

Safety Data Sheet

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 2023-12-30

Revision Number 13

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Product Code	ST0943
Product Name	10X Lysis Buffer
Pure substance/mixture <u>1.2. Relevant identified uses of the</u>	Mixture e substance or mixture and uses advised against
Identified uses	For research use only. Not for use in diagnostic procedures
Uses advised against	No information available

1.3. Details of the supplier of the safety data sheet

Supplier USA: Takara Bio USA, Inc. 2560 Orchard Parkway San Jose, CA 95131, USA Phone: 800.662.2566/888.251.6618 Web: www.takarabio.com

Europe: Takara Bio Europe S.A.S. 34, Rue de la Croix de Fer 78100 Saint-Germain-en-Laye, France Phone: +33.1.39.04.68.80 Web: www.takarabio.com

Europe: Takara Bio Europe AB Arvid Wallgrens Backe 20, SE-413 46 Göteborg, Sweden Phone: +46.31.758.09.00 Web: www.takarabio.com

India: DSS Takara Bio India Pvt. Ltd. A-5 Mohan Co-operative Industrial Estate, Mathura Road, New Delhi 110044, India Phone: +91.1800.212.4922 (Toll free) Web: www.takarabio.com

For further information, please contact:

1.4. Emergency telephone number

Emergency telephone	In case of emergency, call PERS (Professional Emergency Resource Services) 1-800-633-8253 (US) or 801-629-0667 (international).
Italy	Marco Marano

CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA Roma, Piazza Sant'Onofrio,4 00165 0668593726

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] **Hazard statements** This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

This mixture contains substances considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains substances considered to be very persistent and very bioaccumulating (vPvB).

Endocrine Disruptor Information Contains a known or suspected endocrine disruptor.

Chemical name	EU - REACH (1907/2006) - Article 59(1)	EU - REACH (1907/2006) - Endocrine
	- Candidate List of Substances of Very	Disruptor Assessment List of
	High Concern (SVHC) for Authorisation	Substances
Poly(oxyethylene) nonylphenyl ether (NP-40)	Endocrine disrupting properties	-

	Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4)
Poly(oxyethylene) nonylphenyl ether (NP-40)	Endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number		Classification according to Regulation (EC) No.	•	M-Factor	M-Factor (long-term)
				1272/2008 [CLP]	limit (SCL)		
Poly(oxyethylene) nonylphenyl ether (NP-40) 9016-45-9		No data available	-	No data available	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Poly(oxyethylene) nonylphenyl ether (NP-40) 9016-45-9	2590	1774.66	No data available	No data available	No data available

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No.	SVHC candidates
Poly(oxyethylene) nonylphenyl ether	9016-45-9	Х
(NP-40)		

SECTION 4: First aid measures

4.1. 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. In the case of skin irritation or allergic reactions see a physician.	
Ingestion	Rinse mouth.	
4.2. Most important symptoms and	effects, both acute and delayed	
Symptoms	No information available.	
4.3. Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	

SECTION 5: Firefighting measures

5.1. 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.	
5.2. Special hazards arising from the substance or mixture		
Specific hazards arising from the chemical	No information available.	
5.3. Advice 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

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.
6.2. Environmental precautions	
Environmental precautions	See Section 12 for additional Ecological Information.
6.3. Methods and material for contai	nment and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
6.4. Reference to other sections	
Reference to other sections	See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling		
Advice on safe handling	Ensure adequate ventilation.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.	

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. 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.

Derived No Effect Level (DNEL)No information available.Predicted No Effect ConcentrationNo information available.(PNEC)No

8.2. Exposure controls

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.
Environmental exposure controls	No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
--

Physical state	Liquid
Appearance	aqueous solution
Color	Colorless
Odor	Odorless.
Odor Threshold	No information available
Property	Values
Melting point / freezing point	No data available
Boiling point/boiling range (°C)	No data available
Flammability (solid, gas)	No data available
Flammability Limit in Air	
	Ne dete evelleble
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Flash point	No data available
Autoignition temperature	No data available
Decomposition temperature	
pH	No data available
P	

No data available Solubility in other solvents No data available No information available

No information available

Remarks • Method None known

None known None known None known

Open cup None known None known None known No information available None known None known None known None known None known None known None known

None known

9.2. Other information

Particle Size Distribution

Particle characteristics Particle Size

pH (as aqueous solution)

Kinematic viscosity

Partition coefficient

Dynamic Viscosity

Water solubility

Vapor pressure

Relative density

Bulk Density

Liquid Density Vapor density

9.2.1. Information with regard to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No information available.
10.2. Chemical stability	
Stability	Stable under normal conditions.
Explosion Data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.
10.3. Possibility of hazardous reaction	ions
Possibility of hazardous reactions	None under normal processing.
10.4. Conditions to avoid	
Conditions to avoid	None known based on information supplied.
10.5. Incompatible materials	
Incompatible materials	None known based on information supplied.
10.6. Hazardous decomposition pro	<u>ducts</u>

Hazardous Decomposition Products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

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, chemical and toxicological characteristics

Symptoms

No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)104,684.50 mg/kgATEmix (dermal)74,461.50 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Poly(oxyethylene) nonylphenyl	= 2590 mg/kg (Rat)	= 1780 µL/kg (Rabbit)	-
ether (NP-40)			
Delayed and immediate effects as well 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.			
11.2. Information on other haz	ards		
11.2.1. Endocrine disrupting p	properties		
Endocrine disrupting properties			
11.2.2. Other information			
Other adverse effects No information available.			
	SECTION 12: Ecol	ogical information	
<u>12.1. Toxicity</u>			
Ecotoxicity The environmental impact of		of this product has not been fully ir	nvestigated.
Unknown aquatic toxicity	Contains 0 % of compone	nts with unknown hazards to the ac	uatic environment.
12.2. Persistence and degradability			
Persistence and degradability No information available.			
12.3. Bioaccumulative potentia	<u>I</u>		

Bioaccumulation

No information available.

Component Information

Chemical name	Partition coefficient	
Poly(oxyethylene) nonylphenyl ether (NP-40)	3.7	

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product contains substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment	
Poly(oxyethylene) nonylphenyl ether (NP-40)	PBT / vPvB substance	

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

<u>IATA</u>

- 14.1 UN number or ID number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user Special Provisions None

IMDG

- 14.1 UN number or ID number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user Special Provisions

14.7 Maritime transport in bulk

according to IMO instruments

<u>RID</u>

No information available Not regulated Not regulated Not applicable

Not regulated

Not regulated

Not regulated

Not applicable

Not regulated

No information available

None No information available

14.2 14.3 14.4 14.5 14.6	UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Environmental hazards Special precautions for user special Provisions	Not regulated No information available Not regulated Not regulated Not applicable None
14.2 14.3 14.4 14.5 14.6	UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Environmental hazards Special precautions for user special Provisions	Not regulated No information available Not regulated Not regulated Not applicable None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorization per
	Annex XVII	REACH Annex XIV
Poly(oxyethylene) nonylphenyl ether (NP-40) -	46[b].	-
9016-45-9	46a.	

Persistent Organic Pollutants

Not applicable

Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	bw
Poly(oxyethylene) nonylphenyl ether (NP-40) - 9016-45-9	l.1
	1.2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

_

International Inventories	
TSCA	
DSL/NDSL	
EINECS/ELINCS	
ENCS	
IECSC	
KECL	

Short term exposure limit

Skin designation

PICCS AICS

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

15.2. Chemical safety assessment

Chemical Safety Assessment No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	Time weighted average	STEL
Ceiling	Maximum limit value	*

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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) (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) Japan GHS Classification 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 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

Revision Date 2023-12-30

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet