

Revision date 08-Dec-2023

Version 2

## Section 1: Identification

### Product identifier

**Product name** 9 Degrees North DNA Ligase

**Product No** M0238

### Other means of identification

**Synonyms** None

### Recommended use of the chemical and restrictions on use

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

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Supplier

New England BioLabs (Australia) Pty Ltd  
22/270 Ferntree Gully Road  
Notting Hill, VIC 3168

**E-mail address** info.au@neb.com

### Emergency telephone number

**Company Phone Number** 978-927-5054, 800-632-5227 (toll free)

**National Poisons Centre** 0800 764 766 (toll free)

**24 Hour Emergency Phone Number** Chemtrec +65 3163 8374

## Section 2: Hazard identification

### GHS Classification

Not classified

### Label elements

#### **Hazard statements**

Not classified

### Other hazards which do not result in classification

No information available.

## Section 3: Composition/information on ingredients

Non-hazardous ingredients	Proprietary	Balance
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## Section 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.
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### Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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## Section 5: Fire-fighting measures

### Suitable extinguishing media

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.

**Special exposure hazards in a fire**

**Specific hazards arising from the chemical** No information available.

**Protective equipment and precautions for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## **Section 6: Accidental release measures**

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

**Personal precautions** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**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.

**Precautions to prevent secondary hazards**

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## **Section 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.

**Incompatible materials** None known based on information supplied.

## **Section 8: Exposure controls/personal protection**

**Control parameters**

**Exposure Limits**

**Biological occupational exposure** This product, as supplied, does not contain any hazardous materials with biological limits

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      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.

Environmental exposure controls      No information available.

### **Section 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

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and 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(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	392.78 °C	
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	

#### Other information

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
Particle characteristics	No information available

## Section 10: Stability and reactivity

### Reactivity

Reactivity	No information available.
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### Chemical stability

Stability	Stable under normal conditions.
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### Explosion data

Sensitivity to mechanical impact	None.
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Sensitivity to static discharge	None.
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### Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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### Conditions to avoid

Conditions to avoid	None known based on information supplied.
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### Incompatible materials

Incompatible materials	None known based on information supplied.
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### Hazardous decomposition products

Hazardous decomposition products	None known based on information supplied.
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## Section 11: Toxicological information

### Acute toxicity

### Information on likely routes of exposure

#### Product Information

Inhalation	Specific test data for the substance or mixture is not available.
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Eye contact	Specific test data for the substance or mixture is not available.
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Skin contact	Specific test data for the substance or mixture is not available.
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Ingestion	Specific test data for the substance or mixture is not available.
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Symptoms	No information available.
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### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document  
ATEmix (oral) 25,200.00 mg/kg

ATEmix (dermal)	20,000.00	mg/kg
ATEmix (inhalation-gas)	99,999.00	ppm
ATEmix (inhalation-vapor)	99,999.00	mg/l
ATEmix (inhalation-dust/mist)	99,999.00	mg/l

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

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Data used to identify the health effects</b>	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

**Section 12: Ecological information****Ecotoxicity****Aquatic ecotoxicity**

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

**Terrestrial ecotoxicity** There is no data for this product.

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation****Component Information****Mobility in soil**

**Mobility** No information available.

**Other adverse effects**

No information available.

**Section 13: Disposal considerations****Waste treatment methods**

**Waste from residues/unused products** Not applicable.  
Not Hazardous.

**Contaminated packaging** Not applicable.  
Not Hazardous.

**Section 14: Transport information**

**IATA** Not regulated

**IMDG** Not regulated

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

No information available

**Special precautions for user**

Please refer to the applicable dangerous goods regulations for additional information

**Section 15: Regulatory information****Regulatory information**

**EPA New Zealand HSNO approval code or group standard** To be determined

**National regulations** There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and controlled substance license requirements** Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information  
Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information  
Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more 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

<b>NZIoC</b>	Contact supplier for inventory compliance status.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AiIC</b>	Contact supplier for inventory compliance status.

#### **Legend:**

<b>NZIoC</b>	- New Zealand Inventory of Chemicals
<b>TSCA</b>	- United States Toxic Substances Control Act Section 8(b) Inventory
<b>DSL/NDL</b>	- Canadian Domestic Substances List/Non-Domestic Substances List
<b>EINECS/ELINCS</b>	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
<b>ENCS</b>	- Japan Existing and New Chemical Substances
<b>IECSC</b>	- China Inventory of Existing Chemical Substances
<b>KECL</b>	- Korean Existing and Evaluated Chemical Substances
<b>PICCS</b>	- Philippines Inventory of Chemicals and Chemical Substances
<b>AICS</b>	- Australian Inventory of Chemical Substances

### **Section 16: Other information**

<b>Prepared by</b>	Environmental, Health and Safety 978-927-5054
<b>Revision date</b>	08-Dec-2023
<b>Revision note</b>	SDS is valid 3 years from revision date. Contact info@neb.com for latest revision

\*\*\*Indicates updated data since last publication.

#### **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
C	Carcinogen		

#### **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) (AELG(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)  
 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

World Health Organization

**Disclaimer**

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**End of Safety Data Sheet**