



# Benjamin Moore®

## SAFETY DATA SHEET

Revision Date: 17-Oct-2023

Revision Number: 6

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** WATERBORNE AMINE EPOXY PASTEL BASE  
**Product Code** V440-85  
**Alternate Product Code** V44085  
**Product Class** WATERBORNE EPOXY  
**Color** All  
**Recommended use** Industrial paint  
**Restrictions on use** No information available

**Manufacturer**  
Benjamin Moore & Co.  
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Montvale, NJ 07645  
Phone: 1-866-708-9180  
www.benjaminmoore.com

**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 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

#### Label elements

##### **Danger**

##### **Hazard statements**

Causes skin irritation  
Causes serious eye damage  
May cause cancer  
Causes damage to organs  
Causes damage to organs through prolonged or repeated exposure



**Appearance** liquid

**Odor** little or no odor

**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  
Do not breathe dust/fume/gas/mist/vapors/spray  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

IF exposed: Call a POISON CENTER or doctor

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing  
Immediately call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Precautionary Statements - Storage**

Store locked up

**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

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

**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-%
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Titanium dioxide	13463-67-7	25 - 30
Aliphatic polyamine	-	15 - 20
Silica, crystalline	14808-60-7	10 - 15
2-Propoxyethanol	2807-30-9	1 - 5
2-Butoxyethanol	111-76-2	1 - 5
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5

#### 4. FIRST AID MEASURES

<b>General Advice</b>	Immediately call a POISON CENTER or doctor/physician.
<b>Eye Contact</b>	Immediate medical attention is required. 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.
<b>Skin Contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash clothing before reuse.
<b>Inhalation</b>	Call a physician or poison control center immediately. Move to fresh air. If not breathing, give artificial respiration.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Immediate medical attention is required. Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice.
<b>Protection Of First-Aiders</b>	Use personal protective equipment.
<b>Most Important Symptoms/Effects</b>	None known.
<b>Notes To Physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Specific Hazards Arising From The Chemical</b>	Closed containers may rupture if exposed to fire or extreme heat.
<b>Sensitivity to mechanical impact</b>	No
<b>Sensitivity to static discharge</b>	No
<b>Flash Point Data</b>	
Flash point (°F)	Not Applicable
Flash Point (°C)	Not applicable
Method	Not applicable

**Flammability Limits In Air**

**Lower flammability limit:** Not applicable  
**Upper flammability limit:** Not applicable

**NFPA**

**Health hazards** 2  
**Flammability** 0  
**Stability** 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](http://www.nfpa.org).*

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**Other Information** Prevent further leakage or spillage if safe to do so.

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods for Cleaning Up** Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE**

**Handling** Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.

**Storage** Keep container tightly closed. Keep out of the reach of children.

**Incompatible Materials** No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL
Titanium dioxide	TWA: 0.2 mg/m <sup>3</sup> nanoscale respirable particulate matter TWA: 2.5 mg/m <sup>3</sup> finescale respirable particulate matter	15 mg/m <sup>3</sup> - TWA

Silica, crystalline	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 50 µg/m <sup>3</sup> TWA: 50 µg/m <sup>3</sup> excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (250)/( %SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/( %SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction
2-Butoxyethanol	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*
Dipropylene glycol monomethyl ether	TWA: 50 ppm	100 ppm - TWA 600 mg/m <sup>3</sup> - 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

**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**

In case of insufficient ventilation wear suitable respiratory equipment.

**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**

<b>Appearance</b>	liquid
<b>Odor</b>	little or no odor
<b>Odor Threshold</b>	No information available
<b>Density (lbs./gal)</b>	11.8 - 12.2
<b>Specific Gravity</b>	1.41 - 1.46
<b>pH</b>	No information available
<b>Viscosity (cps)</b>	No information available
<b>Solubility(ies)</b>	No information available
<b>Water solubility</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Vapor pressure @20 °C (kPa)</b>	No information available
<b>Relative vapor density</b>	No information available
<b>Wt. % Solids</b>	55 - 65
<b>Vol. % Solids</b>	35 - 45
<b>Wt. % Volatiles</b>	35 - 45
<b>Vol. % Volatiles</b>	55 - 65

VOC Regulatory Limit (g/L)	<250
Boiling Point (°F)	212
Boiling Point (°C)	100
Freezing point (°F)	32
Freezing Point (°C)	0
Flash point (°F)	Not Applicable
Flash Point (°C)	Not applicable
Method	Not applicable
Flammability (solid, gas)	Not applicable
Upper flammability limit:	Not applicable
Lower flammability 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	No information available

## 10. STABILITY AND REACTIVITY

Reactivity	Not Applicable
Chemical Stability	Stable under normal conditions.
Conditions to avoid	Prevent from freezing.
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	None under normal use.
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** No information available

#### 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** Causes eye irritation. Risk of serious damage to eyes. May cause burns. Severely irritating to eyes.

