



Revision Date: 07-Jun-2016 Revision Number: 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name POLYAMIDE EPOXY BLACK

Product Code V400-80FR

Alternate Product Code
Product Class
Color
Recommended use
A40080
EPOXY
Black
Paint

**Restrictions on use**No information available

**Manufactured For** 

Benjamin Moore & Co., Limited 8775 Keele Street Concord ON L4K 2N1 Phone: 1-800-361-5898 corotechcoatings.ca

Manufacturer

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 800-225-5554 corotechcoatings.com **Emergency Telephone Number(s)** 

CANUTEC: 613-996-6666

## 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous by the Hazardous Products Regulations (HPR: SOR/2015-17)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

#### Label elements

Warning		

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#### Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

Suspected of causing cancer

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance liquid Odor solvent

#### **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Do not breathe dust/fume/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces, no smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

#### **Precautionary Statements - Response**

If exposed or concerned get medical attention

#### **Eves**

If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists get medical attention

### Skin

If skin irritation or rash occurs get medical attention

If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water

Wash contaminated clothing before reuse

### Ingestion

If swallowed immediately call a POISON CENTER or physician

Do NOT induce vomiting

#### **Fire**

In case of fire use CO2, dry chemical, or foam for extinction

### **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep cool

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Other information

No information available

#### Other hazards

**IMPORTANT:** Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

**CAUTION:** All floor coatings may become slippery when wet. Where non-skid characteristics are desired, a small amount of clean sand may be added. Stir often during application.

## 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical Name	CAS-No	Weight % (max)
Kaolin	1332-58-7	10 - 30%
Benzyl alcohol	100-51-6	7 - 13%
Xylene	1330-20-7	5 - 10%
Propylene glycol monomethyl ether	107-98-2	3 - 7%
Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - 5%
Propylene glycol monomethyl ether acetate	108-65-6	1 - 5%
Ethyl benzene	100-41-4	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	1 - 5%
Triethylenetetramine	112-24-3	1 - 5%
Carbon black	1333-86-4	1 - 5%
Titanium dioxide	13463-67-7	0.25 - 0.5%

## 4. FIRST AID MEASURES

General Advice If symptoms persist, call a physician. Show this safety data

sheet to the doctor in attendance.

**Eye Contact** Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If

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symptoms persist, call a physician.

Skin Contact Wash off immediately with soap and plenty of water

removing all contaminated clothes and shoes. If skin

irritation persists, call a physician.

**Inhalation** Move to fresh air. If symptoms persist, call a physician.

If not breathing, give artificial respiration. Call a physician

immediately.

**Ingestion** Clean mouth with water and afterwards drink plenty of

water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Consult a physician.

Protection Of First-Aiders

Use personal protective equipment.

Most Important Symptoms/Effects No information available.

Notes To Physician Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Flammable Properties** 

Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause flash fire.

Suitable Extinguishing Media Foam, dry powder or water. Use extinguishing measures

that are appropriate to local circumstances and the

surrounding environment.

**Protective Equipment And Precautions For** 

**Firefighters** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

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and full protective gear.

Hazardous Combustion Products

Burning may result in carbon dioxide, carbon monoxide

and other combustion products of varying composition

which may be toxic and/or irritating.

Specific Hazards Arising From The Chemical Flammable. Flash back possible over considerable

distance. Keep product and empty container away from heat and sources of ignition. Closed containers may rupture if exposed to fire or extreme heat. Thermal decomposition can lead to release of irritating gases and

vapors.

Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge Yes

**Flash Point Data** 

Flash Point (°F) 80
Flash Point (°C) 27
Flash Point Method PMCC

Flammability Limits In Air

Lower Explosion LimitNot availableUpper Explosion LimitNot available

NFPA Health: 2 Flammability: 3 Instability: 0 Special: -

#### **NFPA** Legend

0 - Not Hazardous

- 1 Slightly
- 2 Moderate
- 3 High
- 4 Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Remove all sources of ignition. Take precautions to

prevent flashback. Ground and bond all containers and handling equipment. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal

protective equipment.

