

Safety Data Sheet

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Code: MDR-574, 575, 576

Product Name: E-Zorb

Manufacturer's Name: MARINE DEVELOPMENT & RESEARCH	Emergency Telephone Number: 352-323-3500
Address (Number, Street, City, State, ZIP) 515 EAST 41 ST ST	Telephone Number for Information: 973-754-7000
PATERSON, NJ 07504	Date Prepared: 3/4/15
	Signature of Preparer (optional):

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification:

Health Hazards:

- Skin Corrosion/ Irritation Category 2
- Serious Eye Damage/ Eye Irritation Category 1
- Carcinogenicity Category 2
- Specific Target Organ Toxicity- Repeated Exposure Category 2

Unknown Toxicity

- Acute toxicity, oral 0.0%
- Acute toxicity, dermal 0.0%
- Acute toxicity, inhalation, vapor 88.9%
- Acute toxicity, inhalation, dust or mist 89.0%

Label Elements:

Hazard Symbol:



Signal word

Danger

Hazard statement:

Causes skin irritation
Causes serious eye damage
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure

Precautionary Statement:

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/ eye protection/ face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust or mist.

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SECTION 2: HAZARDS IDENTIFICATION (continued)

Precautionary Statement Continued:

Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: get medical advice/attention. Immediately call a POISON CENTER/ doctor. Take off contaminated clothing and wash before reuse.

Storage: Store locked up

Disposal: Dispose of contents/ container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classifications: None identified.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Component	CAS Registry #	% w/w	ACGIH TLV	OSHA PEL
Diethanolamine	111-42-2	10-20%	N/A	N/A
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SECTION 4: FIRST-AID MEASURES

General Information: Get medical advice/ attention if you feel unwell.

If Inhaled: Remove exposed person to fresh air if adverse effects are observed.

If on Skin: Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention.

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.

If Swallowed: Rinse mouth. Call a POISON CENTER or doctor/ physician if you feel unwell.

SECTION 5: FIRE FIGHTING MEASURES

General Fire Hazards: No unusual fire or explosive hazards noted.

Suitable (and unsuitable) Extinguishing Media:

Suitable Extinguishing Media: CO₂, dry chemical, foam, water spray, water fog.

Unsuitable Extinguishing Media: Not determined.

Specific Hazards arising From the Chemical: See section 10 for additional information. Container may rupture on heating. Water or foam may cause frothing. Avoid solid streams of water. Use water spray.

Special Protective Equipment & Precautions for Firefighters:

Special Fire Fighting Procedures: No data available.

Special Protective Equipment for Firefighters: Wear full protective fire gear including self-containing breathing apparatus operated in the positive pressure mode with full face piece, coat, pants, gloves and boots.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment. Ventilate area if spilled in confined space or other poorly ventilated areas. Personal Protective Equipment must be worn

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Methods and Material for Containment & Cleaning up: Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Wash area with soap and water. Spilled liquid and dried film are slippery. Use care to avoid falls. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Open container in a well ventilated area. Avoid breathing vapors. Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not breathe dust/fumes/gas/mist/vapors/spray. Do not get in eyes. Avoid contact with skin. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid prolonged or repeated contact with skin. Avoid breathing mist or vapors. When using do not eat, drink or smoke. Stir well before use. Keep containers closed when not in use.

Maximum Handling & Storage Temperature: Not determined

Conditions for Safe Storage: Store away from incompatible materials. See section 10 for incompatible materials. Do not store in open, unlabeled or mislabeled containers. Do not freeze.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters:

Occupational Exposure Limits

Chemical Name	Type	Exposure Limit Values	Source
Diethanolamine – Inhalable fraction and vapor	TWA	1 mg/m ³	US ACGIH Threshold Limit Values (02 2012)
Diethanolamine	REL	3 ppm 15 mg/m ³	US NIOSH: Pocket Guide to Chemical Hazards (2010)

Appropriate Engineering Controls: Mechanical ventilation or local exhaust ventilation is required. Use material in well ventilated area only. Adequate ventilation should be provided so that exposure limits are not exceeded. Mechanical ventilation or local exhaust ventilated may be required.

