

Permatex Canada, Inc.  
8450 Lawson Road, Unit 1  
Milton, ON Canada L9T 0A4  
Telephone: 1-87-Permatex  
(877) 376-2839  
Urgence: 800-255-3924

## Canadian Workplace Hazardous Materials Information System Material Safety Data Sheet

### I. PRODUCT IDENTIFICATION

Product Name: 09224 PC PRO RADIATOR REPAIR KIT PART 1  
Item No: PTX209799F  
Product Type: Epoxy

### II. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	LD50/oral/rat	LC50/inhalation/rat	ACGIH; TLV-TWA
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	>95	11400 mg/kg	not available	

### III. PHYSICAL DATA

Physical State/Appearance: Black liquid  
Odour & Odour Threshold: Mild odour  
Specific Gravity: 1.17  
Evaporation Rate: <1 (butyl acetate = 1)  
Vapour Pressure: <0.1 mm Hg @ 20°C  
Vapour Density: Heavier than air  
Freezing Point: Not determined  
pH: Does not apply  
Octanol/Water Coefficient: Not determined  
Boiling Point: >290°C

### IV. FIRE AND EXPLOSIVE DATA

Recommended Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.  
Hazardous Combustion Products: Carbon monoxide, aldehydes, acids and other organic substances may be formed during combustion or elevated temperatures (260 degrees C.)  
Sensitivity to Static Discharge: Sensitivity to static discharge is not expected  
Conditions of Flammability: None anticipated.  
Flash Point/Range: >200°C PMCC  
Autoignition Temperature: Not determined  
Upper Explosive Limit: Not determined  
Lower Explosive Limit: Not determined

### V. REACTIVITY DATA

Conditions Causing Chemical Instability: None  
Materials to avoid: Can react vigorously with strong oxidizing agents, mineral acids and strong mineral and organic bases, especially primary and secondary aliphatic amines. Reaction with some curing agents produces considerable heat. Hazardous polymerization may occur if over-catalyzed or insufficiently aerated after catalyzation. This polymerization is exothermic.  
Conditions of Reactivity: Carbon monoxide, Aldehydes, Organic acid vapors  
Hazardous Decomposition Products:

### VI. HAZARDS IDENTIFICATION

Primary Routes of Exposure: Eye and skin contact, ingestion, inhalation  
Existing Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory disorders.  
Toxicity Information: (See Effects of Acute Exposure to Product)  
Effects of Acute Exposure: May cause eye and skin irritation. May cause skin sensitization.  
Effects of Chronic Exposure: See (Effects of Acute Exposure to Product).  
Irritancy of Product: Irritation of eyes, skin, nose and throat. May cause dermatitis on prolonged contact in sensitive individuals. Overexposure may cause eye and skin redness.  
Sensitization to Product: (See Effects of Acute Exposure to Product)  
Carcinogenicity: (See Effects of Chronic Exposure to Product)

## **VI. HAZARDS IDENTIFICATION**

**Reproductive Toxicity:** (See Effects of Chronic Exposure to Product)  
**Teratogenicity:** (See Effects of Chronic Exposure to Product)  
**Mutagenicity:** (See Effects of Chronic Exposure to Product)  
**Toxicologically Synergistic Products:** None known  
**WHMIS Hazard Class:** Non-controlled

## **VII. PREVENTATIVE MEASURES**

### **Personal Protection**

**Eyes:** Safety glasses.  
**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.

### **Engineering Controls:**

In case of insufficient ventilation, wear an organic vapor respirator.

### **Spill Procedures:**

Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

### **Protection of Man and Environment:**

Follow Canadian and local regulations for disposal.

### **Handling Procedures and Equipment:**

Store in a dry area below 35°C.

### **Special Handling Information:**

Avoid contact with skin and eyes.

## **VIII. 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. 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.

## **IX. SHIPPING INFORMATION**

### **Canadian Transportation of Dangerous Goods**

**Proper Shipping Name:** Not Regulated  
**Hazard Class:** None  
**UN/ID No:** None

### **IATA**

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

### **IMDG**

**Proper Shipping:** Not regulated  
**Hazard Class:** None  
**UN Number:** None

## **X. PREPARATION INFORMATION**

**Estimated HMIS Classification:** HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0  
HMIS is a registered trademark of the National Paint and Coatings Assn.

**Estimated NFPA Rating:** HEALTH 2, FLAMMABILITY 1, REACTIVITY 0  
NFPA is a registered trademark of the National Fire Protection Assn.

