

This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

Revision date 23-Apr-2025 Revision Number 1

1. Identification

Product identifier

Product Name Ampligase Thermostable DNA Ligase

Other means of identification

Product Code(s) E0001

PR No

Product desciption	Product Code(s)
Ampligase	E0001-X
Ampligase	A0102K
Ampligase	A0110K
Ampligase	A3202K
Ampligase	A3210K
Ampligase	A3210K-X
Ampligase	A32750
Ampligase	A8101
Ampligase	AL005UML-X
Circligase	E0129
Circligase	E0129-X
Circligase	CL4115K-X
Circligase	CL9021K-X
Circligase	CL9025K-X
Circligase	CL411K-X
T4 Polynucleotide Kinase	30000-PQ1494-B
T4 Polynucleotide Kinase	E0055
T4 Polynucleotide Kinase	E0055-X
T4 Polynucleotide Kinase	S733817
T4 Polynucleotide Kinase	B733817
MMLV RT	E0115
MMLV RT	E0115-X
MMLV RT	RT80125K
Episcript RNAse H- Reverse Transcriptase	E0144
Episcript RNAse H- Reverse Transcriptase	E0144-X
Episcript Plus	B736566
Episcript Plus	F836566-X
Episcript Plus	ERT12910K
Episcript Plus	ERT12925K-X
Episcript Plus	ERT12925K-X
Episcript Prime	ERTPRI-X
Episcript Plus	ERTPLUS-X
Hybridase Thermostable RNAse H	E0038
Hybridase Thermostable RNAse H	E0038-X

AGHS / EN Page 1 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

E0111
E0111-X
E0016
E0102
E0084
E0084-X
E0094
E0094-X
TNP92110

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use This product is for research and development only

Restrictions on use Not to be used for human or animal consumption

Details of the supplier of the safety data sheet

Supplier Address

LGC Genomics LLC 2905 Parmenter Street Middleton, WI 53562 USA

Tel: +1 888-575-9695 (between 8am-4:30pm CST)

E-mail genomics.sdsrequest@lgcgroup.com

Emergency telephone number

Emergency Telephone

For Hazardous Materials or Dangerous Goods Incidents, Spills, Leaks, Fires, or Exposures, Call CHEMTREC: +17035273887

2. Hazard(s) identification

Classification

Classified according to OSHA.

Corrosive to metals Category 1

Hazards not otherwise classified (HNOC)

Not applicable

AGHS / EN Page 2 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

Label elements



Warning

Hazard statements

Classified according to OSHA. May be corrosive to metals.

Precautionary Statements - Prevention

Keep only in original packaging

Precautionary Statements - Response

Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store in corrosion resistant container with a resistant inner liner

Hazards classified under paragraph (d)(1)(i)(B) of 1910.1200

No information available.

Other information

Causes mild skin irritation.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Trade secret
Glycerol	56-81-5	40 - 60	-
Hydrochloric acid	7647-01-0	0.1 - 1	-
Sodium hydroxide	1310-73-2	0.1 - 1	-
Octylphenol ethylene oxide condensate	9002-93-1	0.1 - 1	-

AGHS / EN Page 3 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Eye contact 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.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

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.

Specific hazards arising from the No info

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

AGHS / EN Page 4 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

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.

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.

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

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Do not breathe

dust/fume/gas/mist/vapors/spray.

General hygiene considerations Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands

before breaks and after work. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

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

moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on

the CoA.

8. Exposure controls/personal protection

AGHS / EN Page 5 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glycerol	-	TWA: 15 mg/m ³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m ³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m ³ mist,	
		total particulate	
		(vacated) TWA: 5 mg/m ³ mist,	
		respirable fraction	
Hydrochloric acid	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm	IDLH: 50 ppm
7647-01-0		(vacated) Ceiling: 7 mg/m ³	Ceiling: 5 ppm
		Ceiling: 5 ppm	Ceiling: 7 mg/m ³
		Ceiling: 7 mg/m ³	-
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

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 Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. The protective gloves to be used must comply with the specifications

of EC Directive 89/686/EEC and the related standard EN374. Wear protective nitrile rubber

gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection Appropriate respiratory protection should be selected and used according to the chemical

nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be

required.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

AGHS / EN Page 6 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Liquid Physical state Liquid

Color No information available Odor (includes odor threshold) No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing pointNo data availableNone knownBoiling point (or initial boiling point orNo data availableNone known

boiling range)

