



SAFETY DATA SHEET

Revision Date: 02-Jun-2016

Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name POLYAMIDE EPOXY HIGH BUILD CATALYST
Product Code V400-92
Alternate Product Code V40092
Product Class EPOXY
Color All
Recommended use Paint
Restrictions on use No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 800-225-5554
corotechcoatings.com

Emergency Telephone Number(s)
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

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 2
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Warning

Hazard statements

Causes skin irritation
Causes serious eye irritation
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
Wear eye/face protection
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

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 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

Hazards not otherwise classified (HNOC)

Not Applicable

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)
Xylene	1330-20-7	15
Kaolin	1332-58-7	15
Propylene glycol monomethyl ether	107-98-2	5
Ethyl benzene	100-41-4	5
Titanium dioxide	13463-67-7	0.5

4. FIRST AID MEASURES

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.
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) 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.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical Name	ACGIH	OSHA
Xylene	100 ppm - TWA	100 ppm - TWA
	150 ppm - STEL	435 mg/m ³ - TWA
Kaolin	2 mg/m ³ - TWA	15 mg/m ³ - TWA
		5 mg/m ³ - TWA
Propylene glycol monomethyl ether	50 ppm - TWA	N/E
	100 ppm - STEL	
Ethyl benzene	20 ppm - TWA	100 ppm - TWA
		435 mg/m ³ - TWA
Titanium dioxide	10 mg/m ³ - TWA	15 mg/m ³ - TWA

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 Safety glasses with side-shields.

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 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)	9.5 - 9.8
Specific Gravity	1.13 - 1.17
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	75 - 85
Vol. % Solids	65 - 75
Wt. % Volatiles	15 - 25
Vol. % Volatiles	25 - 35
VOC Regulatory Limit (g/L)	< 340
Boiling Point (°F)	241
Boiling Point (°C)	116
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	No information available
Lower Explosion Limit	No information available
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	No data available
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.
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: No information available
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 - repeated exposure Causes damage to organs through prolonged or repeated exposure.
STOT - single exposure May cause disorder and damage to the. Respiratory system.
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) 12744 mg/kg
ATEmix (dermal) 7671 mg/kg
ATEmix (inhalation-dust/mist) 8.5 mg/L
ATEmix (inhalation-vapor) 835.4 mg/L

Acute Toxicity

Component

Xylene

LD50 Oral: 4300 mg/kg (Rat)
LD50 Dermal: > 1700 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.)

Kaolin

LD50 Oral: > 5000 mg/kg (Rat)
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)
Ethyl benzene
LD50 Oral: mg/kg (Rat)
LD50 Dermal: > mg/kg (Rabbit)
LC50 Inhalation (Vapor): mg/m³ (Rat, 2 hr.)
Titanium dioxide
LD50 Oral: > 10000 mg/kg (Rat)

Carcinogenicity

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

Chemical Name	IARC	NTP	OSHA Carcinogen
Ethyl benzene	2B - Possible Human Carcinogen		Listed
Titanium dioxide	2B - Possible Human Carcinogen		Listed

• 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

Not Applicable

Component

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.)

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, 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
Hazard Class	3
UN-No	UN1263
Packing Group	III
Reportable Quantity (RQ)	Ethylbenzene: RQ kg= 454.00, Xylenes mixed isomers: RQ kg= 45.40
Description	UN1263, Paint, , 3, III, RQ

ICAO / IATA

Contact the preparer for further information.

IMDG / IMO

Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

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

Federal Regulations

SARA 311/312 hazardous categorization

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:

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>	<u>CERCLA/SARA 313 (de minimis concentration)</u>
Xylene	1330-20-7	15	1.0
Ethyl benzene	100-41-4	5	0.1

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

This product contains the following HAPs:

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>	<u>Hazardous Air Pollutant (HAP)</u>
Xylene	1330-20-7	15	Listed
Ethyl benzene	100-41-4	5	Listed

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

<u>Chemical Name</u>	<u>Massachusetts</u>	<u>New Jersey</u>	<u>Pennsylvania</u>
Xylene	X	X	X
Kaolin	X	X	X
Propylene glycol monomethyl ether	X	X	X
Ethyl benzene	X	X	X
Titanium dioxide	X	X	X

Legend

X - Listed

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

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Disclaimer

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END OF SAFETY DATA SHEET