

Revision Date: 24-Aug-2023 Revision Number: 1

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HP EPOXY MASTIC - CLEAR BASE

Product Code HP4600-9B

Alternate Product Code UA449B

Product Class epoxy

Color Clear

Recommended use Paint

Restrictions on use No information available

**Manufacturer** 

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180

www.benjaminmoore.com

**Emergency Telephone** 

CHEMTREC: +1 703-741-5970 / 1-800-424-9300 +1 703-527-3887 (outside US & Canada)

# 2. HAZARDS IDENTIFICATION

# Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration hazard	Category 1
Flammable liquids	Category 3

#### Label elements

# Danger

#### Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

Suspected of damaging fertility or the unborn child

May cause respiratory irritation

May cause drowsiness or dizziness

Causes damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance liquid

Odor solvent

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## **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

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

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

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground and bond container and receiving equipment

Use only non-sparking tools

Take action to prevent static discharges

Keep cool

Wear protective gloves/clothing and eye/face protection

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

IF exposed or concerned: Get medical advice/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 advice/attention

### Skin

If skin irritation or rash occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

#### Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor

IF INHALED: Remove person to fresh air and keep comfortable for breathing

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/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 container tightly closed

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

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

Not applicable

## Other information

No information available

**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.

# 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No	Weight-%
Polyamide epoxy	-	20 - 25
Zinc phosphate	7779-90-0	15 - 20
Silica, crystalline	14808-60-7	10 - 15
Benzyl alcohol	100-51-6	10 - 15
Talc	14807-96-6	10 - 15
Xylene	1330-20-7	5 - 10
Propylene glycol monomethyl ether	107-98-2	1 - 5
Ethyl benzene	100-41-4	1 - 5
Triethylenetetramine	112-24-3	1 - 5
Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - 5
1,2,4-Trimethylbenzene	95-63-6	0.5 - 1
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	90-72-2	0.1 - 0.5
1,3,5-Trimethylbenzene	108-67-8	0.1 - 0.5
Diethylbenzene	25340-17-4	0.1 - 0.5

# 4. FIRST AID MEASURES

#### Description of 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 symptoms persist, call a physician.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all

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contaminated clothes and shoes. If skin irritation persists, call a physician. Wash

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clothing before reuse. Destroy contaminated articles such as shoes.

**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 May cause allergy or asthma symptoms or breathing difficulties if inhaled. May

cause allergic skin reaction.

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)

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
Method PMCC

Flammability Limits In Air

Lower flammability limit:

Upper flammability limit:

No data available

No data available

**NFPA** 

Health hazards 2
Flammability 3
Stability 0

Special: Not Applicable

#### 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

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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** See Section 12 for additional Ecological Information.

Methods for Cleaning Up 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 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 Materials** Incompatible with strong acids and bases and strong oxidizing agents.

**Technical measures/Precautions** Ensure adequate ventilation. Use only where airflow will keep vapors from building up in or near the work area in adjoining rooms. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing and disposal of

flammable liquids.

Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL
Silica, crystalline	TWA: 0.025 mg/m <sup>3</sup> respirable	TWA: 50 μg/m³
	particulate matter	TWA: 50 μg/m³ excludes
		construction work, agricultural
		operations, and exposures that result
		from the processing of sorptive clays
		(vacated) TWA: 0.1 mg/m³ respirable
		dust
		: (250)/(%SiO2 + 5) mppcf TWA
		respirable fraction
		: (10)/(%SiO2 + 2) mg/m <sup>3</sup> TWA
		respirable fraction
Talc	TWA: 2 mg/m³ particulate matter	20 mppcf - TWA
	containing no asbestos and <1%	
	crystalline silica, respirable particulate	
	matter	
Xylene	TWA: 20 ppm	100 ppm - TWA
		435 mg/m³ - TWA
Propylene glycol monomethyl ether	STEL: 100 ppm	-
	TWA: 50 ppm	
Ethyl benzene	Ototoxicant - potential to cause hearing	100 ppm - TWA
	disorders	435 mg/m³ - TWA
	TWA: 20 ppm	
1,2,4-Trimethylbenzene	TWA: 10 ppm	-
1,3,5-Trimethylbenzene	TWA: 25 ppm	-

Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

**Eye/Face Protection** Tightly fitting safety goggles. Safety glasses with side-shields. If splashes are likely

to occur, wear:.

**Skin Protection** Long sleeved clothing. Protective gloves.

**Respiratory Protection**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 point approved respirator specified

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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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor solvent

Odor Threshold No information available

 Density (lbs./gal)
 10.9 - 11.3

 Specific Gravity
 1.30 - 1.36

pH No information available
Viscosity (cps) No information available
Solubility(ies) No information available
Water solubility No information available
Evaporation Rate No information available

Vapor pressure @20 °C (kPa)No information availableRelative vapor densityNo information available

 Wt. % Solids
 80 - 90

 Vol. % Solids
 70 - 80

 Wt. % Volatiles
 10 - 20

 Vol. % Volatiles
 20 - 30

 VOC Regulatory Limit (g/L)
 < 250</td>

Freezing point (°F)

Freezing Point (°C)

No information available
No information available

Flash point (°F) 80
Flash Point (°C) 27
Method PMCC
Flammability (solid, gas) Not applicable

Partition coefficient

Upper flammability limit:

Lower flammability limit:

Autoignition Temperature (°F)

Autoignition Temperature (°C)

Decomposition Temperature (°F)

Decomposition Temperature (°C)

No information available

No information available

No information available

No information available

# 10. STABILITY AND REACTIVITY

**Reactivity** No data available

Chemical Stability Stable under normal conditions. Hazardous polymerisation

does not occur.

