

Safety Data Sheet



Trade Name: US-954A

SECTION 1. IDENTIFICATION

Date of issue: 2.13.2018
Product Name: US-954A
Chemical Name:
Other means of identification: Polyurethane Foam Stabilizer and Glass Transition Modifier

Recommended use of the chemical and restrictions on use:

Recommended use: Polyurethane foam additive
Recommended restrictions: Uses other than as recommended above

Company Name: Urethane Sciences, LLC
Company Address: 121 Cross Keys Road, Building E
Berlin, NJ 08009
Company Telephone: Phone: (856) 282-4506
Company Contact Email: info@usci.net

Emergency Phone: ChemTrec (24 Hours): 1-800-424-9300
(Outside of USA 202-366-4488)

SECTION 2: HAZARD(S) IDENTIFICATION

Physical hazards

None Identified

Health hazards

Acute Toxicity, Oral (Category 4)
Skin Corrosion/Irritation (Category 2)
Serious Eye Damage/Irritation (Category 1)
Specific Organ Toxicity – Repeated Exposure (Category 2)
Hazardous to the aquatic environment – Acute (Category 2)
Hazardous to the aquatic environment – Chronic (Category 3)

Environmental hazards

Environmentally hazardous substance

GHS Signal word: DANGER

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GHS Hazard statement(s): Causes serious eye damage
Cause skin irritation
Harmful if swallowed
May cause damage to organs through prolonged or repeated exposure
Harmful to aquatic life with lasting effects
Toxic to aquatic life

GHS Hazard symbol(s):



Precautionary statement(s):

Prevention:

Wear protective gloves and eye/face protection
Avoid release to the environment
Do not breathe dust/gas/mist vapors
Do not eat, drink or smoke when using this product
Wash hands with plenty of water and soap thoroughly after handling

Response:

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Wash with plenty of soap and water
IF SWALLOWED: Rinse mouth
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Disposal:

Dispose of contents/container to hazardous or special waste collection point

Hazard(s) not otherwise Classified (HNOC): None known

SECTION 3: Composition/Information on ingredients

Mixture: Chemical intermediate for urethane polymer production

CHEMICAL NAME	CAS #	Concentration (weight %)
Diethanolamine	111-42-2	< 10%
Diethylene Glycol Monoethyl Ether	111-90-0	< 5 %

Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

The manufacturer has claimed one or more ingredients as trade secret under the OSHA Hazard Communication Standard.

SECTION 4: FIRST AID MEASURES

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Allow victim to breathe fresh air. Allow the victim to rest. Consult a physician if effects occur.

Skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse for a minimum of 20 minutes. Safety shower should be available.

Eye contact: Rinse immediately with plenty of water for a minimum of 20 minutes. Remove contact lenses after 1-2 minutes and continue to rinse. Obtain medical attention if effects occur.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms/effects, acute and delayed: Not expected to present a significant hazard under anticipated conditions of normal use.

Indication of immediate medical attention and special treatment needed: Treatment should control symptoms and is dependent upon the condition of the patient.

SECTION 5: FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Dry chemical. Dry sand. Limestone powder.

Unsuitable extinguishing media: Do not use heavy water stream as fire may spread.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products): Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes

Special protective equipment and precautions for fire-fighters: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuate unnecessary personnel. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Notify authorities if liquid enters sewers or public waters. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. See Section 13, Disposal Considerations, for additional information.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage, including any incompatibles: Keep only in the original container in a cool, well ventilated place Do not store near acids. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Keep containers tightly closed in a dry, cool and well-ventilated place.

Control parameters

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Engineering controls: General ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Chemical goggles.

Skin protection

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Hand protection: Wear protective gloves. Butyl-rubber. Nitrile rubber. Neoprene gloves. Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period

The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Long sleeve shirts and trousers without cuffs.

Other protection: Do not eat, drink or smoke during use. Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers.

Respiratory protection: Not required for properly ventilated areas.

Exposure Limits:

Diethanolamine	OSHA PEL	TWA Value	3 ppm	15 mg/m ³
	ACGIH	TWA Value		1 mg/m ³
		Inhalable fraction and vapor		
		Substance can be absorbed through the skin		
Diethylene Glycol Monoethyl Ether	OSHA PEL	TWA	25 ppm	140 mg/m ³

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state:	Liquid
Form:	Clear liquid
Color:	Colorless
Odor:	Faint oil and ammonia like odor
Odor threshold:	
pH:	Not available
Melting point:	Not available
Freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Not available
Evaporation rate:	Not available
Flammability (solid, gas):	Not available

Upper/lower flammability or explosive limits

Flammability limit – lower (%):	Not available
Flammability limit – upper (%):	Not available
Explosive limit – lower (%):	Not available
Explosive limit – upper (%):	Not available

Vapor pressure:

Vapor density: No data available

Relative density: 1.05

Solubility (ies): No data available

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity (dynamic): 200 cP

% Volatile: Not volatile near room temperature

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not available.

Chemical stability: Stable under normal ambient conditions and anticipated conditions of use.

Possibility of hazardous reactions: Reactive metals (e.g. sodium, calcium, zinc etc.).
 Materials reactive with hydroxyl compounds.
 CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.
 Nitrous acid and other nitrosating agents.
 Organic acids (i.e. acetic acid, citric acid etc.).
 Mineral acids.
 Sodium hypochlorite.
 Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
 Oxidizing agents.