**Skin contact** Irritating to skin. Prolonged skin contact may cause skin irritation and/or dermatitis.

<b>Inhalation</b>	May cause burns. Harmful by inhalation. Causes respiratory tract irritation. Vapours may be irritating to eyes, nose, throat, and lungs. May cause additional affects as listed under "Ingestion".
<b>Ingestion</b>	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Can burn mouth, throat, and stomach.
<b>Sensitization</b>	No information available
<b>Neurological Effects</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Target organ effects</b>	Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, hematopoietic system, Lungs.
<b>STOT - single exposure</b>	May cause disorder and damage to the. Respiratory system. Digestive System.
<b>STOT - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure if inhaled. Causes damage to organs through prolonged or repeated exposure if swallowed. kidney.
<b>Other adverse effects</b>	No information available.
<b>Aspiration Hazard</b>	No information available

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	2208 mg/kg
<b>ATEmix (dermal)</b>	14003 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	8.4 mg/l
<b>ATEmix (inhalation-vapor)</b>	343.6 mg/l

**Component Information**                      Caution - This mixture contains a substance not yet fully tested

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
2-Propoxyethanol 2807-30-9	= 3089 mg/kg ( Rat )	= 870 mg/kg ( Rabbit ) = 960 µL/kg ( Rabbit )	= 1530 ppm ( Rat ) 7 h
2-Butoxyethanol 111-76-2	= 1300 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 4.9 mg/L (Rat) 3H
Dipropylene glycol monomethyl ether 34590-94-8	= 5.35 g/kg ( Rat )	= 9500 mg/kg ( Rabbit )	-

**Chronic Toxicity**

**Carcinogenicity**

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

Chemical name	IARC	NTP	OSHA
Titanium dioxide	2B - Possible Human Carcinogen		Listed
Silica, crystalline	1 - Human Carcinogen	Known	X

- 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.

• 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**

There is no data for this product.

#### **Mobility in Environmental Media**

No information available.

#### **Ozone**

Not applicable

### **Component Information**

#### **Acute Toxicity to Fish**

##### Titanium dioxide

LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

##### 2-Butoxyethanol

LC50: 1490 mg/L (Bluegill sunfish - 96 hr.)

#### **Acute Toxicity to Aquatic Invertebrates**

No information available

#### **Acute Toxicity to Aquatic Plants**

No information available



### 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.

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**ICAO / IATA** Not regulated

**IMDG / IMO** Not regulated

### 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 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
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-%</u>	<u>CERCLA/SARA 313 (de minimis concentration)</u>
2-Propoxyethanol	2807-30-9	1 - 5	1.0
2-Butoxyethanol	111-76-2	1 - 5	1.0
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5	1.0

##### 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-%</u>	<u>Hazardous Air Pollutant (HAP)</u>
2-Propoxyethanol	2807-30-9	1 - 5	Listed

2-Butoxyethanol	111-76-2	1 - 5	Listed
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5	Listed

## US State Regulations

### California Proposition 65

 **WARNING:** This product can expose you to chemicals including Titanium dioxide, which are known to the State of California to cause cancer, and Ethylene glycol which are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### U.S. State Right-to-Know Regulations

Chemical name	Massachusetts	New Jersey	Pennsylvania
Water			X
Titanium dioxide	X	X	X
Silica, crystalline	X	X	X
2-Propoxyethanol		X	X
2-Butoxyethanol	X	X	X
Dipropylene glycol monomethyl ether	X	X	X

### Legend

X - Listed

## 16. OTHER INFORMATION

### HMIS

Health hazards	2*
Flammability	0
Reactivity:	0
Personal protection	-

### 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](http://www.epa.gov/lead).

**Prepared By** Product Stewardship Department  
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Disclaimer

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**End of Safety Data Sheet**