



# SAFETY DATA SHEET

Revision Date: 20-Dec-2016

Revision Number: 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** WATERBORNE AMINE EPOXY PASTEL BASE  
**Product Code** V440-85FR  
**Alternate Product Code** A44085  
**Product Class** WATERBORNE EPOXY  
**Color** All  
**Recommended use** Industrial paint  
**Restrictions on use** No information available

**Manufactured For**  
Benjamin Moore & Co., Limited  
8775 Keele Street  
Concord ON L4K 2N1  
Phone: 1-800-361-5898  
corotechcoatings.ca

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

**Emergency Telephone Number(s)**  
CANUTEC: 613-996-6666

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous by the Hazardous Products Regulations (HPR: SOR/2015-17)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

### Label elements

Danger

**Hazard statements**

Harmful if swallowed  
Causes skin irritation  
Causes serious eye damage  
May cause cancer  
Suspected of damaging fertility or the unborn child  
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 eat, drink or smoke when using this product  
Do not breathe dust/fume/mist/vapors/spray

**Precautionary Statements - Response**

If exposed call a POISON CENTER or physician

**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 physician

**Skin**

If on skin wash with plenty of soap and water  
If skin irritation occurs get medical attention  
Take off contaminated clothing and wash before reuse

**Ingestion**

If swallowed call a POISON CENTER or physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**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.

**CAUTION:** All floor coatings may become slippery when wet. Where non-skid characteristics are desired, a small amount of clean sand may be added. Stir often during application.

### 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical Name	CAS-No	Weight % (max)
Titanium dioxide	13463-67-7	10 - 30%
Aliphatic polyamine	U84660-00-1	10 - 30%
Silica, crystalline	14808-60-7	7 - 13%
2-Propoxyethanol	2807-30-9	1 - 5%
2-Butoxyethanol	111-76-2	1 - 5%
Silica, amorphous	7631-86-9	1 - 5%
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5%
Distillates, petroleum, solvent-refined heavy paraffinic	64741-88-4	0.1 - 0.25%
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	0.1 - 0.25%

### 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 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
Flash Point Method	Not applicable
<b>Flammability Limits In Air</b>	
Lower Explosion Limit	Not applicable
Upper Explosion Limit	Not applicable

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

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.
<b>Other Information</b>	Prevent further leakage or spillage if safe to do so.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.
<b>Methods For Clean-Up</b>	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Storage</b>	Keep container tightly closed. Keep out of the reach of children.
<b>Incompatible Materials</b>	No information available

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limits**

*No exposure limits have been established for this product.*

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Titanium dioxide	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWAEV

			3 mg/m <sup>3</sup> - TWA		
Silica, crystalline	0.025 mg/m <sup>3</sup> - TWA	0.025 mg/m <sup>3</sup> - TWA	0.025 mg/m <sup>3</sup> - TWA	0.10 mg/m <sup>3</sup> - TWA	0.1 mg/m <sup>3</sup> - TWAEV
2-Propoxyethanol	N/E	N/E	N/E	25 ppm - TWA 110 mg/m <sup>3</sup> - TWA Danger of cutaneous absorption	N/E
2-Butoxyethanol	20 ppm - TWA	20 ppm - TWA 97 mg/m <sup>3</sup> - TWA	20 ppm - TWA	20 ppm - TWA	20 ppm - TWAEV 97 mg/m <sup>3</sup> - TWAEV
Dipropylene glycol monomethyl ether	100 ppm - TWA 150 ppm - STEL Skin	100 ppm - TWA 606 mg/m <sup>3</sup> - TWA 150 ppm - STEL 909 mg/m <sup>3</sup> - STEL Substance may be readily absorbed through intact skin	100 ppm - TWA 150 ppm - STEL Skin absorption can contribute to overall exposure.	100 ppm - TWA 150 ppm - STEL Danger of cutaneous absorption	100 ppm - TWAEV 606 mg/m <sup>3</sup> - TWAEV 150 ppm - STEV 909 mg/m <sup>3</sup> - STEV Skin absorption can contribute to overall exposure.

