



Revision Date: 20-Sep-2018 Revision Number: 6

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name WATERBORNE AMINE EPOXY BATTLESHIP GRAY

Product Code V440-75
Alternate Product Code V44075

Product Class WATERBORNE EPOXY

Color Gray

Recommended use Industrial paint

Restrictions on use No information available

Manufacturer Emergency Telephone

Benjamin Moore & Co.

101 Paragon Drive

CHEMTREC (US): 800-424-9300

CHEMTREC (outside US): (703)-527-3887

101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/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 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

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/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

Hazards not otherwise classified (HNOC)

Not applicable

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-%
Aliphatic polyamine	-	25
Silica, crystalline	14808-60-7	15
Titanium dioxide	13463-67-7	10
2-Propoxyethanol	2807-30-9	10
2-Butoxyethanol	111-76-2	5
Carbon black	1333-86-4	0.5
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	0.5

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

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15 minutes. Keep eye wide open while rinsing.

Skin Contact 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.

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.

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.

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Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge No

Flash Point Data

Flash Point (°F)

Flash Point (°C)

Method

Not applicable

Not applicable

Not applicable

Flammability Limits In Air

Lower flammability limit:Not applicableUpper flammability limit:Not applicable

NFPA Health: 1 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 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

Silica, crystalline	0.025 mg/m ³ - TWA	-
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
2-Butoxyethanol	20 ppm - TWA	50 ppm - TWA 240 mg/m³ - TWA prevent or reduce skin absorption
Carbon black	3 mg/m³ - TWA	3.5 mg/m ³ - TWA

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

Appearance liquid

Odor little or no odor

Odor Threshold No information available

 Density (lbs/gal)
 10.1 - 10.2

 Specific Gravity
 1.21 - 1.23

pH No information available Viscosity (cps) No information available

Solubility(ies)

Water solubility

Evaporation Rate

No information available

Vapor pressure @20 °C (kPa)No information availableVapor densityNo information available

 Wt. % Solids
 45 - 55

 Vol. % Solids
 30 - 40

 Wt. % Volatiles
 45 - 55

 Vol. % Volatiles
 60 - 70

 VOC Regulatory Limit (g/L)
 <250</td>

 Politics Point (°F)
 212

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 applicableFlash Point (°C)Not applicableMethodNot applicableFlammability (solid, gas)Not applicable

Upper flammability limit:

Lower flammability limit:

Not applicable

Not applicable

Autoignition Temperature (°F)No information availableAutoignition Temperature (°C)No information available

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Decomposition Temperature (°F)No information availableDecomposition Temperature (°C)No information availablePartition coefficientNo information available

10. STABILITY AND REACTIVITY

Reactivity Not Applicable

Chemical Stability Stable under normal conditions.

Conditions to avoid Prevent from freezing.

Incompatible MaterialsNo 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.

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.

SensitizationNo information availableNeurological EffectsNo information availableMutagenic EffectsNo information available

Reproductive Effects Possible risk of impaired fertility. Possible risk of harm to the unborn child.

Developmental EffectsNo information available.
Target organ effects
No information available.

STOT - single exposure

May cause disorder and damage to the. Respiratory system. Digestive System.

Causes damage to organs through prolonged or repeated exposure if inhaled.

Causes damage to organs through prolonged or repeated exposure if swallowed.

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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

ATEmix (oral) 1219 mg/kg
ATEmix (dermal) 12893 mg/kg
ATEmix (inhalation-dust/mist) 6.6 mg/L
ATEmix (inhalation-vapor) 384 mg/L

Component Information

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

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): 450 ppm (Rat, 4 hr.)

Carbon black

LD50 Oral: > 15400 mg/kg (Rat) LD50 Dermal: > 3000 mg/kg (Rabbit)

Distillates (petroleum), solvent-refined light paraffinic

LD50 Oral: > 15 g/kg (Rat) LD50 Dermal: > 5 g/kg (Rabbit)

Carcinogenicity

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

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

No information available.

Mobility in Environmental Media

No information available.

Ozone

No information available

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 StatesYes - All components are listed or exempt.
Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 hazardous categorization

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:

Chemical name	CAS No.	Weight-%	CERCLA/SARA 313 (de minimis concentration)
2-Propoxyethanol	2807-30-9	10	1.0
2-Butoxyethanol	111-76-2	5	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

None

US State Regulations

California Proposition 65

WARNING: Cancer and Reproductive Harm- www.P65warnings.ca.gov

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Silica, crystalline	X	X	X
Titanium dioxide	X	X	X
2-Propoxyethanol		X	X
2-Butoxyethanol	X	X	X
Carbon black	X	X	X

Legend

X - Listed

16. OTHER INFORMATION

HMIS - Health: 1* 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 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

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Disclaimer

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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