



SAFETY DATA SHEET

Revision Date: 07-Jun-2016

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name POLYAMIDE EPOXY SEMI-GLOSS CATALYST
Product Code V400-91FR
Alternate Product Code A40091
Product Class EPOXY
Color All
Recommended use 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 1A |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Aspiration toxicity | 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 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

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 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.

3. COMPOSITION INFORMATION ON COMPONENTS

| Chemical Name | CAS-No | Weight % (max) |
|--|------------|----------------|
| Talc | 14807-96-6 | 10 - 30% |
| 4,4-isopropylidenediphenol-epichlorohydrin copolymer | 25068-38-6 | 10 - 30% |
| Xylene | 1330-20-7 | 7 - 13% |
| Propylene glycol monomethyl ether | 107-98-2 | 3 - 7% |
| 2-Pentanone, 4-methyl- | 108-10-1 | 1 - 5% |
| Ethyl benzene | 100-41-4 | 1 - 5% |
| Silica, crystalline | 14808-60-7 | 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 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. 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

Flash Point Method

PMCC

Flammability Limits In Air

Lower Explosion Limit

Not available

Upper Explosion Limit

Not 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

See Section 12 for additional Ecological Information.

Methods For Clean-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

No exposure limits have been established for this product.

| Chemical Name | ACGIH | Alberta | British Columbia | Ontario | Quebec |
|-----------------------------------|---------------------------------|--|---------------------------------|---------------------------------|--|
| 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 |
| 2-Pentanone, 4-methyl- | 20 ppm - TWA 75 ppm - STEL | 50 ppm - TWA 205 mg/m ³ - TWA 75 ppm - STEL 307 mg/m ³ - STEL | 20 ppm - TWA 75 ppm - STEL | 20 ppm - TWA 75 ppm - STEL | 50 ppm - TWAEV 205 mg/m ³ - TWAEV 75 ppm - STEV 307 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 |
| 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 |

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.

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) | 10.5 - 10.8 |
| Specific Gravity | 1.25 - 1.29 |
| pH | 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 | 70 - 80 |
| Vol. % Solids | 60 - 70 |
| Wt. % Volatiles | 20 - 30 |
| Vol. % Volatiles | 30 - 40 |
| VOC Regulatory Limit (g/L) | < 340 |
| Boiling Point (°F) | 237 |
| Boiling Point (°C) | 114 |
| Freezing Point (°F) | No information available |
| Freezing Point (°C) | No information available |
| Flash Point (°F) | 80 |
| Flash Point (°C) | 27 |
| Flash Point Method | PMCC |
| Flammability (solid, gas) | Not applicable |
| Upper Explosion Limit | Not applicable |
| Lower Explosion 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 (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 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.

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.
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 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. Contains: Crystalline Silica which 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. Causes damage to organs through prolonged or repeated exposure.

Other adverse effects

Aspiration Hazard

No information available.

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) | 11351 mg/kg |
| ATEmix (dermal) | 7992 mg/kg |
| ATEmix (inhalation-dust/mist) | 8.1 mg/L |
| ATEmix (inhalation-vapor) | 603.4 mg/L |

Component

4,4-isopropylidenediphenol-epichlorohydrin copolymer

LD50 Oral: mg/kg (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)

2-Pentanone, 4-methyl-

LD50 Oral: 2080-4600 mg/kg (Rat)

LC50 Inhalation (Vapor): 100000 mg/m³

Ethyl benzene

LD50 Oral: mg/kg (Rat)

LD50 Dermal: > mg/kg (Rabbit)

LC50 Inhalation (Vapor): mg/m³ (Rat, 2 hr.)

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

Chronic Toxicity

Carcinogenicity

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

| Chemical Name | IARC | NTP |
|------------------------|--------------------------------|------------------------|
| 2-Pentanone, 4-methyl- | 2B - Possible Human Carcinogen | |
| Ethyl benzene | 2B - Possible Human Carcinogen | |
| Silica, crystalline | 1 - Human Carcinogen | Known 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 / Accumulation

No information available.

Mobility in Environmental Media

No information available.

Ozone

No information available

Component

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 |
| 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 % (max)</u> | <u>NPRI Parts 1- 4</u> |
|-----------------------------------|---------------|-----------------------|------------------------|
| Xylene | 1330-20-7 | 7 - 13% | Listed |
| Propylene glycol monomethyl ether | 107-98-2 | 3 - 7% | Listed |
| 2-Pentanone, 4-methyl- | 108-10-1 | 1 - 5% | 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 % (max)</u> | <u>NPRI Part 5</u> |
|------------------------|---------------|-----------------------|--------------------|
| Xylene | 1330-20-7 | 7 - 13% | Listed |
| 2-Pentanone, 4-methyl- | 108-10-1 | 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-sem/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

Revision Date: 07-Jun-2016
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