**Legend**

ACGIH - American Conference of Governmental Industrial Hygienists  
 Alberta - Alberta Occupational Exposure Limits  
 British Columbia - British Columbia Occupational Exposure Limits  
 Ontario - Ontario Occupational Exposure Limits  
 Quebec - Quebec Occupational 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**

**Appearance**

liquid

**Odor**

little or no odor

**Odor Threshold**

No information available

**Density (lbs/gal)**

11.9 - 12.0

**Specific Gravity**

1.42 - 1.44

**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**

55 - 65

**Vol. % Solids**

35 - 45

**Wt. % Volatiles**

35 - 45

**Vol. % Volatiles**

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

**Flash Point Method**

Not applicable

Flammability (solid, gas)	Not applicable
Upper Explosion Limit	Not applicable
Lower Explosion 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 (n-octanol/water)	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

#### 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 Vapor may cause irritation Causes eye irritation Risk of serious damage to eyes May cause burns
Skin contact	Irritating to skin. Prolonged skin contact may cause skin irritation and/or dermatitis. May cause burns.
Inhalation	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".
Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Can burn mouth, throat, and stomach.
Sensitization:	No information available.
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	Possible risk of impaired fertility. Possible risk of harm to the unborn child.
Developmental Effects	No information available.

**Target Organ Effects**  
**STOT - single exposure**

No information available.  
May cause disorder and damage to the. Respiratory system. Digestive System. Blood.

**STOT - repeated exposure**

Causes damage to organs through prolonged or repeated exposure if inhaled. Contains: Crystalline Silica which 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. Causes damage to organs through prolonged or repeated exposure if swallowed. Causes damage to organs through prolonged or repeated exposure in contact with skin. May cause disorder and damage to the. Blood. Kidney.

**Other adverse effects**  
**Aspiration Hazard**

No information available.  
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>	1468 mg/kg
<b>ATEmix (dermal)</b>	14003 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	8.5 mg/L
<b>ATEmix (inhalation-vapor)</b>	424 mg/L

**Component**

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

2-Propoxyethanol

LD50 Oral: 3089-3090 mg/kg (Rat)

LD50 Dermal: 960 µL/kg (Rabbit)

LC50 Inhalation (Vapor): 9060 mg/m<sup>3</sup> (Rat)

2-Butoxyethanol

LD50 Oral: 470 mg/kg (Rat)

LD50 Dermal: 220 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 450 ppm (Rat, 4 hr.)

Silica, amorphous

LD50 Oral: > 5000 mg/kg (Rat)

LD50 Dermal: 2,000 mg/kg (Rabbit)

LC50 Inhalation (Dust): > 2 mg/L

Dipropylene glycol monomethyl ether

LD50 Oral: 5400 µL/kg (Rat)

LD50 Dermal: 10 mL/kg (Rabbit)

Distillates, petroleum, solvent-refined heavy paraffinic

LD50 Oral: > mg/kg (Rat)

LD50 Dermal: > mg/kg

LC50 Inhalation (Vapor): > mg/L (Rat, 4 hr.)

Distillates (petroleum), solvent-refined light paraffinic

LD50 Oral: > 15 g/kg (Rat)

LD50 Dermal: > 5 g/kg (Rabbit)

**Chronic Toxicity**

**Carcinogenicity**

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

Chemical Name	IARC	NTP
Titanium dioxide	2B - Possible Human Carcinogen	
Silica, crystalline	1 - Human Carcinogen	Known Human 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.
- 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

No information available

### Component

#### 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, provincial, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

**14. TRANSPORT INFORMATION**

**TDG**

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.

**National Pollutant Release Inventory (NPRI)**

**NPRI Parts 1- 4**

This product contains the following Parts 1-4 NPRI chemicals:

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>	<u>NPRI Parts 1- 4</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

**NPRI Part 5**

This product contains the following NPRI Part 5 Chemicals:

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>	<u>NPRI Part 5</u>
2-Butoxyethanol	111-76-2	1 - 5%	Listed

**WHMIS Regulatory Status**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

## 16. OTHER INFORMATION

HMIS - Health: 2\* Flammability: 0 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 logging onto Health Canada @ [http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked\\_questions-questions\\_posees-eng.php](http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked_questions-questions_posees-eng.php).

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**Reason For Revision** Not available

### Disclaimer

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**END OF SAFETY DATA SHEET**