SAFETY DATA SHEET

Revision Date: *20-Dec-2016* **Revision Number:** *1*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**WATERBORNE AMINE EPOXY TINT BASE**
Product Code	**V440-86FR**
Alternate Product Code	A44086
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	10 - 30%
2-Propoxyethanol	2807-30-9	1 - 5%
2-Butoxyethanol	111-76-2	1 - 5%
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5%
Silica, amorphous	7631-86-9	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%
Aluminum oxide	1344-28-1	0.1 - 0.25%

4. FIRST AID MEASURES

General Advice

Immediately call a POISON CENTER or doctor/physician.

Eye Contact

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.

Skin Contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Wash clothing before reuse.

Inhalation

Call a physician or Poison Control Center immediately. Move to fresh air. If not breathing, give artificial respiration.

Ingestion

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.

Protection Of First-Aiders

Use personal protective equipment.

Most Important Symptoms/Effects

None known.

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

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.

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 Clean-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

No exposure limits have been established for this product.

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Titanium dioxide	10 mg/m³ - TWA	10 mg/m³ - TWA	10 mg/m³ - TWA 3 mg/m³ - TWA	10 mg/m³ - TWA	10 mg/m³ - TWAEV
Silica, crystalline	0.025 mg/m³ - TWA	0.025 mg/m³ - TWA	0.025 mg/m³ - TWA	0.10 mg/m³ - TWA	0.1 mg/m³ - TWAEV
2-Propoxyethanol	N/E	N/E	N/E	25 ppm - TWA 110 mg/m³ - TWA Danger of cutaneous absorption	N/E
2-Butoxyethanol	20 ppm - TWA	20 ppm - TWA 97 mg/m³ - TWA	20 ppm - TWA	20 ppm - TWA	20 ppm - TWAEV 97 mg/m³ - TWAEV
Dipropylene glycol monomethyl ether	100 ppm - TWA 150 ppm - STEL Skin	100 ppm - TWA 606 mg/m³ - TWA 150 ppm - STEL 909 mg/m³ - 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/m³ - TWAEV 150 ppm - STEV 909 mg/m³ - STEV Skin absorption can contribute to overall exposure.
Aluminum oxide	1 mg/m³ - TWA	10 mg/m³ - TWA	1.0 mg/m³ - TWA	1 mg/m³ - TWA	10 mg/m³ - TWAEV

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)	11.45 - 11.55
Specific Gravity	1.37 - 1.39
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	50 - 60
Vol. % Solids	35 - 45
Wt. % Volatiles	40 - 50
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	No information available.
STOT - single exposure	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	No information available.
Aspiration Hazard	No information available.

Numerical measures of toxicity

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

ATEmix (oral)	1347 mg/kg
ATEmix (dermal)	13175 mg/kg
ATEmix (inhalation-dust/mist)	8.2 mg/L
ATEmix (inhalation-vapor)	362 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^3 (Rat)
2-Butoxyethanol
LD50 Oral: 470 mg/kg (Rat)
LD50 Dermal: 220 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 450 ppm (Rat, 4 hr.)
Dipropylene glycol monomethyl ether
LD50 Oral: 5400 µL/kg (Rat)
LD50 Dermal: 10 mL/kg (Rabbit)
Silica, amorphous
LD50 Oral: > 5000 mg/kg (Rat)
LD50 Dermal: 2,000 mg/kg (Rabbit)
LC50 Inhalation (Dust): > 2 mg/L
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
Aluminum oxide		Reasonably Anticipated 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:

Chemical Name	CAS-No	Weight % (max)	NPRI Parts 1- 4
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
Aluminum oxide	1344-28-1	0.1 - 0.25%	Listed

NPRI Part 5
This product contains the following NPRI Part 5 Chemicals:

Chemical Name	CAS-No	Weight % (max)	NPRI Part 5
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.

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Disclaimer

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END OF SAFETY DATA SHEET