SAFETY DATA SHEET



Date Prepared: 06/14/2016

MSDS No: DEHA85 **Date-Revised**: 06/14/2016

Revision No: 1

DEHA 85%

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DEHA 85%

PRODUCT CODE: DEHA85, DEHA85396

MANUFACTURER

Distributed by Tarr, LLC P.O. Box 12570 Portland, OR 97212

Product Stewardship: 503-288-5294

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424 - 9300 **CANUTEC** (Canadian Transportation): (613) 996 - 6666

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Dermal), Category 4 Acute Toxicity (Inhalation), Category 4 Target Organ Toxicity (Single exposure), Category 3

Physical:

Flammable Liquids, Category 3

GHS LABEL







Exclamation mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H302: Harmful if swallowed. H332: Harmful if inhaled.

H335: May cause respiratory irritation. H226: Flammable liquid and vapour.

PRECAUTIONARY STATEMENT(S)

General:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P271: Use only outdoors or in a well-ventilated area.

P240: Ground and bond container and receiving equipment.

P242: Use non-sparking tools.

P281: Use personal protective equipment as required.

P243: Take action to prevent static discharges.

Response:

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/...if you feel unwell.

Storage:

P233: Keep container tightly closed.

P102: Keep out of reach of children.

Disposal:

P273: Avoid release to the environment.

4160WT6Y: Dispose of contents/container to an approved waste disposal plant.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: WARNING! Flammable liquid and vapor. Harmful or fatal if swallowed. Vapor harmful. May be irritating to eyes and respiratory tract. May cause central nervous system depression.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
ethanamine, n-ethyl-n-hydroxy-	85	3710-84-7
Water	15	7732-18-5

4. FIRST AID MEASURES

EYES: Immediately flush contaminated eye(s) with lukewarm, gently running water for at least 20 minutes while holding eyelid(s) open. Tale care not to rinse contaminated water into a non-affected eye. Neutral saline solution may be used for flushing if available. DO NOT INTERRUPT FLUSHING. Have emergency vehicle wait if necessary. If irritation persist, repeat flushing. Get medical attention immediately.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Call a physician if irritation develops. Wash clothing before reuse.

INGESTION: If victim is conscious and alert, give 2-3 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

INHALATION: Remove from exposure to fresh air. If not breathing or if breathing is difficult, oxygen should be administered by qualified personnel. Consult doctor.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Vapors tend to remain close to the ground and collect in out of the way places. Use non-sparking blowers or ventilation facilities to remove potential explosive or toxic accumulations.

EXTINGUISHING MEDIA: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam.

FIRE FIGHTING EQUIPMENT: The use of SCBA is recommended for firefighters. Water spray may be used to cool containers exposed to heat or flame.

SENSITIVE TO STATIC DISCHARGE: Yes

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Small spills: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

GENERAL PROCEDURES: Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation. Spills should be contained, solidified, and placed in suitable containers for disposal.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep containers tightly closed when not in use. Store and use only in well ventilated areas. Do not store or use near heat, sparks or open flame. Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Empty containers may contain toxic or explosive concentrations of product vapors.

STORAGE: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical goggles/face sheild.

SKIN: Wear chemical resistant gloves such as: Nitrile, Butyl rubber or consult your safety equipment supplier.

RESPIRATORY: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

PROTECTIVE CLOTHING: Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

WORK HYGIENIC PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

COMMENTS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Ammonia-like odor.

COLOR: Light yellow.

pH: Alkaline

FLASHPOINT AND METHOD: (115.7°F) CC AUTOIGNITION TEMPERATURE: (509°F) VAPOR PRESSURE: 0.004 hPa at 25°C (77°F)

VAPOR DENSITY: 3.1 (Air=1)

BOILING POINT: (257°F) to (266°F)

FREEZING POINT: (-13°F)

SOLUBILITY IN WATER: Soluble

DENSITY: 7.5 at (60°F)

SPECIFIC GRAVITY: 0.92

MOLECULAR WEIGHT: 89.1

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Avoid heat, sparks, flame and contact with strong oxidizing agents.

POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.

INCOMPATIBLE MATERIALS: Strong oxidizers (perchlorates, nitrates, etc.), strong acids, sodium peroxide, hydrogen peroxide and peroxides, chromium trioxide, strong alkalies, strong caustics, most common metals, reactive metals (sodium, calcium zinc, etc.), carbonates, strong bases, amines, phosphorous trichloride, phosphorous pentachloride. Incompatible with most metals (except aluminum, stainless steel), cyanides, sulfides.

COMMENTS:

Heating or fire can release toxic gas. Nitrogen oxides (NOx). Carbon monoxide. Carbon oxides. Ammonia.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

DERMAL LD₅₀: 1300 mg/kg (rabbit)

ORAL LD₅₀: 2190 mg/kg (rat)

INHALATION LC₅₀: 11.4 mg/l (rat), 4 hour(s)

SKIN CORROSION/IRRITATION: Causes skin irritation.

SERIOUS EYE DAMAGE/IRRITATION: Causes serious eye irritation.

RESPIRATORY OR SKIN SENSITISATION: Does not induce skin sensitization.

GERM CELL MUTAGENICITY: Not mutagenic.

CARCINOGENICITY

NOTES: None Expected.

STOT-REPEATED EXPOSURE:

NOAEC: 546 mg/m3, Inhalation, Rat

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Biodegradation: 75% (20 d), Readily biodegradable, Sewage, domestic, aerobic, non-adapted, Closed Bottle test.

BIOACCUMULATION/ACCUMULATION: Koc: 43.47 @ 20° c

AQUATIC TOXICITY (ACUTE): Chemical Name: Diethylamine 109-89-7

Freshwater Algae:20:95 h Pseudokirchneiella subcapitata mg/L EC50

Freshwater Fish: 25:96 h Oncorhynchus mykiss mg/L

LC50 100-180:96 h Poeclia reticulata mg/L LC50 semi-static 855:96 h Pimphales promaelas mg/L LC 50-flow

through
Water Flea:

100:48 h Daphnia magna mg/L EC50 41: 24 h Daphnia magna mg/L EC50

96-HOUR LC₅₀: > 134 mg/l (based on product concentration >98%)

48-HOUR EC₅₀: 8.2 mg/l (Daphnia)

96-HOUR EC₅₀: 26 mg/l (72 hr.) (green algae)

CHEMICAL FATE INFORMATION: Not readily biodegradable. 11% after 28 days.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of waste material according to local, State, Federal, and Provincial Environmental Regulations. No components are identified as a RCRA hazardous waste. Waste should be tested using appropriate TCLP analysis to determine applicable waste numbers.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquids, N.O.S.

TECHNICAL NAME: (Diethylhydroxylamine) **PRIMARY HAZARD CLASS/DIVISION:** 3

UN/NA NUMBER: UN 1993

PACKING GROUP: III

NAERG: 128

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: To the best of our knowledge, this product is not reportable under SARA 311/312. Reporting may be required if the material is present at any one time in amounts equal to or greater than 10,000 pounds.

FIRE: Yes PRESSURE GENERATING: No REACTIVITY: Yes ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: This product contains the following components in concentrations above de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: Title III: No components were identified.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: RQ of 100 lbs. for Diethyylamine, 109-89-7, 100lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements under CFR 40 CFR 720.30.

16. OTHER INFORMATION

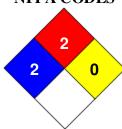
PREPARED BY: COMPLIANCE Date-Revised: 06/14/2016

REVISION SUMMARY: This MSDS replaces the 06/14/2016 MSDS. Revised: **Section 1:** Date Issued.

HMIS RATING

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X





NFPA STORAGE CLASSIFICATION: These ratings are part of a specific hazard communication program and should be disregarded where individuals are not trained in the use of this hazard rating system. You should be familiar with the hazard communication programs applicable to your workplace.

HMIS RATINGS NOTES: The HMIS rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in the SDS must be considered. Personal protection rating to be supplied by user depending on use conditions.

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