Flammability 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

None known No data available Flash point **Autoignition temperature** No data available None known **Decomposition temperature** No data available None known SADT (°C) No data available None known No data available None known pН No data available

pH (as aqueous solution)

No data available

None known

None known

No data available

Partition coefficient n-octanol/water (log No data available None known

Vapor pressure (includes evaporation rate)No data available

None known
None known
None known

Density and/or relative densityNo data availableNone knownBulk densityNo data availableLiquid DensityNo data available

Liquid DensityNo data availableRelative vapor densityNo data availableNone known

Particle characteristics
None known
Particle Size
No data available

No data available

Other information

Information with regard to physical hazard classes

10. Stability and reactivity

Particle Size Distribution

Reactivity No information available.

Chemical stability Stable under normal conditions.

AGHS / EN Page 7/16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Oxidizing agent.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

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. Causes mild skin irritation.

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

No information available

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

 ATEmix (oral)
 99,999.00 mg/kg

 ATEmix (dermal)
 99,999.00 mg/kg

 ATEmix (inhalation-gas)
 99,999.00 ppm

 ATEmix (inhalation-dust/mist)
 99,999.00 mg/l

 ATEmix (inhalation-vapor)
 99,999.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol = 12600 mg/kg (Rat) 56-81-5		> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h
Hydrochloric acid 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat)1 h
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

AGHS / EN Page 8 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

1310-73-2			
Octylphenol ethylene oxide	= 1800 mg/kg (Rat)	-	-
condensate			
9002-93-1			

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 mild skin irritation.

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 exposureNo information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Glycerol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		
Sodium hydroxide	-	LC50: =45.4mg/L (96h,	-	-

AGHS / EN Page 9 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

1310-73-2 Oncorhynchus mykiss)

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Glycerol 56-81-5	-1.75
Octylphenol ethylene oxide condensate 9002-93-1	2.7

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused Dispose of in accordance with local regulations. Dispose of waste in accordance with

products environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT

UN number or ID number UN3264

Extended proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

Transport hazard class(es) 8
Packing group | | | |

Special Provisions IB3, T7, TP1, TP28

DOT Marine Pollutant NP

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid), 8, III

Emergency Response Guide 154

Number

TDG

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

AGHS / EN Page 10 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

Transport hazard class(es) 8
Packing group | ||

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid), 8, III

MEX

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

Transport hazard class(es) 8
Packing group | | | |

Technical Name Hydrochloric acid

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid), 8, III

Special Provisions 223, 274

ICAO (air)

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

Transport hazard class(es) 8
Packing group | | |

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid), 8, III

Special Provisions A3

<u>IATA</u>

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

Transport hazard class(es) 8
Packing group III

Technical Name Hydrochloric acid

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid), 8, III

Special Provisions A3, A803 ERG Code 8L

IMDG

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

Transport hazard class(es) 8

Packing group III F-A S-B Special Provisions 223, 274

Marine pollutant NP

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid), 8, III

15. Regulatory information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

AGHS / EN Page 11 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

The Rotterdam Convention Not applicable

International Inventories

TSCA

LGC has not confirmed that the chemical substances in this product are on the TSCA Inventory, and LGC is distributing this product solely for use either in applications statutorily exempt from TSCA and regulated under other laws (e.g., FFDCA, FIFRA) or in research and development activities in accordance with the TSCA Inventory R&D exemption provided at 40 CFR 720.36. It is the end-user's responsibility to understand and follow the requirements that apply to its use of this product.

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Glycerol	56-81-5	Present	Active
Water	7732-18-5	Present	Active
Hydrochloric acid	7647-01-0	Present	Active
Trometamol	77-86-1	Present	Active
Sodium chloride	7647-14-5	Present	Active
Octylphenol ethylene oxide condensate	9002-93-1	Present	Active
Enzyme (Non hazardous)	-	-	Unknown *
Sodium hydroxide	1310-73-2	Present	Active
Edetate disodium	6381-92-6	Present	Active
(2S,3S)-1,4-Dimercaptobutane-2,3-diol	3483-12-3	Present	Active

^{*}Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** 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 PICCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status. TCSI

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 Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

AGHS / EN Page 12 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

NZIOC - New Zealand Inventory of Chemicals **TCSI** - Taiwan Chemical Substance Inventory

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrochloric acid 7647-01-0	5000 lb	-	-	Х
Sodium hydroxide 1310-73-2	1000 lb	-	-	Х

CAA (Clean Air Act)

This product contains the following substances which are regulated pollutants to the Clean Air Act (CAA).

