

Safety Data Sheet

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

Identification of the substance or mixture

Product code 902100
Product name 2nd-cycle ss-cDNA enzyme

Company/undertaking identification

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24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC Within the USA + Canada: 1-800-424-9300 and +1 703-527-3887
Outside the USA + Canada: +1 703-741-5970

Country Specific Emergency Number (if available):

CHEMTREC Israel (Tel Aviv) +(972)-37630639 (Greeting Language: Hebrew)
CHEMTREC Malaysia 1-800-815-308 (Toll Free) (Greeting Language: Malay)
CHEMTREC Malaysia (Kuala Lumpur) +(60)-327884561 (Greeting Language: Malay)
CHEMTREC Philippines 1-800-1-116-1020 (Toll Free) (Greeting Language: Tagalog)
CHEMTREC Philippines (Manila) +(63) 632-395-3308 (Greeting Language: Tagalog)
CHEMTREC Saudi Arabia +(966)-8111095861 (Greeting Language: Arabic and English)
CHEMTREC Singapore 800-101-2201 (Toll Free) (Greeting Language: English and Mandarin)
CHEMTREC Singapore +(65)-31581349 (Greeting Language: English and Mandarin)
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CHEMTREC South Africa 0-800-983-611 (Greeting Language: English)
CHEMTREC Vietnam (Hanoi) +(84)-444581771 (welcome Language: Vietnamese)

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SECTION 2: Hazards identification

Australian SDS Statement

Not classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonised System (GHS)

GHS - Classification

Health hazards

Not Hazardous

Physical hazards

Not Hazardous

Environmental hazards

Not Hazardous

Label elements

Signal Word

None

Hazard pictograms

None

Hazard pictograms names

None

Hazard Statements

Not Applicable

Precautionary Statements

Prevention

Not Applicable

Response

Not Applicable

Storage

Not Applicable

Disposal

Not Applicable

Other hazards

Contains a known or suspected endocrine disruptor

SECTION 3: Composition/information on ingredients

Component	CAS-No.	Common name	EINECS-No.	Weight percent
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy- 9002-93-1 (<0.9)	9002-93-1	-	-	<0.9
Glycerin 56-81-5 (40-70)	56-81-5	-	200-289-5	40-70

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

Skin contact	Rinse with plenty of water. Immediate medical attention is not required.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Notes to Physician	Treat symptomatically.

Most important symptoms and effects, both acute and delayed

Not Applicable

Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable extinguishing media	No information available.

Special hazards arising from the substance or mixture

Not known.

Advice for fire-fighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
 Always wear recommended Personal Protective Equipment
 Use personal protection equipment
 See Section 8 for more detail.

Environmental precautions

Prevent product from entering drains. Do not allow material to contaminate ground water system.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	Australia STEL	Australia	Australia - Skin Absorbers	Australia - OES - Peak
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None	None	None
Glycerin 56-81-5	None	10 mg/m ³	None	None

Chemical Name	New Zealand - Workplace Exposure Limits	New Zealand TWA	New Zealand STEL	New Zealand Ceiling Limits
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None	None	None
Glycerin 56-81-5	None	10 mg/m ³	None	None

Chemical Name	China OEL (MAC)	China - Skin Absorbers	Hong Kong OEL
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None	None
Glycerin	None	None	None

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56-81-5			
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Chemical Name	Korea OEL (CEILING)	Korea OEL (TWA)	Korea OEL (STEL)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None	None
Glycerin 56-81-5	None	10 mg/m ³	None

Chemical Name	Taiwan OEL - TWA	Taiwan OEL (Skin notations, Carcinogens)	Taiwan OEL (STELs)	Taiwan OEL (Ceilings)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None	None	None
Glycerin 56-81-5	None	None	None	None

Chemical Name	Singapore OEL (PEL)	Singapore OEL (STEL)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None
Glycerin 56-81-5	10 mg/m ³	None

Chemical Name	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- 9002-93-1	None	None
Glycerin 56-81-5	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas

Exposure controls

Personal Protective Equipment

Respiratory protection In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Eye protection Tight sealing safety goggles

Skin and Body Protection Wear suitable protective clothing

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	liquid	
Odour	No data available	
pH	No data available	
Melting point / melting range	°C Mixture has not been tested	°F Mixture has not been tested
Boiling point / boiling range	°C Mixture has not been tested	°F Mixture has not been tested
Flash point	°C Mixture has not been tested	°F Mixture has not been tested
Autoignition Temperature	°C Mixture has not been tested	°F Mixture has not been tested
Decomposition temperature	°C Mixture has not been tested	°F Mixture has not been tested
Evaporation rate	No data	
Flammability (solid, gas)	No data available	
Upper explosion limit	Mixture has not been tested	
Lower explosion limit	Mixture has not been tested	
Vapour Pressure	Mixture has not been tested	
Relative density	Mixture has not been tested	
Specific gravity	No data	
Solubility	No data available	
Partition coefficient: n-octanol/water	No data available	
Viscosity	No data	
Explosive properties	Mixture has not been tested	
Oxidising properties	No data	

Other information

No data available.

