



# SAFETY DATA SHEET

Revision date 25-Mar-2025

Version 6

## Section 1: Identification

### Product identifier

**Product name** Monarch gDNA Nuclei Lysis Buffer

**Product No** T3053

### Other means of identification

**Synonyms** None

**Pure substance/mixture** Mixture

### 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 manufacturer or importer

#### **Supplier**

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

For further information, please contact

**Contact Point** Product Safety Department

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

### Emergency telephone number

**Company Phone Number** 1800 934 218

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

**Australian Poisons Information:** 131 126

## Section 2: Hazard(s) identification

### GHS Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

### Label elements

Exclamation mark



### Signal word

WARNING

### Hazard statements

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation

### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/clothing and eye/face protection  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of water and soap  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

### Other hazards which do not result in classification

May be harmful in contact with skin.

## Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Guanidine Hydrochloride	50-01-1	40 - 50%
Sodium EDTA	6381-92-6	0 - 10%
Non-hazardous ingredients	Proprietary	Balance

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## Section 4: First aid measures

### Description of first aid measures

#### General advice

Show this safety data sheet to the doctor in attendance.

<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

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

**Note to physicians** Treat symptomatically.

### **Section 5: Firefighting 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. Use personal protection equipment.

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

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

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

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

#### **Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up**

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

**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. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**General hygiene considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

**Section 8: Exposure controls and personal protection****Control parameters**

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological 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** If splashes are likely to occur, wear safety glasses with side-shields.

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

**Hand protection** Wear suitable gloves. Impervious gloves.

**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.

**Thermal hazards** No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	No information available
Odor	None.
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	8.2	
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	96 °C	
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	200 °C	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

### Other information

VOC content	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.
Sensitivity to static discharge	None.

### 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** Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

**Section 11: Toxicological information**

**Acute toxicity**

**Information on likely routes of exposure**

**Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Numerical measures of toxicity - Product Information**

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

<b>ATEmix (oral)</b>	1,524.10 mg/kg
<b>ATEmix (dermal)</b>	4,019.50 mg/kg
<b>ATEmix (inhalation-gas)</b>	99,999.00 ppm
<b>ATEmix (inhalation-vapor)</b>	99,999.00 mg/l
<b>ATEmix (inhalation-dust/mist)</b>	99,999.00 mg/l

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Guanidine Hydrochloride	= 773.6 mg/kg ( Rat ) = 907.1 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 3.181 mg/L ( Rat ) 4 h = 7.655 mg/L ( Rat ) 4 h
Sodium EDTA	= 2 g/kg ( Rat )	-	-

See section 16 for terms and abbreviations

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** 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.

## Section 12: Ecological information

### Ecotoxicity

**Aquatic ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium EDTA	-	LC50: =320mg/L (96h, Poecilia reticulata)	-	-

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

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

#### Bioaccumulation

#### Component Information

Chemical name	Partition coefficient
Guanidine Hydrochloride	-1.7
Sodium EDTA	-4.3

### Mobility

**Mobility** No information available.

### Other adverse effects

**Other adverse effects** No information available.

## Section 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.

See section 8 for more information

**Section 14: Transport information**

**ADG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

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

No information available

**Section 15: Regulatory information****Regulatory information****National regulations****Australia**

See section 8 for national exposure control parameters

**Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

No poisons schedule number allocated

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Guanidine Hydrochloride - 50-01-1	Present	-
Sodium EDTA - 6381-92-6	Present	-

**Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**International Inventories**

**AiIC**

**NZIoC**

**TSCA**

**DSL/NDSL**

**EINECS/ELINCS**

Contact supplier for inventory compliance status.

Contact supplier for inventory compliance status.

Contact supplier for inventory compliance status.

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.  
**KECL** Contact supplier for inventory compliance status.  
**PICCS** Contact supplier for inventory compliance status.

**Legend:**

**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**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 Chemicals Inventory  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**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

**Section 16: Other information**

**Revision date** 25-Mar-2025

**Revision Note****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	Sk*	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)  
 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)  
 Australian Industrial Chemicals Introduction Scheme (AICIS)  
 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 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

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**End of Safety Data Sheet**