



Revision Date: 07-Nov-2019 Revision Number: 7

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name POLYAMIDE EPOXY COATING SEMI-GLOSS CATALYST V400-91

Product Code V400-91
Alternate Product Code V40091

Product Class
Color
Light yellow
Recommended use
CATALYST
CATALYST

Restrictions on useNo information available

Manufacturer Emergency Telephone

Benjamin Moore & Co. CHEMTREC (US): 800-424-9300
101 Paragon Drive CHEMTREC (outside US): (703)-527-3887

Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com

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
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Causes skin irritation

Causes serious eye irritation

V400-91 - POLYAMIDE EPOXY COATING SEMI-GLOSS CATALYST

Revision Date: 07-Nov-2019

May cause an allergic skin reaction

May cause cancer

May damage fertility or the unborn child

Causes damage to organs

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

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

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

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician

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

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 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-%
Talc	14807-96-6	25 - 30
Copolymer, bisphenol A diglycidylether-bisphenol A	25036-25-3	25 - 30
4,4-isopropylidenediphenol-epichlorohydrin copolymer	25068-38-6	15 - 20
Xylene	1330-20-7	10 - 15
Propylene glycol monomethyl ether	107-98-2	5 - 10
2-Pentanone, 4-methyl-	108-10-1	1 - 5
Ethyl benzene	100-41-4	1 - 5
n-Butyl alcohol	71-36-3	1 - 5
Silica, crystalline	14808-60-7	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

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-AidersUse personal protective equipment.

Most Important Symptoms/Effects May cause allergic skin reaction.

Symptoms/Enects

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.

Revision Date: 07-Nov-2019

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:Not availableUpper 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,

Revision Date: 07-Nov-2019

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

HandlingAvoid 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 TLV	OSHA PEL
Talc	2 mg/m³ - TWA	20 mppcf - TWA
Xylene	100 ppm - TWA	100 ppm - TWA
	150 ppm - STEL	435 mg/m ³ - TWA
Propylene glycol monomethyl ether	50 ppm - TWA	N/E
	100 ppm - STEL	
2-Pentanone, 4-methyl-	20 ppm - TWA	100 ppm - TWA
	75 ppm - STEL	410 mg/m ³ - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA
		435 mg/m³ - TWA
n-Butyl alcohol	20 ppm - TWA	100 ppm - TWA
·		300 mg/m ³ - TWA
Silica, crystalline	0.025 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. If splashes are likely to occur, wear:. Tightly

fitting safety goggles.

Skin Protection Long sleeved clothing. Protective gloves.

Respiratory ProtectionUse 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) 10.6 - 10.7 Specific Gravity 1.27 - 1.29

pH No information available

Viscosity (cps)No information availableSolubility(ies)No information availableWater solubilityNo information availableEvaporation RateNo information availableVapor pressureNo information availableVapor densityNo information available

 Wt. % Solids
 70 - 80

 Vol. % Solids
 65 - 75

 Wt. % Volatiles
 20 - 30

V400-91 - POLYAMIDE EPOXY COATING SEMI-GLOSS CATALYST

Vol. % Volatiles25 - 35VOC Regulatory Limit (g/L)< 340</th>Boiling Point (°F)237.2Boiling Point (°C)114.0

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

Upper flammability limit:

Lower flammability limit:

Autoignition Temperature (°F)

Autoignition Temperature (°C)

Decomposition Temperature (°F)

Decomposition Temperature (°C)

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

Revision Date: 07-Nov-2019

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.

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

Revision Date: 07-Nov-2019

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 May cause an allergic skin reaction

Neurological EffectsNo information available. **Mutagenic Effects**No information available.

Reproductive Effects May damage fertility or the unborn child.

Developmental EffectsNo information available. **Target organ effects**No information available.

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure if inhaled.

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) 8396 mg/kg
ATEmix (dermal) 7299 mg/kg
ATEmix (inhalation-dust/mist) 8.5 mg/L
ATEmix (inhalation-vapor) 482.3 mg/L

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4-isopropylidenediphenol-epichlor ohydrin copolymer 25068-38-6	= 11400 mg/kg(Rat)	-	-
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
2-Pentanone, 4-methyl- 108-10-1	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat)4 h
n-Butyl alcohol 71-36-3	= 700 mg/kg (Rat) = 790 mg/kg (Rat)	= 3402 mg/kg (Rabbit) = 3400 mg/kg (Rabbit)	> 8000 ppm (Rat) 4 h
Silica, crystalline 14808-60-7	= 500 mg/kg(Rat)	-	-

Carcinogenicity

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

Chemical name	IARC	NTP	OSHA
	2B - Possible Human		Listed
2-Pentanone, 4-methyl-	Carcinogen		
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	1 - Human Carcinogen	Known Human	Listed
Silica, crystalline		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, and local regulations. Local

requirements may vary, consult your sanitation department or state-designated

Revision Date: 07-Nov-2019

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

Description UN1263, PAINT, 3, III

ICAO / IATA Contact the preparer for further information.

IMDG / IMOContact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

TSCA: United StatesYes - All components are listed or exempt.

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:

Chemical name	CAS No.	<u>Weight-%</u>	CERCLA/SARA 313 (de minimis concentration)
Xylene	1330-20-7	10 - 15	1.0
2-Pentanone, 4-methyl-	108-10-1	1 - 5	1.0
Ethyl benzene	100-41-4	1 - 5	0.1
n-Butyl alcohol	71-36-3	1 - 5	1.0

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
			<u>(HAP)</u>
Xylene	1330-20-7	10 - 15	Listed
2-Pentanone, 4-methyl-	108-10-1	1 - 5	Listed
Ethyl benzene	100-41-4	1 - 5	Listed

US State Regulations

California Proposition 65

MARNING: Cancer and Reproductive Harm– www.P65warnings.ca.gov

State Right-to-Know

<u>Otate Hight to Hilow</u>			
Chemical name	Massachusetts	New Jersey	Pennsylvania
Talc	X	X	Χ
Xylene	X	X	Χ
Propylene glycol monomethyl ether	X	X	Χ
2-Pentanone, 4-methyl-	X	X	X
Ethyl benzene	X	X	X
n-Butyl alcohol	X	X	X
Silica, crystalline	Х	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.

Prepared By Product Stewardship Department

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645

800-225-5554

Revision Date: 07-Nov-2019 **Revision Summary** 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