**Prepared By:** Denise Boyd, Manager-Environmental, Health & Safety

**Revision Date:** October 27, 2009

### **Company:**

Permatex Canada, Inc. 8450 Lawson Rd. Unit 1, Milton, ON L9T 0A4

**Revision Number:** 2

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

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## Canadian Workplace Hazardous Materials Information System Material Safety Data Sheet

### I. PRODUCT IDENTIFICATION

**Product Name:** 09224 PC PRO RADIATOR REPAIR KIT PART 2  
**Item No:** PTX209800F  
**Product Type:** Hardener

### II. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	LD50/oral/rat	LC50/inhalation/rat	ACGIH; TLV-TWA
MERCAPTAN AMINE BLEND MIXTURE	>95	not available	not available	

### III. PHYSICAL DATA

**Physical State/Appearance:** Yellow liquid  
**Odour & Odour Threshold:** Mercaptan odour  
**Specific Gravity:** 1.15  
**Evaporation Rate:** <1 (butyl acetate = 1)  
**Vapour Pressure:** Not determined  
**Vapour Density:** Heavier than air  
**Freezing Point:** Not determined  
**pH:** Does not apply  
**Octanol/Water Coefficient:** Not determined  
**Boiling Point:** Not determined

### IV. FIRE AND EXPLOSIVE DATA

**Recommended Extinguishing Media:** Carbon dioxide, Dry chemical, Foam  
**Hazardous Combustion Products:** Oxides of carbon, Oxides of nitrogen, Hydrogen sulfide, Oxides of sulfur  
**Sensitivity to Static Discharge:** Sensitivity to static discharge is not expected  
**Conditions of Flammability:** None anticipated.  
**Flash Point/Range:** 260°C COC  
**Autoignition Temperature:** Not determined  
**Upper Explosive Limit:** Not determined  
**Lower Explosive Limit:** Not determined

### V. REACTIVITY DATA

**Conditions Causing Chemical Instability:** None  
**Materials to avoid:** Strong oxidizers, Amines  
**Conditions of Reactivity:** None  
**Hazardous Decomposition Products:** Oxides of nitrogen, Carbon monoxide, Hydrogen sulfide, Oxides of sulfur

### VI. HAZARDS IDENTIFICATION

**Primary Routes of Exposure:** Eye and skin contact, ingestion, inhalation  
**Existing Conditions Aggravated by Exposure:** None known  
**Toxicity Information:** (See Effects of Acute Exposure to Product)  
**Effects of Acute Exposure:** Inhaling may cause mild irritation to the nose, throat and respiratory tract. May cause skin sensitization. Moderately toxic if swallowed. Irritating to mouth, throat and stomach with nausea. Can cause severe skin and eye irritation or burns. May cause permanent visual impairment.  
**Effects of Chronic Exposure:** Overexposure may cause delayed lung injury and chemical pneumonia.  
**Irritancy of Product:** See (Effects of Acute Exposure to Product)  
**Sensitization to Product:** (See Effects of Acute Exposure to Product)  
**Carcinogenicity:** (See Effects of Chronic Exposure to Product)  
**Reproductive Toxicity:** (See Effects of Chronic Exposure to Product)  
**Teratogenicity:** (See Effects of Chronic Exposure to Product)

## **VI. HAZARDS IDENTIFICATION**

**Mutagenicity:** (See Effects of Chronic Exposure to Product)  
**Toxicologically Synergistic Products:** None known  
**WHMIS Hazard Class:** D2B TOXIC MATERIALS

## **VII. PREVENTATIVE MEASURES**

### **Personal Protection**

**Eyes:** Safety glasses.  
**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. In case of insufficient ventilation, wear an organic vapor respirator.  
**Engineering Controls:** In case of insufficient ventilation, wear an organic vapor respirator.  
**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.  
**Protection of Man and Environment:** Follow Canadian and local regulations for disposal.  
**Handling Procedures and Equipment:** Store in a dry area below 35°C.  
**Special Handling Information:** Avoid prolonged breathing of vapor. Keep away from eyes. Avoid prolonged contact with skin. Do not smoke while using. Wash hands after use.

## **VIII. 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:** 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.

## **IX. SHIPPING INFORMATION**

### **Canadian Transportation of Dangerous Goods**

**Proper Shipping Name:** Not Regulated  
**Hazard Class:** None  
**UN/ID No:** None

### **IATA**

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

### **IMDG**

**Proper Shipping:** Not regulated  
**Hazard Class:** None  
**UN Number:** None

## **X. PREPARATION INFORMATION**

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