



Revision Date: 21-Jul-2021

**Revision Number:** 6

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 www.benjaminmoore.com/Corotech

# BENJAMIN MOORE COROTECH POLYAMIDE EPOXY COATING TINTABLE WHITE V400-86 V40086 epoxy

V40086 epoxy White Industrial paint No information available

#### **Emergency Telephone**

CHEMTREC: +1 703-741-5970 / 1-800-424-9300 +1 703-527-3887 (outside US & Canada)

# 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
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

## Label elements

## Danger

Odor solvent

### Hazard statements

Causes skin irritation Causes serious eye irritation May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction Suspected of causing cancer Suspected of damaging fertility or the unborn child May cause respiratory irritation Causes damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Flammable liquid and vapor



Appearance liquid

# **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

In case of inadequate ventilation wear respiratory protection

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/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Wear protective gloves/protective clothing/eye protection/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 experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing **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 container tightly closed

#### **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

**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.

**CAUTION:** All floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

# 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
Titanium dioxide	13463-67-7	35 - 40
Polyamine adduct	-	15 - 20
Xylene	1330-20-7	10 - 15
Kaolin	1332-58-7	5 - 10
Benzyl alcohol	100-51-6	5 - 10
Propylene glycol monomethyl ether	107-98-2	1 - 5
Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - 5
Ethyl benzene	100-41-4	1 - 5
Silica amorphous	7631-86-9	1 - 5
1,2,4-Trimethylbenzene	95-63-6	1 - 5
Triethylenetetramine	112-24-3	1 - 5
Trimethylolpropane	77-99-6	0.1 - 0.5
2-Butoxyethanol	111-76-2	0.1 - 0.5

# 4. FIRST AID MEASURES

#### Description of first aid measures

General AdviceIf symptoms persist, call a physician. Show this safety data sheet to the doctor in<br/>attendance.Eye ContactImmediately 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 allergy or asthma symptoms or breathing difficulties if inhaled. 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	

Flammable Properties	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) Flash Point (°C) Method	80 27 PMCC

# Flammability Limits In Air

Lower flammability limit:		Not available	
Upper flammability limit:		Not available	
<u>NFPA</u>	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.
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.
Handling	Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor

# 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
Titanium dioxide	TWA: 10 mg/m <sup>3</sup>	15 mg/m³ - TWA
Xylene	STEL: 150 ppm	100 ppm - TWA
	TWA: 100 ppm	435 mg/m <sup>3</sup> - TWA
Kaolin	TWA: 2 mg/m <sup>3</sup> particulate matter	15 mg/m³ - TWA
	containing no asbestos and <1%	5 mg/m³ - TWA
	crystalline silica, respirable particulate	
	matter	
Propylene glycol monomethyl ether	STEL: 100 ppm	N/E
	TWA: 50 ppm	
Ethyl benzene	TWA: 20 ppm	100 ppm - TWA
		435 mg/m³ - TWA
Silica amorphous	N/E	20 mppcf - TWA
2-Butoxyethanol	TWA: 20 ppm	50 ppm - TWA
		240 mg/m³ - TWA
		prevent or reduce skin absorption

#### 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 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 Odor **Odor Threshold** Density (lbs/gal) **Specific Gravity** pН Viscosity (cps) Solubility(ies) Water solubility **Evaporation Rate** Vapor pressure 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 12.3 - 12.4 1.47 - 1.49 No information available 70 - 80 55 - 65 20 - 30 35 - 45 < 340 248 120 No information available No information available 80 27 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 reaction	None under normal conditions of use.			
11. TOXICOLOGICAL INFORMATION				
Product Information				
Information on likely routes of e	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	Contact with eyes may cause irritation. 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	Respiratory sensitizer May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction			
Neurological Effects Mutagenic Effects Reproductive Effects Developmental Effects Target organ effects STOT - repeated exposure STOT - single exposure	No information available. No information available. Possible risk of impaired fertility. Possible risk of harm to the unborn child. No information available. No information available. Causes damage to organs through prolonged or repeated exposure if inhaled, Central nervous system, Causes damage to organs through prolonged or repeated exposure. May cause disorder and damage to the, Respiratory system.			
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)	4021 mg/kg
ATEmix (dermal)	3719 mg/kg
ATEmix (inhalation-dust/mist)	6.5 mg/L
ATEmix (inhalation-vapor)	851 mg/L

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Polyamine adduct	< 2000 mg/kg	>2000 mg/kg	= 5.0 mg/L (Rat)4 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat)4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 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
Solvent naphtha, petroleum, light aromatic 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat)4 h
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat)4 h
Silica amorphous 7631-86-9	= 7900 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat)1 h
1,2,4-Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m³ (Rat)4 h
Triethylenetetramine 112-24-3	= 2500 mg/kg (Rat)	= 550 mg/kg (Rabbit)	-
Trimethylolpropane 77-99-6	= 14100 mg/kg (Rat) = 14000 mg/kg (Rat)	-	> 0.29 mg/L (Rat)4 h
2-Butoxyethanol 111-76-2	= 1300 mg/kg(Rat)	> 2000 mg/kg (Rabbit)	> 4.9 mg/L (Rat) 3H

# Chronic Toxicity

# **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.) <u>2-Butoxyethanol</u> LC50: 1490 mg/L (Bluegill sunfish - 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 Y	es
Chronic Health Hazard Y	es
Fire hazard Y	es
Sudden release of pressure hazard N	0
Reactive Hazard N	0

## 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	10 - 15	1.0
Ethyl benzene	100-41-4	1 - 5	0.1
1,2,4-Trimethylbenzene	95-63-6	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
Xylene	1330-20-7	10 - 15	<u>(HAP)</u> 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

Chemical name	Massachusetts	New Jersey	Pennsylvania
Titanium dioxide	Х	Х	X
Xylene	Х	Х	X
Kaolin	Х	Х	X
Benzyl alcohol	Х		X
Propylene glycol monomethyl ether	Х	Х	X
Ethyl benzene	Х	Х	X
Silica amorphous	Х		X
1,2,4-Trimethylbenzene	Х	Х	X
Triethylenetetramine	Х	Х	X
2-Butoxyethanol	Х	Х	Х

#### 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:	21-Jul-2021
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