Other Information Prevent further leakage or spillage if safe to do so. Do not

allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be

contained.

**Environmental Precautions** 

**Methods For Clean-Up** 

See Section 12 for additional Ecological Information.

Dam up. Soak up with inert absorbent material. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Clean

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contaminated surface thoroughly.

# 7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor build-up by providing adequate ventilation during and after use.

Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Ignition and/or flash back may occur.

**Storage** 

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible with strong acids and bases and strong oxidizing agents.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Exposure Limits**

**Incompatible Materials** 

No exposure limits have been established for this product.

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Kaolin	2 mg/m³ - TWA	2 mg/m³ - TWA	2 mg/m³ - TWA	2 mg/m³ - TWA	5 mg/m³ - TWAEV
Xylene	100 ppm - TWA	100 ppm - TWA	100 ppm - TWA	100 ppm - TWA	100 ppm - TWAEV
	150 ppm - STEL	434 mg/m <sup>3</sup> - TWA	150 ppm - STEL	150 ppm - STEL	434 mg/m³ - TWAEV
		150 ppm - STEL			150 ppm - STEV
		651 mg/m <sup>3</sup> - STEL			651 mg/m <sup>3</sup> - STEV
Propylene glycol monomethyl	50 ppm - TWA	100 ppm - TWA	50 ppm - TWA	50 ppm - TWA	100 ppm - TWAEV
ether	100 ppm - STEL	369 mg/m³ - TWA	75 ppm - STEL	100 ppm - STEL	369 mg/m <sup>3</sup> - TWAEV
		150 ppm - STEL			150 ppm - STEV
		553 mg/m <sup>3</sup> - STEL			553 mg/m <sup>3</sup> - STEV
Propylene glycol monomethyl	N/E	N/E	50 ppm - TWA	50 ppm - TWA	N/E
ether acetate			75 ppm - STEL	270 mg/m <sup>3</sup> - TWA	
Ethyl benzene	20 ppm - TWA	100 ppm - TWA	20 ppm - TWA	20 ppm - TWA	100 ppm - TWAEV
		434 mg/m³ - TWA			434 mg/m <sup>3</sup> - TWAEV
		125 ppm - STEL			125 ppm - STEV
		543 mg/m <sup>3</sup> - STEL			543 mg/m <sup>3</sup> - STEV
Triethylenetetramine	N/E	N/E	N/E	0.5 ppm - TWA	N/E
				3 mg/m³ - TWA	
				Danger of cutaneous	
				absorption	
Carbon black	3 mg/m³ - TWA	3.5 mg/m <sup>3</sup> - TWA	3 mg/m³ - TWA	3 mg/m³ - TWA	3.5 mg/m <sup>3</sup> - TWAEV
Titanium dioxide	10 mg/m³ - TWA	10 mg/m³ - TWA	10 mg/m³ - TWA	10 mg/m³ - TWA	10 mg/m <sup>3</sup> - TWAEV

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

Alberta - Alberta Occupational Exposure Limits

British Columbia - British Columbia Occupational Exposure Limits

Ontario - Ontario Occupational Exposure Limits Quebec - Quebec Occupational Exposure Limits

N/E - Not established

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

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**Personal Protective Equipment** 

**Eve/Face Protection Skin Protection** 

**Respiratory Protection** 

Safety glasses with side-shields.

3 mg/m<sup>3</sup> - TWA

Protective gloves and impervious clothing.

Use only with adequate ventilation. In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic

vapors.

**Hygiene Measures** 

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash

thoroughly after handling.

