

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: OSHA 29 CFR 1910.1200

Document Type US - OSHA GHS

Revision date 13-Dec-2023

Version 10

1. Identification		
Product identifier		
Product name	NotI-HF™	
Other means of identification		
Product No	R3189	
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		
<u>Supplier Address</u> 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 E-mail address 24 Hour Emergency Phone Number	978-921-1350 info@neb.com Chemtrec +1 703-741-5970	

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

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

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

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	et None.	
Sensitivity to static discharge	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 container tightly closed in a dry 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	No special protective equipment required.	
Skin and body protection	No special protective equipment required.	
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	
Color	No information available	
Odor	Mild	
Odor threshold	No information available	
ouor intesticia		
Property_	Values_	Remarks • Method
рН	No data available	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 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(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	392.78 °C / 739 °F	
Decomposition temperature	332.70 0 7 733 1	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Dynamic viscosity		
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

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, o	hemical and toxicological characteristics	
Symptoms	No information available.	
Acute toxicity		
Numerical measures of toxicity		
The following values are calculated ATEmix (oral) ATEmix (dermal) ATEmix (inhalation-gas) ATEmix (inhalation-dust/mist) ATEmix (inhalation-vapor)	based on chapter 3.1 of the GHS document 25,200.00 mg/kg 20,000.00 mg/kg 99,999.00 ppm 99,999.00 mg/l 99,999.00 mg/l	
Component Information		
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.
Other adverse effects	No information available.
Interactive effects	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	
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	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	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

This product does not contain any substances regulated under applicable state right-to-know regulations

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 $\ X$	
Legend Section TWA Ceiling Key literature refe Agency for Toxic S U.S. Environmenta European Food Sa EPA (Environment Acute Exposure Ge U.S. Environmenta U.S. Environmenta Food Research Joe Hazardous Substa International Unifor National Institute o Australia National In NIOSH (National In National Library of National Library of National Toxicolog New Zealand's Che	nce Database rm Chemical Information Data f Technology and Evaluation Industrial Chemicals Notificat nstitute for Occupational Safe Medicine's ChemID Plus (NL Medicine's PubMed databas	PERSONAL PROT e) S ta used to compile stry (ATSDR) ew Database Insecticide, Fungici duction Volume Ch abase (IUCLID) (NITE) ion and Assessmer ty and Health) M CIP) e (NLM PUBMED) rmation Database (the SDS de, and Ro nemicals	STEL (Short Terr Skin designation	n Exposure Limit)	
	conomic Co-operation and De conomic Co-operation and De nization				m	
Prepared by	Environ 978-927	nental, Health and -5054	Safety			
Revision date Revision note Disclaimer	13-Dec- SDS is v		evision dat	e. Contact info@neb.com	for latest revision.	
	provided in this Safety Data	Sheet is correct to	o the best	t of our knowledge and I	belief at the date of	

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End of Safety Data Sheet