



Material Safety Data Sheet

Revision Date: 21-Nov-2013

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CORTECH WATERBORNE AMINE EPOXY - SANDSTONE
Product Code V440-52
Product Class WATER THINNED PAINT
Color All

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. COMPOSITION INFORMATION ON COMPONENTS

Hazardous Components

Chemical Name	CAS-No	Weight % (max)
Aliphatic polyamide		15 - 40%
Silica, crystalline	14808-60-7	10 - 30%
Titanium dioxide	13463-67-7	10 - 30%
2-Propoxyethanol	2807-30-9	5 - 10%
2-Butoxyethanol	111-76-2	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%

3. HAZARDS IDENTIFICATION

3. HAZARDS IDENTIFICATION

Emergency Overview

WARNING

Vapor harmful. Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis.
Irritating to eyes. Harmful if swallowed.

Appearance liquid

Odor little or no odor

Potential Health Effects

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Effects

Eyes

Causes eye irritation.

Skin

May cause skin irritation and/or dermatitis. May be absorbed through the skin in harmful amounts.

Inhalation

May cause irritation of respiratory tract. Inhalation of high vapor / aerosol concentrations may cause irritation of respiratory system. May cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects.

Ingestion

Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. 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.

Chronic Effects

Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause blood damage. Repeated contact may cause allergic reactions in very susceptible persons.

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.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions None known

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.

4. FIRST AID MEASURES

General Advice	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. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Do not induce vomiting without medical advice. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Notes To Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	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.
Specific Hazards Arising From The Chemical	Closed containers may rupture if exposed to fire or extreme heat.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	No
Flash Point Data	
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Flammability Limits In Air	
Upper Explosion Limit	Not applicable
Lower Explosion Limit	Not applicable

NFPA **Health:** 2 **Flammability:** 0 **Instability:** 0 **Special:** -

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	Avoid contact with the skin and the eyes. Ensure adequate ventilation. Use personal protective equipment.
Environmental Precautions	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.
Methods For Clean-Up	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Other Information	None known

7. HANDLING AND STORAGE

Handling	Keep in a well-ventilated place. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.. Remove and wash contaminated clothing before re-use.
Storage	Keep away from direct sunlight. Keep container tightly closed. Keep out of the reach of children. Keep in properly labeled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Aliphatic polyamide	N/E	N/E	N/E	N/E	N/E
Silica, crystalline	0.025 mg/m ³ - TWA	0.1 mg/m ³ - TWA	0.025 mg/m ³ - TWA	0.10 mg/m ³ - TWAEV designated substance regulation	0.1 mg/m ³ - TWAEV
Titanium dioxide	10 mg/m ³ - TWA	10 mg/m ³ - TWA	10 mg/m ³ - TWA 3 mg/m ³ - TWA	10 mg/m ³ - TWA	10 mg/m ³ - TWAEV
2-Propoxyethanol	N/E	N/E	N/E	110 mg/m ³ - TWAEV 25 ppm - TWAEV Absorption through skin, eyes, or mucous membranes	N/E
2-Butoxyethanol	20 ppm - TWA	20 ppm - TWA 97 mg/m ³ - TWA Substance may be readily absorbed through intact skin	20 ppm - TWA	20 ppm - TWAEV Absorption through skin, eyes, or mucous membranes	20 ppm - TWAEV 97 mg/m ³ - TWAEV

Distillates, petroleum, solvent-refined heavy paraffinic	N/E	N/E	N/E	N/E	N/E
Distillates (petroleum), solvent-refined light paraffinic	N/E	N/E	N/E	N/E	N/E

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

Tightly fitting safety goggles. Face-shield.

Skin Protection

Protective gloves and impervious clothing

Respiratory Protection

In case of insufficient ventilation wear suitable respiratory equipment.. When spraying the product or applying in confined areas, wear a properly fitted NIOSH approved respirator specific for isocyanates.

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
Density (lbs/gal)	10.5 - 10.9
Specific Gravity	1.25 - 1.31
pH	Not available
Viscosity (centistokes)	Not available
Evaporation Rate	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Wt. % Solids	45 - 55
Vol. % Solids	30 - 40
Wt. % Volatiles	45 - 55
Vol. % Volatiles	60 - 70
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
Upper Explosion Limit	Not available
Lower Explosion Limit	Not available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions To Avoid	Prevent from freezing
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous Decomposition Products	None under normal use.
Possibility Of Hazardous Reactions	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product

No information available

Component

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat) vendor data

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

LD50 Dermal: > 10000 mg/m³ (Rabbit)

LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

2-Propoxyethanol

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

LD50 Dermal: 960 µL/kg (Rabbit)

LC50 Inhalation (Vapor): 9060 mg/m³ (Rat)

2-Butoxyethanol

LD50 Oral: 470 mg/kg (Rat)

LD50 Dermal: 220 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 2.2 mg/L (Rat, 4 hr.)

Sensitization: No sensitizing effects known.

Distillates, petroleum, solvent-refined heavy paraffinic

LD50 Oral: > 5,000 mg/kg (Rat)

LD50 Dermal: > 2,000 mg/kg

LC50 Inhalation (Vapor): > 3.9 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	ACGIH	IARC	NTP	OSHA Carcinogen
Silica, crystalline	A2 - Suspected Human Carcinogen	1 - Human Carcinogen	Known Human Carcinogen	Listed
Titanium dioxide		2B - Possible Human Carcinogen		Listed
2-Butoxyethanol	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans			
Distillates, petroleum, solvent-refined heavy paraffinic		1 - Human Carcinogen		
Distillates (petroleum), solvent-refined light paraffinic		1 - 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

ACGIH - American Conference of Governmental Industrial Hygienists

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects**Product****Acute Toxicity to Fish**

No information available

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

12. ECOLOGICAL INFORMATION

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

United States TSCA

Yes - All components are listed or exempt.

Canada DSL

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:

15. REGULATORY INFORMATION

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>
2-Propoxyethanol	2807-30-9	5 - 10%
2-Butoxyethanol	111-76-2	1 - 5%

This product may contain trace amounts of (other) NPRI Parts I-4 reportable chemicals. Contact the preparer for further information.

NPRI Part 5

This product contains the following NPRI Part 5 Chemicals:

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

This product may contain trace amounts of (other) NPRI Part 5 reportable chemicals. Contact the preparer for further information.

WHMIS Regulatory Status

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2A Very toxic materials



16. OTHER INFORMATION

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/hl-vs/iyh-vsv/prod/paint-peinture-eng.php>.

Prepared By

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Revision Summary

No information available

Disclaimer

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V440-52FR
End of MSDS