



SAFETY DATA SHEET

Revision Date: 18-Jun-2019

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name EPOXY MASTIC COATING CLEAR BASE
Product Code V160-88FR
Alternate Product Code A16088
Product Class epoxy
Color Clear
Recommended use Industrial 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: 1-866-708-9180
corotechcoatings.com

Emergency Telephone
CANUTEC: 613-996-6666

2. HAZARDS IDENTIFICATION

Classification

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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements**Danger****Hazard statements**

Harmful if swallowed
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 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**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
Do not eat, drink or smoke when using this product
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
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/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Eyes

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/physician

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Rinse mouth

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

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.

3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Polyamine adduct	-	10 - 30%	-	-
Zinc phosphate	7779-90-0	10 - 30%	-	-
Silica, crystalline	14808-60-7	7 - 13%	-	-
Benzyl alcohol	100-51-6	7 - 13%	-	-
Talc	14807-96-6	7 - 13%	-	-
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%	-	-
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	90-72-2	0.25 - 0.5%	-	-

Confidential Business Information note

*The exact percentage (concentration) of composition has been withheld as a trade secret

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 symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Wash 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) 80.0
Flash Point (°C) 26.7
Method PMCC

Flammability Limits In Air

Lower flammability limit: Not available
Upper flammability limit: Not available

NFPA Health: 2 Flammability: 3 Instability: 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 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical name	ACGIH TLV	Alberta	British Columbia	Ontario	Quebec
Silica, crystalline	0.025 mg/m ³ - TWA	0.025 mg/m ³ - TWA	0.025 mg/m ³ - TWA	0.10 mg/m ³ - TWA	0.1 mg/m ³ - TWAEV
Talc	2 mg/m ³ - TWA	2 mg/m ³ - TWA	2 mg/m ³ - TWA	2 mg/m ³ - TWA	3 mg/m ³ - TWAEV
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 434 mg/m ³ - TWA 150 ppm - STEL 651 mg/m ³ - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWAEV 434 mg/m ³ - TWAEV 150 ppm - STEV 651 mg/m ³ - STEV
Propylene glycol monomethyl ether	50 ppm - TWA 100 ppm - STEL	100 ppm - TWA 369 mg/m ³ - TWA 150 ppm - STEL 553 mg/m ³ - STEL	50 ppm - TWA 75 ppm - STEL	50 ppm - TWA 100 ppm - STEL	100 ppm - TWAEV 369 mg/m ³ - TWAEV 150 ppm - STEV 553 mg/m ³ - STEV
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 434 mg/m ³ - TWA 125 ppm - STEL 543 mg/m ³ - STEL	20 ppm - TWA	20 ppm - TWA	100 ppm - TWAEV 434 mg/m ³ - TWAEV 125 ppm - STEV 543 mg/m ³ - STEV
Triethylenetetramine	N/E	N/E	N/E	0.5 ppm - TWA 3 mg/m ³ - TWA Danger of cutaneous absorption	N/E

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.

Personal Protective Equipment**Eye/Face Protection**

Safety glasses with side-shields. If splashes are likely to occur, wear: Tightly fitting safety goggles

Skin Protection

Protective gloves and impervious clothing.

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 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)	11.1 - 11.2
Specific Gravity	1.33 - 1.35
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	No information available
Vapor density	No information available
Wt. % Solids	80 - 90
Vol. % Solids	70 - 80
Wt. % Volatiles	10 - 20
Vol. % Volatiles	20 - 30
VOC Regulatory Limit (g/L)	<250
Boiling Point (°F)	248
Boiling Point (°C)	120
Freezing point (°F)	No information available
Freezing Point (°C)	No information available
Flash point (°F)	80.0
Flash Point (°C)	26.7
Method	PMCC
Flammability (solid, gas)	Not applicable
Upper flammability limit:	Not applicable
Lower flammability limit:	Not applicable
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	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 temperature.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.
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.
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.
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.
Sensitization	Respiratory sensitizer. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Neurological Effects	No information available.
Mutagenic Effects	No 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	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. Causes damage to organs through prolonged or repeated 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 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)	1964 mg/kg
ATEmix (dermal)	3730 mg/kg
ATEmix (inhalation-dust/mist)	8.2 mg/L
ATEmix (inhalation-vapor)	1116.5 mg/L

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyamine adduct	< 2000 mg/kg	>2000 mg/kg	= 5.0 mg/L (Rat) 4 h
Zinc phosphate 7779-90-0	> 5000 mg/kg (Rat)	-	-
Silica, crystalline 14808-60-7	= 500 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)	= 17.2 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
Phenol, 2,4,6-tris[(dimethylamino)methyl]- 90-72-2	= 1200 mg/kg (Rat)	= 1280 mg/kg (Rat)	-

Carcinogenicity

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

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

- 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

No information available.

Mobility in Environmental Media

No information available.

Ozone

No information available

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, provincial, 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

TDG

Proper Shipping Name	PAINT
Hazard class	3
UN-No.	UN1263
Packing Group	III
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.
DSL: Canada 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:

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>NPRI Parts 1- 4</u>
Xylene	1330-20-7	5 - 10%	Listed
Ethyl benzene	100-41-4	1 - 5%	Listed

NPRI Part 5

This product contains the following NPRI Part 5 Chemicals:

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>NPRI Part 5</u>
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End of Safety Data Sheet