



Revision Date: 13-Jul-2018

Revision Number: 4

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Product Code Alternate Product Code Product Class Color Recommended use Restrictions on use

Manufacturer

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com

POLYAMIDE EPOXY PRIMER GRAY

V150-70 V15070 EPOXY Gray Industrial paint No information available

Emergency Telephone

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 2A
Carcinogenicity	Category 2
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 Suspected of causing cancer May cause damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways



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/gas/mist/vapors/spray 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 **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 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-%
Titanium dioxide	13463-67-7	20
Xylene	1330-20-7	15
Ethyl benzene	100-41-4	5
Solvent naphtha, petroleum, light aromatic	64742-95-6	5
n-Butyl alcohol	71-36-3	5
Zinc phosphate	7779-90-0	5
1,2,4-Trimethylbenzene	95-63-6	5
Zinc oxide	1314-13-2	1

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 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 gea	r.
Hazardous combustion products			carbon dioxide, carbon monoxide products of varying composition d/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) Flash Point (°C) Method		80.0 26.7 PMCC	
Flammability Limits In Air			
Lower flammability limit: Upper flammability limit:		Not available 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. 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.	
Methods for Cleaning Up		
	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/Precautio	ns 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
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 435 mg/m³ - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
n-Butyl alcohol	20 ppm - TWA	100 ppm - TWA 300 mg/m³ - TWA
Zinc oxide	2 mg/m³ - TWA 10 mg/m³ - STEL	5 mg/m³ - TWA 15 mg/m³ - 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 Skin Protection Respiratory Protection	Safety glasses with side-shields. Long sleeved clothing. Protective gloves. 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 Odor **Odor Threshold** Density (lbs/gal) **Specific Gravity** pН Viscosity (cps) Solubility(ies) Water solubility **Evaporation Rate** Vapor pressure @20 °C (kPa) Vapor density Wt. % Solids Vol. % Solids Wt. % Volatiles Vol. % Volatiles VOC Regulatory Limit (g/L) Boiling Point (°F) **Boiling Point (°C)** Freezing Point (°F) Freezing Point (°C) Flash Point (°F) Flash Point (°C) Method Flammability (solid, gas) **Upper flammability limit:** Lower flammability limit: Autoignition Temperature (°F) Autoignition Temperature (°C) Decomposition Temperature (°F) Decomposition Temperature (°C) Partition coefficient

liquid solvent No information available 13.4 - 13.5 1.60 - 1.63 No information available 75 - 85 60 - 70 15 - 25 30 - 40 < 340 243.0 117.0 No information available No information available 80.0 26.7 PMCC Not applicable No information available 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.	
Symptoms related to the physic	cal, 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 Skin contact Ingestion	Contact with eyes may cause irritation. May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the skin and produce dermatitis. 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 Neurological Effects Mutagenic Effects Reproductive Effects Developmental Effects Target organ effects STOT - repeated exposure	No information available No information available. No information available. No information available. No information available. No information available. 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)	9135 mg/kg
ATEmix (dermal)	8251 mg/kg
ATEmix (inhalation-dust/mist)	12.4 mg/L
ATEmix (inhalation-vapor)	1088.9 mg/L

Acute Toxicity Component Information

Titanium dioxide LD50 Oral: > 10000 mg/kg (Rat) Xylene LD50 Oral: 4300 mg/kg (Rat) LD50 Dermal: > 1700 mg/kg (Rabbit) LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.) Ethyl benzene LD50 Oral: mg/kg (Rat) LD50 Dermal: > mg/kg (Rabbit) LC50 Inhalation (Vapor): mg/m³ (Rat, 2 hr.) Solvent naphtha, petroleum, light aromatic LD50 Oral: 8400 mg/kg (Rat) n-Butyl alcohol LD50 Oral: 790 - 800 mg/kg (Rat) LD50 Dermal: 3400 mg/kg LC50 Inhalation (Vapor): 24000 mg/m³ (Rat, 4 hr.) 1,2,4-Trimethylbenzene LD50 Oral: 5000 mg/kg (Rat) LC50 Inhalation (Vapor): 18000 mg/m3 (Rat, 4 hr.) Zinc oxide LD50 Oral: 5000 mg/kg (Rat) LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

Carcinogenicity

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

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

• 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

No information available.

Mobility in Environmental Media

No information available.

<u>Ozone</u>

Not applicable

Component Information

Acute Toxicity to Fish

<u>Titanium dioxide</u> LC50: > 1000 mg/L (Fathead Minnow - 96 hr.) <u>Xylene</u> LC50: 13.5 mg/L (Rainbow Trout - 96 hr.) <u>Ethyl benzene</u> 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 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 Hazard class UN-No. Packing Group Description	PAINT 3 UN1263 III 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.

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.	Weight-%	CERCLA/SARA 313 (de minimis concentration)
Xylene	1330-20-7	15	1.0
Ethyl benzene	100-41-4	5	0.1
n-Butyl alcohol	71-36-3	5	1.0
Zinc phosphate	7779-90-0	5	1.0

1,2,4-Trimethylbenzene	95-63-6	5	1.0
Clean Air Act, Section 112 Hazard This product contains the following H	1	s) (see 40 CFR 61)	

<u>CAS NO.</u>	Weight-%	<u>Hazardous Air Pollutant</u>
	-	<u>(HAP)</u>
1330-20-7	15	Listed
100-41-4	5	Listed
	1330-20-7	1330-20-7 15

US State Regulations

California Proposition 65

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

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Titanium dioxide	X	X	Х
Xylene	X	X	Х
Ethyl benzene	X	X	Х
n-Butyl alcohol	X	X	Х
Zinc phosphate		X	Х
1,2,4-Trimethylbenzene	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.

Prepared By	Product Stewardship Department Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 800-225-5554
Revision Date:	13-Jul-2018
Revision Summary	Not available

Disclaimer

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END OF SAFETY DATA SHEET