## PHYSICAL AND CHEMICAL PROPERTIES

120

**Appearance** liquid Odor solvent

No information available **Odor Threshold** 

Density (lbs/gal) 9.5 - 9.8**Specific Gravity** 1.13 - 1.17

Hq No information available Viscosity (cps) No information available Solubility No information available **Water Solubility** No information available **Evaporation Rate** No information available

**Vapor Pressure** No information available **Vapor Density** No information available

Wt. % Solids 65 - 75 Vol. % Solids 55 - 65 Wt. % Volatiles 25 - 35Vol. % Volatiles 35 - 45VOC Regulatory Limit (g/L) < 340 **Boiling Point (°F)** 248

**Boiling Point (°C)** Freezing Point (°F) No information available Freezing Point (°C) No information available

Flash Point (°F) 80 Flash Point (°C) 27 **Flash Point Method PMCC** 

Not applicable Flammability (solid, gas) **Upper Explosion Limit** Not applicable Not applicable **Lower Explosion Limit** 

**Autoignition Temperature (°F)** No information available **Autoignition Temperature (°C)** No information available **Decomposition Temperature (°F)** No information available **Decomposition Temperature (°C)** No information available Partition Coefficient (n-octanol/water) No information available

# 10. STABILITY AND REACTIVITY

Reactivity Not Applicable

**Chemical Stability** Stable under normal conditions. Hazardous polymerisation

does not occur.

**Conditions To Avoid** Keep away from open flames, hot surfaces, static

electricity and sources of ignition. Sparks. Elevated

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temperature.

Incompatible with strong acids and bases and strong **Incompatible Materials** 

oxidizing agents.

**Hazardous Decomposition Products** Thermal decomposition can lead to release of irritating

gases and vapors.

None under normal conditions of use. **Possibility Of Hazardous Reactions** 

### 11. TOXICOLOGICAL INFORMATION

**Product Information** 

Information on likely routes of exposure

**Principal Routes of Exposure** Eye contact, skin contact and inhalation.

**Acute Toxicity** 

**Product Information** Repeated or prolonged exposure to organic solvents may

lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and

inhaling vapors may be harmful or fatal.

Information on toxicological effects

**Symptoms** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eye contact Contact with eyes may cause irritation.

Skin contact May cause skin irritation and/or dermatitis. Prolonged skin

contact may defat the skin and produce dermatitis.

Harmful by inhalation. High vapor / aerosol concentrations Inhalation

are irritating to the eyes, nose, throat and lungs and may

cause headaches, dizziness, drowsiness,

unconsciousness, and other central nervous system

effects.

Ingestion Harmful if swallowed. Ingestion may cause irritation to

> mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury,

possibly progressing to death.

No information available. Sensitization: **Neurological Effects** No information available. **Mutagenic Effects** No information available. **Reproductive Effects** No information available. **Developmental Effects** No information available. **Target Organ Effects** 

No information available.

**STOT - single exposure**May cause disorder and damage to the. Respiratory

system.

STOT - repeated exposure Causes damage to organs through prolonged or repeated

exposure if inhaled. Central nervous system (CNS). Causes damage to organs through prolonged or repeated

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exposure.

Other adverse effects No information available.

**Aspiration Hazard**May be harmful if swallowed and enters airways. Small amounts of this product aspirated into the respiratory

amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

## Numerical measures of toxicity

### The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 6069 mg/kg
ATEmix (dermal) 4814 mg/kg
ATEmix (inhalation-dust/mist) 5.8 mg/L
ATEmix (inhalation-vapor) 550.6 mg/L

## Component

Kaolin

LD50 Oral: > 5000 mg/kg (Rat)

Benzyl alcohol

LD50 Oral: 1230-1660 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit)

LC50 Inhalation (Vapor): > 5,000 mg/m<sup>3</sup> (Rat)

**Xylene** 

LD50 Oral: 4300 mg/kg (Rat)

LD50 Dermal: > 1700 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.)

Propylene glycol monomethyl ether
LD50 Oral: 6,600 mg/kg (Rat)
LD50 Dermal: 13,000 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 10,000 ppm (Rat)
Solvent naphtha, petroleum, light aromatic

LD50 Oral: 8400 mg/kg (Rat)

Propylene glycol monomethyl ether acetate

LD50 Oral: 8532 mg/kg (Rat) LD50 Dermal: > 5000 mg/kg (Rabbit) LC50 Inhalation (Vapor): > 4345 ppm

Ethyl benzene

LD50 Oral: mg/kg (Rat)

LD50 Dermal: > mg/kg (Rabbit)

LC50 Inhalation (Vapor): mg/m<sup>3</sup> (Rat, 2 hr.)

