

# Nhe I

## Cat#: orb94027 (MSDS)

### 1. Identification

**Product identifier**

**Product name** NheI

**Other means of identification****Recommended use of the chemical and restrictions on use**

**Recommended use** This product is for research and development only

**Restrictions on use** No information available

### 2. Hazard(s) identification

**Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements****Hazard statements**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**Appearance** Colorless

**Physical state** Liquid

**Odor** Mild

**Other information**

Not applicable

**Unknown acute toxicity**

51.461 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

51.461 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

51.461 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

51.461 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### 3. Composition/information on ingredients

#### Substance

Not applicable.

#### Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health.

### 4. First-aid measures

#### Description of first aid measures

**Inhalation** Remove to fresh air.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

#### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

### 5. Fire-fighting measures

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

#### Specific hazards arising from the chemical

No information available.

#### Explosion data

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

#### Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

#### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits.

**Other information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

#### Engineering controls

Showers

Eyewash stations

Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Physical state** Liquid

**Appearance** Colorless

**Odor** Mild

**Odor threshold** No information available

#### Property Values Remarks • Method

**pH** No data available None known

**Melting point / freezing point** No data available None known

**Boiling point / boiling range** No data available None known

**Flash point** No data available None known

**Evaporation rate** No data available None known

**Flammability (solid, gas)** No data available None known

**Flammability Limit in Air** None known

**Upper flammability or explosive limits** No data available  
**Lower flammability or explosive limits** No data available  
**Vapor pressure** No data available None known  
**Vapor density** No data available None known  
**Relative density** No data available None known  
**Water solubility** No data available None known  
**Solubility in other solvents** No data available None known  
**Partition coefficient** No data available None known  
**Autoignition temperature** No data available None known  
**Decomposition temperature** No data available None known  
**Kinematic viscosity** No data available None known  
**Dynamic viscosity** No data available None known

**Other information**

**Explosive properties** No information available  
**Oxidizing properties** No information available  
**Softening point** No information available  
**Molecular weight** No information available  
**VOC Content (%)** No information available  
**Liquid Density** No information available  
**Bulk density** No information available  
**Reactivity** No information available.  
**Chemical stability** Stable under normal conditions.  
**Possibility of hazardous reactions** None under normal processing.  
**Conditions to avoid** None known based on information supplied.  
**Incompatible materials** None known based on information supplied.  
**Hazardous decomposition products** None known based on information supplied.

**11. Toxicological information**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.  
**Eye contact** Specific test data for the substance or mixture is not available.  
**Skin contact** Specific test data for the substance or mixture is not available.  
**Ingestion** Specific test data for the substance or mixture is not available.  
**Symptoms related to the physical, chemical and toxicological characteristics**  
**Symptoms** No information available.

**Acute toxicity**

**Numerical measures of toxicity**

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

**ATEmix (oral)** 22,445.40 mg/kg  
**ATEmix (dermal)** 19,432.20 mg/kg

**Unknown acute toxicity**

51.461 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

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51.461 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

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51.461 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

**12. Ecological information**

**Ecotoxicity.**

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

**Component Information**

**Other adverse effects** No information available.

**13. Disposal considerations****Waste treatment methods****Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**14. Transport information**

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO (air)** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**RID** Not regulated  
**ADR** Not regulated  
**ADN** Not regulated

## 15. Regulatory information

### International Inventories

**TSCA** Complies

**DSL/NDSL** Complies

**EINECS/ELINCS** -

**ENCS** -

**IECSC** Complies

**KECL** -

**PICCS** Complies

**AICS** Complies

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the



Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## US State Regulations

### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

#### 16. Other information

**NFPA Health hazards** 0 **Flammability** 0 **Instability** 0 **Special Hazard** -

**HMIS Health hazards** 0 **Flammability** 0 **Physical hazards** 0 **Personal protection** X

**Key or legend to abbreviations and acronyms used in the safety data sheet**

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

## Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

**Prepared by** Environmental, Health and Safety

978-927-5054