Chemical name	Hazardous air pollutants (HAPs)	Ozone-depleting substances (ODS)
Hydrochloric acid	Present	-
7647-01-0		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous	Reportable Quantity (RQ)
		Substances RQs	
Hydrochloric acid	5000 lb	5000 lb	RQ 5000 lb final RQ
7647-01-0			RQ 2270 kg final RQ
Sodium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
	,		,

AGHS / EN Page 13 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

Glycerol 56-81-5	X	X	X
Water 7732-18-5	-	-	Х
Hydrochloric acid 7647-01-0	Х	X	X
Sodium hydroxide 1310-73-2	Х	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 3 Flammability 0 Instability 0 Special hazards - Hallth hazards 0 Flammability 0 Physical hazards 4 Personal protection -

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

Legend

ACGIH	American Conference of Governmental Industrial Hygienists	
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
	(Europe)	
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)	
AIIC	Australian Inventory of Industrial Chemicals	
ATE	Acute Toxicity Estimate	
ASTM	American Society for the Testing of Materials	
bar	Biological Reference Values for Chemical Compounds in the Work Area	
BAT	Biological tolerance values for occupational exposure	
BEL	Biological exposure limits	
bw	Body weight	
Ceiling	Maximum limit value	
CMR	Carcinogen, Mutagen or Reproductive Toxicant	
DOT	Department of Transportation (United States)	
DSL	Domestic Substances List (Canada)	
EmS	Emergency Schedule	
ENCS	Existing and New Chemical Substances (Japan)	
EPA	Environmental Protection Agency	
GHS	Globally Harmonized System	
HMIS	Hazardous Materials Identification System	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous	
	Chemicals in Bulk	
ICAO	International Civil Aviation Organization	
IECSC	Inventory of Existing Chemical Substances in China	

AGHS / EN Page 14 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

IMDG	International Maritime Dangerous Goods	
IMO	International Maritime Danigerous Goods International Maritime Organization	
ISO	International Organization for Standardization	
KECI	Korean Existing Chemicals Inventory	
LC50	Lethal Concentration to 50% of a test population	
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)	
MARPOL	International Convention for the Prevention of Pollution from Ships	
NFPA	National Fire Protection Association	
NIOSH	National Institute for Occupational Safety and Health	
n.o.s.	Not Otherwise Specified	
NOAEC	No Observed Adverse Effect Concentration	
NOAEL	No Observed Adverse Effect Level	
NOELR	No Observable Effect Loading Rate	
NTP	National Toxicology Program (United States)	
NZIoC	New Zealand Inventory of Chemicals	
OECD	Organization for Economic Cooperation and Development	
OEL	Occupational exposure limits	
OSHA	Occupational Safety and Health Administration of the US Department of Labor	
PBT	Persistent, Bioaccumulative and Toxic substance	
PICCS	Philippines Inventory of Chemicals and Chemical Substances	
PMT	Persistent, Mobile and Toxic	
PPE	Personal protective equipment	
QSAR	Quantitative Structure Activity Relationship	
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)	
SADT	Self-Accelerating Decomposition Temperature	
SAR	Structure-activity relationship	
SARA	Superfund Amendments and Reauthorization Act	
SDS	Safety Data Sheet	
SL	Surface Limit	
STEL	Short Term Exposure Limit	
STOT RE	Specific target organ toxicity - Repeated exposure	
STOT SE	Specific target organ toxicity - Single exposure	
TCSI	Taiwan Chemical Substance Inventory	
TDG	Transport of Dangerous Goods (Canada)	
TSCA	Toxic Substances Control Act (United States)	
TWA	Time-Weighted Average	
UN	United Nations	
VOC	Volatile organic compounds	
vPvB	Very Persistent and Very Bioaccumulative	
vPvM	Very Persistent and Very Mobile Very Persistent and Very Mobile	
Sen+	Sensitizer	
Sk*	Skin designation	
**	Hazard Designation	
	เาละสเน มียงเปลเบา	

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR)

AGHS / EN Page 15 / 16



This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

E0001 - Ampligase Thermostable DNA Ligase

Revision date 23-Apr-2025

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)

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 23-Apr-2025

Revision Note No information available.

Disclaimer

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

End of Safety Data Sheet

AGHS / EN Page 16 / 16