1,2,4-Trimethylbenzene LD50 Oral: 5000 mg/kg (Rat)

LC50 Inhalation (Vapor): 18000 mg/m3 (Rat, 4 hr.)

Triethylenetetramine

LD50 Oral: 2500 mg/kg (Rat) LD50 Dermal: 805 mg/kg (Rabbit)

Carbon black

LD50 Oral: > 15400 mg/kg (Rat) LD50 Dermal: > 3000 mg/kg (Rabbit)

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

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### **Chronic Toxicity**

## Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical Name	IARC	NTP
	2B - Possible Human Carcinogen	
Ethyl benzene		
	2B - Possible Human Carcinogen	
Carbon black		
	2B - Possible Human Carcinogen	
Titanium dioxide		

Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

#### Legend

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety & Health Administration

## 12. ECOLOGICAL INFORMATION

## **Ecotoxicity Effects**

The environmental impact of this product has not been fully investigated.

### **Product Information**

## **Acute Toxicity to Fish**

No information available

#### **Acute Toxicity to Aquatic Invertebrates**

No information available

## **Acute Toxicity to Aquatic Plants**

No information available

### Persistence / Degradability

No information available.

### **Bioaccumulation / Accumulation**

No information available.

#### **Mobility in Environmental Media**

No information available.

#### **Ozone**

No information available

## Component

## **Acute Toxicity to Fish**

**Xylene** 

LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)

Ethyl benzene

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LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Titanium dioxide

LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

### **Acute Toxicity to Aquatic Invertebrates**

Ethyl benzene

EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

### **Acute Toxicity to Aquatic Plants**

Ethyl benzene

EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

### 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with federal, state, provincial,

and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal

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options.

**Empty Container Warning** Emptied containers may retain product residue. Follow

label warnings even after container is emptied. Residual

vapors may explode on ignition.

### 14. TRANSPORT INFORMATION

**TDG** 

Proper Shipping NamePaintHazard Class3UN-NoUN1263Packing GroupIII

**Description** UN1263, Paint, 3, III

ICAO / IATA Contact the preparer for further information.

IMDG / IMO Contact the preparer for further information.

## 15. REGULATORY INFORMATION

### **International Inventories**

**TSCA: United States**Yes - All components are listed or exempt.

Yes - All components are listed or exempt.

# National Pollutant Release Inventory (NPRI)

#### NPRI Parts 1-4

This product contains the following Parts 1-4 NPRI chemicals:

Chemical Name CAS-No Weight % (max) NPRI Parts 1- 4

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Benzyl alcohol	100-51-6	7 - 13%	Listed
Xylene	1330-20-7	5 - 10%	Listed
Propylene glycol monomethyl ether	107-98-2	3 - 7%	Listed
Propylene glycol monomethyl ether	108-65-6	1 - 5%	Listed
acetate			
Ethyl benzene	100-41-4	1 - 5%	Listed
1,2,4-Trimethylbenzene	95-63-6	1 - 5%	Listed

#### **NPRI Part 5**

This product contains the following NPRI Part 5 Chemicals:

Chemical Name	CAS-No	Weight % (max)	NPRI Part 5
Xylene	1330-20-7	5 - 10%	Listed
Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - 5%	Listed
Propylene glycol monomethyl ether acetate	108-65-6	1 - 5%	Listed
1,2,4-Trimethylbenzene	95-63-6	1 - 5%	Listed

#### **WHMIS Regulatory Status**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

### 16. OTHER INFORMATION

HMIS -Health: 2\* Flammability: 3 Reactivity: 0 PPE: -

## **HMIS Legend**

- 0 Minimal Hazard
- 1 Slight Hazard
- 2 Moderate Hazard
- 3 Serious Hazard
- 4 Severe Hazard
- ' Chronic Hazard
- X Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by logging onto Health Canada @

http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked\_questions-questions\_posees-eng.php.

**Prepared By** Product Stewardship Department

> Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645

855-724-6802

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Reason For Revision

Not available

#### **Disclaimer**

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

**END OF SAFETY DATA SHEET**