



Benjamin Moore®

SAFETY DATA SHEET

Revision Date: 24-Aug-2023

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HP EPOXY MASTIC - CATALYST
Product Code HP4600-90FR
Alternate Product Code UF4490
Product Class CATALYST
Color All
Recommended use CATALYST
Restrictions on use No information available

Manufactured For

Benjamin Moore & Co., Limited
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CANUTEC: 613-996-6666 (Transport Emergency Only)

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 2A
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause genetic defects
May cause cancer
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure
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/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

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

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

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)
4,4-isopropylidenediphenol-epichlorohydrin copolymer	25068-38-6	30 - 60%	-	-
Silica, crystalline	14808-60-7	10 - 30%	-	-
Propylene glycol monomethyl ether	107-98-2	3 - 7%	-	-
Xylene	1330-20-7	1 - 5%	-	-
Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - 5%	-	-
1,2,4-Trimethylbenzene	95-63-6	1 - 5%	-	-
Ethyl benzene	100-41-4	0.5 - 1%	-	-
1,3,5-Trimethylbenzene	108-67-8	0.25 - 0.5%	-	-
Diethylbenzene	25340-17-4	0.1 - 0.25%	-	-

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 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:	No data available
Upper flammability limit:	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 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.

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	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 0.025 mg/m ³	TWA: 0.025 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
Propylene glycol monomethyl ether	STEL: 100 ppm TWA: 50 ppm	100 ppm - TWA 369 mg/m ³ - TWA 150 ppm - STEL 553 mg/m ³ - STEL	50 ppm - TWA 100 ppm - STEL	50 ppm - TWA 100 ppm - STEL	100 ppm - TWAEV 369 mg/m ³ - TWAEV 150 ppm - STEV 553 mg/m ³ - STEV
Xylene	TWA: 20 ppm	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
1,2,4-Trimethylbenzene	TWA: 10 ppm	-	-	-	-
Ethyl benzene	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	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
1,3,5-Trimethylbenzene	TWA: 25 ppm	-	-	-	-

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**

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

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)	10.2 - 10.7
Specific Gravity	1.22 - 1.29
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 available
Relative vapor density	No information available
Wt. % Solids	80 - 90
Vol. % Solids	75 - 85
Wt. % Volatiles	10 - 20
Vol. % Volatiles	15 - 25
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
Flash Point (°C)	27
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

May cause an allergic skin reaction.

Neurological Effects

No information available.

Mutagenic Effects

No information available.

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target organ effects

Respiratory system, Eyes, Lungs.

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, 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)	12870 mg/kg
ATEmix (inhalation-dust/mist)	30.8 mg/l
ATEmix (inhalation-vapor)	186.6 mg/l

Component Information

Caution - This mixture contains a substance not yet fully tested

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4-isopropylidenediphenol-epichlorohydrin copolymer 25068-38-6	= 11400 mg/kg (Rat)	-	-
Propylene glycol monomethyl ether 107-98-2	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 7559 ppm (Rat) 6 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
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/m ³ (Rat) 4 h
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
1,3,5-Trimethylbenzene 108-67-8	= 5000 mg/kg (Rat)	-	= 24 g/m ³ (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
Silica, crystalline	1 - Human Carcinogen	Known
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

There is no data for this product.

Mobility in Environmental Media

No information available.

Ozone

Not applicable

Component Information**Acute Toxicity to Fish****4,4-isopropylidenediphenol-epichlorohydrin copolymer**

LC50: 1.5 mg/L (Rainbow Trout - 96 hr.)

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

Transport hazard class(es) 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	1 - 5%	Listed
1,2,4-Trimethylbenzene	95-63-6	1 - 5%	Listed
Ethyl benzene	100-41-4	0.5 - 1%	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>
Xylene	1330-20-7	1 - 5%	Listed
Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - 5%	Listed
1,2,4-Trimethylbenzene	95-63-6	1 - 5%	Listed
1,3,5-Trimethylbenzene	108-67-8	0.25 - 0.5%	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 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 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 at http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked_questions-questions_posees-eng.php.

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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