



LENMAR[®]

SAFETY DATA SHEET

Revision Date: 21-Aug-2018

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name EVOLUTION WATERBORNE FLOOR FINISH - HARDENER
Product Code 1YB-200B
Alternate Product Code TR1220
Product Class CATALYST
Color Clear
Recommended use CATALYST
Restrictions on use No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 1-866-708-9180
lenmar-coatings.com

Emergency Telephone
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

Classification

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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 4

Label elements

Warning

Hazard statements

Harmful if inhaled
May cause an allergic skin reaction
May cause respiratory irritation
Combustible liquid



Appearance liquid

Odor little or no odor

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

Skin

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

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
1,6-Diisocyanatohexane homopolymer polyethylene glycol mono-methyl ether-blocked	160994-68-3	65
Dipropylene glycol dimethyl ether	111109-77-4	40

4. FIRST AID MEASURES

General Advice	Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor, or going for treatment.
Eye Contact	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. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician. Wash clothing before reuse. Destroy contaminated articles such as shoes.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately.
Ingestion	Rinse mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Protection Of First-Aiders	Use personal protective equipment.
Most Important Symptoms/Effects	Eye irritation. Skin irritation. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Notes To Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Foam, dry powder or water. 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	Combustible material. Closed containers may rupture if exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	Yes
Flash Point Data	
Flash Point (°F)	149
Flash Point (°C)	65

Method Setaflash closed cup

Flammability Limits In Air

Lower flammability limit: Not available
Upper flammability limit: Not available

NFPA **Health:** 2 **Flammability:** 2 **Instability:** 1 **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 Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and inhalation of vapors. Ensure adequate ventilation.

Other Information 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.

Environmental precautions See Section 12 for additional Ecological Information.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear personal protective equipment. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible Materials Incompatible with strong acids and bases and strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

No exposure limits have been established for this product.

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. Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal Protective Equipment

Eye/Face Protection

Tightly fitting safety goggles If splashes are likely to occur, wear: Face-shield

Skin Protection

Long sleeved clothing. Protective gloves.

Respiratory Protection

In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.

Hygiene Measures

Avoid contact with skin, eyes and clothing. Do not breathe vapors/dust. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid
Odor	little or no odor
Odor Threshold	No information available
Density (lbs/gal)	8.6 - 8.9
Specific Gravity	1.04 - 1.06
pH	No information available
Viscosity (cps)	No information available
Solubility(ies)	No information available
Water solubility	No information available
Evaporation Rate	No information available
Vapor pressure @20 °C (kPa)	No information available
Vapor density	No information available
Wt. % Solids	60 - 70
Vol. % Solids	55 - 65
Wt. % Volatiles	30 - 40
Vol. % Volatiles	35 - 45
VOC Regulatory Limit (g/L)	< 275
Boiling Point (°F)	347
Boiling Point (°C)	175
Freezing Point (°F)	No information available
Freezing Point (°C)	No information available
Flash Point (°F)	149
Flash Point (°C)	65
Method	Setaflash closed cup

Flammability (solid, gas)	Not applicable
Upper flammability limit:	No information available
Lower flammability limit:	No information available
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. Hazardous polymerisation does not occur.
Conditions to avoid	Keep away from open flames, hot surfaces, static electricity and sources of ignition.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors.
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 Repeated or prolonged exposure to organic solvents may lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

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 Contact with eyes may cause irritation. Vapor may cause irritation.
Skin contact May cause skin irritation and/or dermatitis. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated exposure may cause skin dryness or cracking.
Ingestion Ingestion may cause irritation to mucous membranes. Small amounts of this

Inhalation	product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Harmful by inhalation. High vapor / aerosol concentrations are irritating to the eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects.
Sensitization	May cause sensitization by skin contact.
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target organ effects	No information available.
STOT - repeated exposure	No information available.
STOT - single exposure	May cause disorder and damage to the. Respiratory system.
Other adverse effects	No information available.
Aspiration Hazard	May be harmful if swallowed and enters airways. 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.

Numerical measures of toxicity

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

ATEmix (inhalation-dust/mist) 2.3 mg/L

Component Information

Acute Toxicity

1,6-Diisocyanatohexane homopolymer polyethylene glycol mono-methyl ether-blocked

Sensitization May cause sensitization by skin contact

Dipropylene glycol dimethyl ether

LD50 Oral: 3300 mg/kg (Rat)

LD50 Dermal: > 2000 mg/kg (Rabbit)

Sensitization May cause sensitization by skin contact

Carcinogenicity

There are no known carcinogenic chemicals in this product above reportable levels.

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

No information available

Acute Toxicity to Aquatic Invertebrates

Dipropylene glycol dimethyl ether

EC50: > 1000 mg/L (Daphnia magna - 24 hr.)

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.

Empty Container Warning

Emptied containers may retain product residue. Follow label warnings even after container is emptied. Residual vapors may explode on ignition.

14. TRANSPORT INFORMATION

DOT

Not regulated

ICAO / IATA

Contact the preparer for further information.

IMDG / IMO

Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

TSCA: United States Yes - All components are listed or exempt.
DSL: Canada No - Not all of the components are listed.
One or more component is listed on NDSL.

Federal Regulations

SARA 311/312 hazardous categorization

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
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:

None

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

There are no state right-to-know chemicals in this product above reportable levels.

Legend

X - Listed

16. OTHER INFORMATION

HMIS - **Health:** 2 **Flammability:** 2 **Reactivity:** 1 **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.

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Disclaimer

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END OF SAFETY DATA SHEET