Individual Protective Measures:

General Information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION (continued)

Eye/Face Protection: Wear tight-fitting goggles or face shield.

Skin Protections:

Hand Protection: Use good industrial hygiene practice to avoid skin contact. If contact with the material may occur wear chemically protective gloves. Suitable gloves can be recommended by the glove supplier. Chemical resistant gloves

Other: Chemical resistant boots. Wear apron or protective clothing in case of contact. Do not wear rings, watches similar apparel that could entrap the material. Gloves, coveralls, apron, boots as necessary to minimize contact.

Respiratory Protection: A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene Measures: Observe good industrial hygiene practices. Do not get in eyes. Avoid contact with skin. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark Amber Liquid	Physical State: Liquid
Boiling Point: > 392° F (200°C)	Solubility in Water: Slightly soluble
Evaporation Rate: < 1 n-Butyl acetate = 1	Density: 0.95 68°F (20°C)
Freezing Point: No data available	Flammability: No data available
Flash Point: >219°F(104°C) (Closed Cup)	Vapor Density: No data available
Molecular Weight: No data available	Vapor Pressure: <0.02 torr (20°C 68°F)
Odor: Characteristic	Viscosity: No data available
pH: No data available	% Volatile: No data available
	Partition Coefficient: No data available

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Material is stable under normal conditions

Reactivity: No data available

Incompatibility: Strong acids. Contact with acids. Material is a strong base. Strong bases will react with some metals to form salts. Avoid contact with nitrites, nitrates, or nitrosating agents due to the potential for nitrosamine formation. Strong oxidizing agents.

Hazardous Decomposition Products: Ammonia. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Nitrogen Oxides

Conditions to Avoid: Do not expose to excessive heat, ignitions sources, or oxidizing materials

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SECTION 11: TOXICOLOGICAL INFORMATION

Eye: Causes serious eye damage

Skin: Causes skin irritation

Ingestion: May be harmful if swallowed

Inhalation: No data available

Information on Toxicological Effects:

Acute Toxicity

- **Oral:** Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain. ATEmix > 2000 mg/kg
- **Dermal:** Not classified for acute toxicity based on available data
- **Inhalation:** Not classified for acute toxicity based on available data
- **Skin Corrosion/ Irritation:** Prolonged or repeated contact may cause irritation.
- **Serious Eye Damage/ Eye Irritation:** Causes serious eye damage

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information: Environmental fate and effects are not established.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal of Substance: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

Container Disposal: Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product

SECTION 14: TRANSPORT INFORMATION (Not meant to be all inclusive)

D.O.T. Shipping Name: Environmentally hazardous substance, Liquid, N.O.S.

D.O.T. Hazard Class: 9

U.N. / N.A. Number: UN 3082

Packing Group: III

D.O.T. Label: 9

SECTION 15: REGULATORY INFORMATION (Not meant to be all inclusive- selected regulation represented)

US Federal Regulations:

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories

Acute Chronic
(Immediate) (Delayed)

SARA 302 Extremely Hazardous Substance

SARA 304 Emergency Release Notification

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SECTION 15: REGULATORY INFORMATION cont. (Not meant to be all inclusive- selected regulation represented)

SARA 311/312 Hazardous Chemical

SARA 313 (TRI Reporting)

This product may contain chemicals regulated under the Superfund Amendments and Reauthorization Act (SARA).

US State Regulations:

US California Proposition 65: This product may contain chemicals known to the state of California to cause cancer and/or birth defects.

SECTION 16: OTHER INFORMATION

HMIS Hazard ID

Health: *3

Flammability: 1

Physical Hazards: 0

Hazard ratings: 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe; *Chronic health

NFPA Hazard ID

Flammability: 1

Health: 3

Reactivity: 0

Special Hazard: NA

Hazard ratings: 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe

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