

SAFETY DATA SHEET

Version 1

Revision date 18-Mar-2024

| 1. Identification | | |
|--|---|--|
| Product identifier | | |
| Product name | Pseudouridine-5'-Triphosphate (Pseudo-UTP) | |
| Other means of identification | | |
| Product No | N0433 | |
| Synonyms | None | |
| 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 | |
| Details of the supplier of the safety data sheet | | |
| Supplier Address New England BioLabs 240 County Road Ipswich, MA 01938 USA | | |
| Emergency telephone number | | |
| Company Phone Number | 978-927-5054, 800-632-5227 (toll free) | |
| Telefax | 978-921-1350 | |
| E-mail address | info@neb.com | |
| 24 Hour Emergency Phone Number | Chemtrec +1 703-741-5970 | |

2. Hazard(s) identification

Classification

This product is not considered hazardous by either the US 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Workplace Hazardous Material Information System (WHMIS 2015).

Label elements

Hazard statements

This product is not considered hazardous by either the US 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Workplace Hazardous Material Information System (WHMIS 2015).

Other information

No information available.

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 | Rinse mouth. | |
| Most important symptoms and effects, both acute and delayed | | |
| Symptoms | No information available. | |
| Effects of Exposure | 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. |
|--|---|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No information available. |
| Explosion data Sensitivity to mechanical impac Sensitivity to static discharge | t None. None. |
| Special protective equipment and precautions 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 This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

| Appropriate engineering controls | |
|----------------------------------|---------|
| Engineering controls | Showers |

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

| Eye/face protection | No special protective equipment required. |
|--|---|
| Hand protection | No special protective equipment required. |
| Skin and body protection Respiratory protection | No special protective equipment required. 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 o | chemical properties | |
|--|--------------------------|------------------|
| Physical state | Liquid | |
| Appearance | Clear Colorless | |
| Color | No information available | |
| Odor | None | |
| Odor threshold | No information available | |
| | | |
| Property_ | Values | Remarks • Method |
| Hq | 7 | None known |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling rang | eNo 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 | No data available | |
| limits | | |
| Lower flammability or explosive | No data available | |
| limits | | |
| 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(ies) | 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 | |
| | | |

10. Stability and reactivity

| 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

| information on likely routes of exposure | | |
|--|--|--|
| 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. | |
| <u>Symptoms related to the physical, c</u> Symptoms | hemical and toxicological characteristics No information available. | |
| Acute toxicity | | |
| Numerical measures of toxicity | | |
| The following values are calculated ATEmix (oral) ATEmix (dermal) ATEmix (inhalation-gas) ATEmix (inhalation-vapor) ATEmix (inhalation-dust/mist) | based on chapter 3.1 of the GHS document 99,999.00 mg/kg 99,999.00 mg/kg 99,999.00 ppm 99,999.00 mg/l 99,999.00 mg/l | |
| Delayed and immediate effects as w | ell 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. |

| 12. Ecological information | | |
|-------------------------------|---|--|
| Ecotoxicity | The environmental impact of this product has not been fully investigated. | |
| Persistence and degradability | No information available. | |
| Bioaccumulation | There is no data for this product. | |
| Mobility in soil | No information available. | |
| 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

15. Regulatory information

Regulatory information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

| DSL/NDSL EINECS/ELINCS | Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. |
|---------------------------|--|
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Contact supplier for inventory compliance status. |
| KECI | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| AIIC | Contact supplier for inventory compliance status. |
| NZIOC | Contact supplier for inventory compliance status. |

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

NZIOC - New Zealand Inventory of Chemicals

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

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Water | - | - | Х |
| 7732-18-5 | | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. Other information | | | | | | | | | |
|---|--|------------------------------|-----|-----------------------------------|---|--|--|--|--|
| NFPA HMIS | Health hazards 0 Health hazards 0 | Flammability Flammability | | Instability 0 Physical hazards | 0 | Special hazards - Personal protection X | | | |
| Key or legend to abbreviations and acronyms used in the safety data sheet | | | | | | | | | |
| TWA TW/ | POSURE CONTROLS/PEF A (time-weighted average) imum limit value | S | TEL | | | Exposure Limit) | | | |
| Ceiling Maximum limit value Sk* 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) Environmental Protection Agency ChemView Database 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) National Institute of Technology and Evaluation (NITE) 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) U.S. National Toxicology Program (NTP) New Zeeland'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 Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications | | | | | | | | | |
| Revision date | 18-Mar-202 | 24 | | | | | | | |

Revision Note

No information available.

End of Safety Data Sheet