No information available

Conditions to avoid Keep away from open flames, hot surfaces, static

electricity and sources of ignition. Sparks. Elevated

temperature.

Incompatible Materials Incompatible with strong acids and bases and strong

oxidizing agents.

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Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating

gases and vapors.

Possibility of hazardous reactions None under normal conditions of use.

# 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.

### Symptoms related to the physical, chemical and toxicological characteristics

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.

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.

**Inhalation** Harmful by inhalation. High vapor / aerosol concentrations are irritating to the eyes,

nose, throat and lungs and may cause headaches, dizziness, drowsiness,

unconsciousness, and other central nervous system effects.

Sensitization Respiratory sensitizer

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Neurological EffectsNo information available.Mutagenic EffectsNo information available.

**Reproductive Effects** Possible risk of impaired fertility. Possible risk of harm to the unborn child.

**Developmental Effects** No information available.

Target organ effects Respiratory system. Eyes. Lungs.

**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure if inhaled,

Central nervous system, Causes damage to organs through prolonged or repeated

exposure.

STOT - single exposure Other adverse effects May cause disorder and damage to the, Respiratory system.

No information available.

Aspiration Hazard May be harmful if swallowed and enters airways. 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.

# Numerical measures of toxicity

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

ATEmix (oral) 3192 mg/kg
ATEmix (inhalation-dust/mist) 7.4 mg/l
ATEmix (inhalation-vapor) 232.1 mg/l

<u>Component Information</u> Caution - This mixture contains a substance not yet fully tested

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyamide epoxy	< 2000 mg/kg	>2000 mg/kg	= 5.0 mg/L (Rat) 4 h
Zinc phosphate 7779-90-0	> 5000 mg/kg (Rat)	-	-
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg ( Rabbit )	= 29.08 mg/L (Rat) 4 h
Propylene glycol monomethyl ether 107-98-2	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 7559 ppm (Rat) 6 h
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg ( Rabbit )	= 17.4 mg/L (Rat) 4 h
Triethylenetetramine 112-24-3	= 2500 mg/kg (Rat)	= 550 mg/kg(Rabbit)	-
Solvent naphtha, petroleum, light aromatic 64742-95-6	= 8400 mg/kg(Rat)	> 2000 mg/kg(Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4-Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg ( Rabbit )	= 18 g/m³ (Rat ) 4 h
Phenol, 2,4,6-tris[(dimethylamino)methyl]- 90-72-2	= 1200 mg/kg(Rat)	= 1280 mg/kg ( Rat )	-
1,3,5-Trimethylbenzene 108-67-8	= 5000 mg/kg (Rat)	-	= 24 g/m³ (Rat) 4 h
Diethylbenzene 25340-17-4	= 2050 mg/kg (Rat)	> 5000 mg/kg ( Rabbit )	-

# **Chronic Toxicity**

# **Carcinogenicity**

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

Chemical name	IARC	NTP	OSHA
	1 - Human Carcinogen	Known	Χ
Silica, crystalline			
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		

<sup>•</sup> Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried 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**

There is no data for this product.

# **Mobility in Environmental Media**

No information available.

#### Ozone

Not classified

# **Component Information**

# **Acute Toxicity to Fish**

Xylene

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

Ethyl benzene

LC50: 12.1 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, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal 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

DOT

**Proper Shipping Name** Paint Transport hazard class(es) 3 UN1263 UN-No **Packing Group** Ш

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. **DSL: Canada** 

# Federal Regulations

### SARA 311/312 Hazard Categories

Acute health hazard Yes Chronic Health Hazard Yes Fire hazard Yes Sudden release of pressure hazard No Reactive Hazard No

# **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	CERCLA/SARA 313 (de minimis concentration)
Zinc phosphate	7779-90-0	15 - 20	1.0
Xylene	1330-20-7	5 - 10	1.0
Ethyl benzene	100-41-4	1 - 5	0.1

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical name CAS No Weight-% **Hazardous Air Pollutant** (HAP)

 Xylene
 1330-20-7
 5 - 10
 Listed

 Ethyl benzene
 100-41-4
 1 - 5
 Listed

# **US State Regulations**

# **California Proposition 65**

WARNING: This product can expose you to chemicals including Crystalline Silica, which are known to the State of California to cause cancer, and Toluene which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

# U.S. State Right-to-Know

#### Regulations

Chemical name	Massachusetts	New Jersey	Pennsylvania
Zinc phosphate		X	X
Silica, crystalline	Χ	X	X
Benzyl alcohol	Χ		X
Talc	Χ	X	X
Xylene	Χ	X	X
Propylene glycol monomethyl ether	Χ	X	X
Ethyl benzene	X	X	X
Triethylenetetramine	Χ	X	X

#### Legend

X - Listed

### 16. OTHER INFORMATION

#### **HMIS**

Health hazards 2\*
Flammability 3
Reactivity: 0
Personal protection -

# **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

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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 contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

**Prepared By Product Stewardship Department** 

> Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 800-225-5554

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#### 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**