabilities: Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (esp. primary and secondary aliphatic amines), Sodium/calcium hypochlorite, Peroxides
Conditions to Avoid: Open flame and extreme heat
Hazardous Products of Combustion: Oxides of carbon, Chlorine

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

IATA

Proper Shipping Name: Unrestricted
Class or Division: None
UN/NA 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:
No California Prop 65 chemicals are known to be present.

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, Health and Safety Manager
Company: Permatex. Inc. 10 Columbus Blvd. Hartford, CT USA 06106
Revision Date: 04/10/2006
Revision Number: 1

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: **84212 PERMA POXY 90 MIN MULTI-METAL EPOXY PART 2 2OZ TB**
Item No: **PTX203010C**
Product Type: **Epoxy hardener**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Weight Percent	ACGIH TLV:	OSHA PEL:
DIMER/TOFA, REACTION PRODUCTS WITH TETA 68082-29-1	40-70	Not Listed	Not Listed
POLYAMIDE OF TALL-OIL FATTY ACID DIMERS AND TETRAETHYLENEPENTAMINE 68953-36-6	5-15	Not Listed	Not Listed
TRIETHYLENETETRAMINE 112-24-3	1-10	Not Listed	Not Listed
TETRAETHYLENEPENTAMINE 112-57-2	<5	Not Listed	Not Listed
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL 90-72-2	1-10	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Toxicity: This material is irritating to skin, eyes and respiratory tract. May cause skin sensitization. Harmful amounts may be absorbed through the skin with extensive and prolonged contact. May cause lacrimation, conjunctivitis, corneal damage and may cause permanent injury (i.e. blindness) Long term exposure to high concentrations of vapor may cause lung, liver or kidney damage. May cause gastrointestinal irritation

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

Signs and Symptoms of Exposure: Ingesting may cause abdominal pain and vomiting.. May cause pain, redness or swelling of the eyes and excessive blinking and tear production.. 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..

Medical Conditions Recognized as Being Aggravated by Exposure: Persons with preexisting respiratory, liver, kidney, eye or skin diseases may be adversely affected.

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: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get 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: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): >200°F Method: TCC

Recommended Extinguishing Media: Carbon dioxide, Dry chemical, foam

Special Fire-Fighting Procedures: Firefighters shoud wear self-contained breathing apparatus and protective clothing to prevent all skin and eye contact.

Hazardous Products of Combustion: Acrid and toxic fumes with organic amines, ammonia, oxides of carbon and nitrogen

Unusual Fire/Explosion Hazards: None.

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. Wear appropriate protective and respiratory equipment.

7. HANDLING AND STORAGE

Storage: Store away from heat.
Handling: Avoid contact with skin and eyes. Use only in a well ventilated area. Wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses or goggles.
Skin: Neoprene, rubber or butyl rubber gloves
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: Use an approved NIOSH organic vapor respirator below the TLV. If TLV is exceeded or overexposure is likely, use positive pressure or self contained breathing apparatus.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White paste
Odor: AMMONIA LIKE
Boiling Point: >340°F
pH: Does not apply
Solubility in Water: SOLUBLE
Specific Gravity: n/d
VOC Content(Wt.%): n/d
Vapor Pressure: <1 mmHg @ 68°F
Vapor Density (Air=1): >1
Evaporation Rate: <1 (butyl acetate = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE
Hazardous Polymerization: WILL NOT OCCUR
Incompatabilities: Strong oxidizers, Acids, Chlorinated organic compounds
Conditions to Avoid: Heat is generated when resin is mixed with curing agents; Run-away cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.
Hazardous Products of Combustion: Acrid and toxic fumes with organic amines, ammonia, oxides of carbon and nitrogen

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

IATA

Proper Shipping Name: Unrestricted
Class or Division: None
UN/NA 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:
No California Prop 65 chemicals are known to be present.

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

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