



SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
JIS Z 7253:2019; JIS Z 7253:2012

Revision date 31-May-2023
Version 2

1. Identification

Product name phi29-XT DNA Polymerase, 10X
Product No M0572
Registration number(s) No information available

Details of the supplier of the safety data sheet

Supplier
NEB Japan

Emergency telephone number Chemtrec +65 3163 8374

E-mail address tech.jp@neb.com

Recommended use of the chemical and restrictions on use

Recommended use No information available.

Restrictions on use No information available

2. Hazard(s) identification

GHS Classification

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

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Classification not applicable
Acute toxicity - Inhalation (Vapors)	Classification not possible
Acute toxicity - Inhalation (Dusts/Mists)	Classification not possible
Skin corrosion/irritation	Classification not possible
Serious eye damage/eye irritation	Classification not possible
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Effects on or via lactation	Classification not possible
Specific target organ toxicity (single exposure)	Classification not possible
Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible
Acute aquatic toxicity	Not classified
Chronic aquatic toxicity	Not classified
Ozone	Classification not possible

GHS label elements

Hazard statements

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

Prevention

- Not applicable

Response

- Not applicable

Storage

- Not applicable

Disposal

- Not applicable

Other hazards

No information available.

3. Composition/information on ingredients

Pure substance/mixture

Mixture

Chemical name	CAS No.	Weight-%	ENCS Inventory	ENCS Number	ISHL Inventory	ISHL No.
Trade Secret	Trade secret	0 - 10%	Existing	(8)-55	Existing	(8)-55

Until March 31, 2023 Pollutant Release and Transfer Register (PRTR)

Not applicable

After April 1, 2023 Pollutant Release and Transfer Register (PRTR)

Not applicable

Industrial Safety and Health Law

ISHL Notifiable Substances

Not applicable

Harmful Substances Whose Names Are to be Indicated on the Label

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

4. First-aid measures

In case of inhalation

Remove to fresh air.

In case of skin contact

Wash skin with soap and water.

In case of eye contact

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

In case of ingestion

Rinse mouth.

Most important symptoms/effects, acute and delayed

No information available.

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	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Special Extinguishing Media	Cool drums with water spray.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
Other information	CAUTION: Use of water spray when fighting fire may be inefficient.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	See Section 12 for additional Ecological Information.
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.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Handling

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

Storage

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

8. Exposure controls/personal protection

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

Biological monitoring indicator This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Engineering controls	Showers Eyewash stations Ventilation systems.
Environmental exposure controls	No information available.
<u>Personal protective equipment</u>	
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.
Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear
Physical state	Liquid
Color	No information available
Odor	Slight
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No information available
Initial boiling point and boiling range		No information available
Flammability (solid, gas)		No information available
Upper/lower flammability or explosive limits		No information available
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		No information available
Evaporation rate		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
pH	7.4	No information available
Viscosity		
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Water solubility		No information available
Solubility(ies)		No information available
Partition Coefficient (n-octanol/water)		No information available
Vapor pressure		No information available
Density and/or relative density		
Relative density		No information available
Liquid Density	No information available	
Bulk density	No information available	
Vapor density		No information available
Particle characteristics		
Particle Size		Not applicable
Particle Size Distribution		Not applicable

Other information

Explosive properties	No information available
-----------------------------	--------------------------

Oxidizing properties 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 No information available.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

Explosion data

Sensitivity to static discharge None.

Sensitivity to mechanical impact None.

11. Toxicological information

Acute toxicity

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	22,780.70 mg/kg
ATEmix (dermal)	18,079.90 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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret	= 37000 mg/kg (Rat)	-	> 5.1 mg/L (Rat) 4 h

Symptoms No information available.

Product Information

Ingestion Specific test data for the substance or mixture is not available.

Inhalation Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

12. Ecological information

Ecotoxicity

Percentage for unknown hazards 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Mobility in soil No information available.

Hazardous to the ozone layer Classification not possible. Based on available data, the classification criteria are not met.

Other adverse effects No information available.

13. Disposal considerations

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

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

ADR Not regulated

IATA Not regulated

Japan Not regulated

15. Regulatory information

National regulations**Until March 31, 2023 Pollutant Release and Transfer Register (PRTR)**

Not applicable

After April 1, 2023 Pollutant Release and Transfer Register (PRTR)

Not applicable

Industrial Safety and Health Law

Not applicable

ISHL Notifiable Substances

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

Fire Service Law:

Not applicable

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed

Chemical name	CAS No.	Chemical Substances Control Law
Trade Secret		Priority assessment chemical substance

Act on Prevention of Marine Pollution and Maritime Disaster

Not applicable

Waterworks (Water Supply) Act

Waterworks (Water Supply) Act article 4 legally binding water quality standards

Air Pollution Control Law

Volatile organic compound per Air Pollution Control Law article 2, paragraph 4

International Regulations**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**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.

AICS

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**16. Other information****Revision date**

31-May-2023

Revision note

No information available.

Key or legend to abbreviations and acronyms used in the safety data sheetLegend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	Ceiling	Maximum limit value
*	Skin designation	+	Sensitizers

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 Chemicals Agency
 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)
 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

This SDS complies with the requirements of JIS Z 7252:2014 and JIS Z 7253:2012 (Japan). The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of publication. This information is intended only as a guide for safe handling, use, processing, storage, transportation, disposal and release and should not be taken as a warranty or quality specification. The information relates only to the specific material and may not be valid for such material used in combination with any other materials or in any process unless expressly specified in the text. New England Biolabs will not be liable for any damages resulting from handling or contact with the product.

End of Safety Data Sheet