Conditions to avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible materials: Strong acids. Strong bases. Oxidizing materials. Isocyanates (unintended contact)

Hazardous decomposition products: Nitric Acid. Ammonia. Nitrogen oxides (NOx).
 Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO2). Aldehydes. Flammable hydrocarbon fragments. Nitrosamine.

SECTION 11: TOXICOLOGICAL INFORMATION
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Toxicological information appears in this section when such data is available.

Acute toxicity:	Acute Health Hazard
Ingestion:	LD50: 710 mg/kg Species: Rat (diethanol amine) 7500 mg/kg Species: Rat (diethylene glycol monoethyl ether)
Inhalation:	No data available
Dermal:	LD50: 12,200 mg/kg Species: Rabbit (diethanol amine) 11,176 mg/kg Species: Rabbit (diethylene glycol monoethyl ether)
Skin corrosion/irritation :	Moderate skin irritation
Serious eye damage/irritation :	Severe eye irritation.
Respiratory or skin sensitization :	Not classified

Chronic Health Hazard: Rats given high doses of diethanolamine (DEOA) for 90 days developed anemia. Paralysis and nervous system effects have been seen in animal studies. In a postnatal screening test {Chernoff-kavlock test}, DEOA at a dose of 450 mg/kg/day given orally by gavage to pregnant mice affected the survival and weight gain of their offspring. Testes injury and adverse sperm effects were found in rats given multiple oral doses. An NTP dermal study of diethanolamine showed clear evidence of carcinogenicity in mice (liver and kidney tumors) but no evidence of carcinogenicity in rats.

Germ cell mutagenicity :	Not classified
Carcinogenicity :	
Diethanolamine:	IARC: 2B • Possibly carcinogenic to humans. ACGIH: Group A3 · Confirmed animal carcinogen with unknown relevance to humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure
Reproductive toxicity :	Not classified
Specific target organ toxicity: (single exposure)	Not classified

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Specific target organ toxicity:
(repeated exposure) Not classified

Aspiration hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

Acute toxicity to fish

(LC50 (96h) fish >100 mg/L (Fathead minnow) (diethanol amine)

Acute toxicity to Daphnia

(LC50 (96h) fish >100 mg/L (diethanol amine)

Persistence and degradability

Biodegradability: Not established

Bioaccumulative potential

Bioaccumulation: Not established

Mobility in soil

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

UN/ID No.:	UN3082
Proper shipping name:	Environmentally hazardous substances, liquid, n.o.s., (contains Diethanolamine)
Class or Division:	9
Packing group :	III
Label(s) :	9
RQ Substance:	Yes
Marine Pollutant:	No

Maritime transport IMDG

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UN/ID No.: UN3082
Proper shipping name: Environmentally hazardous substances, liquid, n.o.s., (contains Diethanolamine)
Class or Division: 9
Packing group : III
Label(s) : 9
RQ Substance: Yes
Marine Pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

UN/ID No.: UN3082
Proper shipping name: Environmentally hazardous substances, liquid, n.o.s., (contains Diethanolamine)
Class or Division: 9
Packing group : III
Label(s) : 9
RQ Substance: Yes
Marine Pollutant: No

Air transport ICAO-TI and IATA-DGR

UN/ID No.: UN3082
Proper shipping name: Environmentally hazardous substances, liquid, n.o.s., (contains Diethanolamine)
Class or Division: 9
Packing group : III
Label(s) : 9
RQ Substance: Yes
Marine Pollutant: No

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

NOTE: This product contains a USDOT Hazardous Substance and will meet the Reportable Quantity definition when shipped to, from, or within the United States, in the amount specified in 49CFR 172.101 Appendix A.

SECTION 15: REGULATORY INFORMATION

Federal Regulations

Toxic Substances Control Act (TSCA) – All components are on the U.S. EPA TSCA Inventory List.

CERCLA Hazardous Substance List, 40 CFR 302.4:

Diethanolamine – CAS # 111-42-2

Diethylene Glycol Monoethyl Ether – CAS # 111-90-0

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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Hazard categories:

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard – No

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed

Section 311 hazardous chemical: Diethanolamine – CAS # 111-42-2
Diethylene Glycol Monoethyl Ether – CAS # 111-90-0

SARA Section 313 (Specific toxic chemical listings): Diethanolamine – CAS # 111-42-2
Diethylene Glycol Monoethyl Ether – CAS # 111-90-0

STATE REGULATIONS:

New Jersey Worker and Community Right-to-Know Act

Diethanolamine – CAS # 111-42-2
Diethylene Glycol Monoethyl Ether – CAS # 111-90-0

Pennsylvania Worker and Community Right-to-Know Act

Diethanolamine – CAS # 111-42-2
Diethylene Glycol Monoethyl Ether – CAS # 111-90-0

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986):

WARNING! This product contains a chemical known in the State of California to cause cancer.
Diethanolamine – CAS # 111-42-2

SECTION 16: OTHER INFORMATION

HMIS RATING

Health: 2
Flammability: 1
Physical Hazard: 0

Revision Date: 6/16/2020

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any legal liability for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.