SECTION 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	No information available.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	= 1800 mg/kg (Rat) = 4190 mg/kg (Rat) = 1700 mg/kg (Rat)	No data available	No data available
Glycerin	= 12600 mg/kg (Rat)	No data available	>570mg/m ³ (Rat)

Principal Routes of Exposure

Skin corrosion/irritation Conclusive but not sufficient for classification

Serious eye damage/irritation Conclusive but not sufficient for classification

Respiratory or skin sensitisation Conclusive but not sufficient for classification

Specific target organ toxicity (STOT) – single exposure Conclusive but not sufficient for classification

Specific target organ toxicity (STOT) – repeated exposure Conclusive but not sufficient for classification

Carcinogenicity Conclusive but not sufficient for classification

Germ cell mutagenicity Conclusive but not sufficient for classification

Reproductive toxicity Conclusive but not sufficient for classification

Aspiration hazard Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

Hazardous to the Aquatic Environment.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	No data available	No data available	No data available	No data available	No data available
Glycerin	No data available	Daphnia magna EC50>500 mg/L (24 h)	No data available	No data available	logPow-1.76

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

No information available.

Other adverse effects Contains a known or suspected endocrine disruptor.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations. Do not empty into drains. Do not dispose of waste into sewer.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not Applicable.

SECTION 15: Regulatory information

International Inventories

Chemical Name	US TSCA	Canada (DSL)	NDSL	PICCS (Philippines)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Listed	Listed	-	Listed
Glycerin	Listed	Listed	-	Listed

Chemical Name	ENCS (Japan)	IECSC - China Inventory of Existing Chemical Substances	South Korea (KECL)	AICS (Australia)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	-	Listed	Listed	Listed
Glycerin	Listed	Listed	Listed	Listed

Chemical Name	NZIoC - New Zealand Inventory of Chemicals	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Listed	-	-
Glycerin	Listed	Listed	-

Korea

Chemical Name	Wastes Control Act	Safety Control of Dangerous Substances Act
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Listed	Not Listed
Glycerin	Not Listed	Present

Industrial Safety and Health Law

Harmful substances subject to control

Refer to the Industrial Safety and Health Act, articles 24 and 38, and the Regulation on Industrial Health Standards, Annex 12 (related to articles 420, 439, 440)

Chemical Name	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	ISHA - Substances to be controlled - Metals	ISHA - Substances to be controlled - Organic Substances	ISHA - Substances to be controlled - Acids and bases	ISHA - Substances to be controlled - Gas-phase substances
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Glycerin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Harmful agents subject to work environment monitoring

Refer to the Industrial Safety and Health Act, article 42, and the Enforcement Regulation of the Industrial Safety and Health Act, article 93-1

Chemical Name	Organic compounds	Metals	Acids and alkalis	Gas-phase substances	Dusts
Poly(oxy-1,2-ethanediyl),	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

.alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-					
Glycerin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Harmful agents subject to workers requiring health examination

Refer to the Industrial Safety and Health Act, article 43, and the Enforcement Regulation of the Industrial Safety and Health Act, article 98-2

Chemical Name	Organic compounds	Metals	Acids and alkalis	Gas-phase substances	Dusts
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Glycerin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Chemicals Control Act

Chemical Name	Toxic substance	Prohibited substance	Restricted substance
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Applicable	Not Applicable	Not Applicable
Glycerin	Not Applicable	Not Applicable	Not Applicable

Act on Registration, Evaluation, etc. of Chemicals (K-REACH)

Refer to the Act on Registration and Evaluation of Chemical Substances, Articles 8-4, 9 and 10-2

Chemical Name	Existing substances subject to registration	Existing substances not likely to be subject to registration	Existing substances known to be of very low risk
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Applicable	Not Applicable	Not Applicable
Glycerin	Not Applicable	Not Applicable	Not Applicable

Chemicals Control Act (CCA) - Accident Precaution Chemicals

Refer to the Chemicals Control Act (CCA), Articles 2-6 and 39, the Enforcement Decree of Chemicals Control Act, Article 17, and the Enforcement Regulation of Chemicals Control Act, Articles 45 and Annex 10

Chemical Name	Threshold Values (%)	Quantity limit for manufacture/use	Quantity limit for custody/storage
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Applicable	Not Applicable	Not Applicable
Glycerin	Not Applicable	Not Applicable	Not Applicable

Singapore

Chemical Name	Singapore - Poisons List
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Listed
Glycerin	Not Listed

Taiwan

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Chemical Name	Toxic Chemical Substances Control Act - Classification and Control Levels	Toxic Chemical Substances Control Act - Threshold Regulated Quantities	Hazard Prevention Standard for Specified Chemical Substances
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Listed	Not Listed	Not Listed
Glycerin	Not Listed	Not Listed	Not Listed

China

Chemical Name	China - Catalogue of Occupational Hazard Factors	China - Dangerous Goods List	China - Catalog of Hypertoxic Chemicals	China - List of Dangerous Chemicals for Priority Management
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Not Listed	Not Listed	Not Listed	Not Listed
Glycerin	Not Listed	Not Listed	Not Listed	Not Listed

SECTION 16: Other information

Reason for revision SDS sections updated.
Revision number 3
Revision date 15-Mar-2019

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References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet