Permatex, Inc. 10 Columbus Blvd. Hartford, CT 06106 USA Telephone: 1-87-Permatex (877) 376-2839 Emergency: 800-255-3924 International Emergency: 813-248-0585

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: Item No: Product Type: 84101 PERMAPOXY 5 MIN.GENERAL PURPOSE EPOXY PART 1 25 ML VC1233B Epoxy resin

2. COMPOSITION/INFORMATION ON INGREDIENTS			
Component	Weight%	ACGIH; TLV-TWA	OSHA PEL:
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	>60	Not listed	Not Listed

3. HAZARDS IDENTIFICATION

Toxicity: Primary Routes of Entry: Signs and Symptoms of Exposure: May cause eye, skin and respiratory irritation. May cause skin sensitization.

Eye and skin contact, ingestion, inhalation May cause pain, redness or swelling of the eyes and excessive blinking and te

May cause pain, redness or swelling of the eyes and excessive blinking and tear production. Repeated skin contact may cause allergic skin reactions. Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. Ingestion may cause nausea and vomiting.

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:If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.Inhalation:Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed.
Obtain medical attention.Skin Contact:Wash off with soap and water. If skin irritation persists, call a physician.
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°):
 >400°F
 PMCC

 Recommended Extinguishing Media:
 Carbon Dioxide, Dry C

 Special Fire-Fighting Procedures:
 Material will not burn u

 contained breathing ap
 contained breathing ap

 Hazardous Products of Combustion:
 Oxides of carbon, Alder

 Unusual Fire/Explosion Hazards:
 May decompose above

>400°F PMCC
 Carbon Dioxide, Dry Chemicals, Foam.
 Material will not burn unless preheated. Firefighters should wear self-contained breathing apparatus. Use water spray to cool exposed containers.
 Oxides of carbon, 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: Upper Explosive Limit:

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:

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

Not determined

Not determined

7. HANDLING AND STORAGE

Storage: Handling: Store in a cool, dry area. Store away from heat.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes:	Safety glasses.
Skin:	Neoprene or nitrile gloves recommended. 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:	Not required under normal use. An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear viscous liquid
Odor:	Slight
Boiling Point:	>500°F
pH:	Neutral
Solubility in Water:	Negligible
Specific Gravity:	1.17
VOC Content(Wt.%):	0
Vapor Pressure:	0.03 mmHg @ 171°F
Vapor Density (Air=1):	>1
Evaporation Rate:	<1 (butyl acetate = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: Hazardous Polymerization: Incompatabilities:

Conditions to Avoid: Hazardous Products of Combustion:

11. TOXICOLOGICAL INFORMATION

Oral LD50 (rat) = 11.4 g/kg Dermal LD50 (rabbit) = >20 ml/kg Inhalation LC50 (rat) = no deaths (4h) IARC Group 3; Not classifiable as a carcinogen

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORTATION INFORMATION

DOT	(49CFR 172)	
Dome	estic Ground Transport	
	DOT Shipping Name:	Unrestricted
	Hazard Class:	None
	UN/ID Number:	None
<u>IATA</u>		
	Proper Shipping Name:	Not regulated
	Class or Division:	None
	UN/ID Number:	None
IMDG	<u>i</u>	
	Proper Shipping:	Unrestricted
	Hazard Class:	None
	UN Number:	None
	Marine Pollutant:	None

STABLE WILL NOT OCCUR Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines) Heat Oxides of carbon, Aldehydes, Acid vapors

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 0.Estimated HMIS Classification:HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0NFPA 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, N	Manager-Environmental, Health & Safety	Revision Date	: July/25/2008
Company:	Permatex. Inc.	10 Columbus Blvd. Hartford, CT USA 06106	Revision	3
			Number:	

 Telephone No.:
 1-87-Permatex (877) 376-2839

Product Name:

Product Type:

Item No:

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

84101 PERMAPOXY 5 MIN.GENERAL PURPOSE EPOXY PART 2 25 ML VC1521B **Epoxy hardener**

2. COMPOSITION/INFORMATION ON INGREDIENTS			
Ingredient	Weight Percent	ACGIH TLV:	OSHA PEL:
MERCAPTAN AMINE BLEND MIXTURE	>60	Not Listed	Not Listed
2,4,6- TRIS(DIMETHYLAMINOMETHYL)P HENOL 90-72-2	<20	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Toxicity:	Causes severe eye irritation. May cause severe skin irritation. May cause nose, throat and respiratory irritation. Ingestion may irritate digestive tract and cause nausea, vomiting and diarrhea. May cause skin sensitization.
Primary Routes of Entry:	Eye and skin contact, inhalation
Signs and Symptoms of Exposure:	May be injurious to eyes, skin, muscous membranes and lungs. May cause pain, redness or swelling of the eyes and excessive blinking and tear production. Repeated skin contact may cause allergic skin reactions. Swallowing: This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage. Aspiration into the lungs can cause chemical pneumonia which can be fatal.
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	If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.

Ingestion:	If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation:	Move to fresh air in case of accidental inhalation of vapors. Oxygen or artificial respiration if needed.
	Obtain medical attention.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. 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 Method: 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, Amines, Ammonia
Unusual Fire/Explosion Hazards:	Personnel in vicinity and downwind should be evacuated
Lower Explosive Limit:	Not determined.

Upper Explosive Limit:

Not determined.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:

Eliminate all sources of ignition. 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 vapors from heated material. Avoid contact with skin and eyes. Wash thoroughly after handling. Discard contaminated leather gloves and shoes.
8. EXPOSURE CONTRO	LS/PERSONAL PROTECTION
Eyes:	Safety glasses with side shields or chemical goggles.
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:	Colorless to light yellow 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 mmHg @ 70°F
Vapor Density (Air=1):	Not determined
Evaporation Rate:	Not determined

10. STABILITY AND REACTIVITY

Chemical Stability: Hazardous Polymerization: Incompatabilities: Conditions to Avoid: Hazardous Products of Combustion: STABLE WILL NOT OCCUR Strong oxidizers Amines Heat. Oxides of carbon. Oxides of nitrogen. Amines. Ammonia.

11. TOXICOLOGICAL INFORMATION

Eye irritation: Severe - Draize = 4.8

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

ΙΑΤΑ

Proper Shipping Name:	Unrestricted
Class or Division:	None
UN/NA Number:	None

IMDG

Proper Shipping:
Hazard Class:
UN Number:

Unrestricted None 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 0Estimated HMIS Classification:HEALTH 3, FLAMMABILITY 1, PHYSICAL HAZARD 0NFPA is a registered trademark of the National Fire Protection Assn.HMIS is a registered trademark of the National Paint and Coatings Assn.

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