

Page 1/9 Revision Date 31-Mar-2025 Version 3

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

Product Identifier

Perihalan Produk: RIPA buffer with EGTA Product Description: RIPA buffer with EGTA

Cat No. : J61951

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Company Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd

Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square, No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,

Selangor Darul Ehsan, Malaysia. Main line: +60 3-5525 7888

Supplier

E-mail address Enquiry.my@thermofisher.com

Emergency Telephone Number CHEMTREC Malaysia 1-800-815-308 (Malay)

CHEMTREC Malaysia (Kuala Lumpur) +(60)-327884561 (Malay)

Tel: +03-5525 7888

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Serious Eye Damage/Eye Irritation Category 2 (H319)

Label Elements



Signal Word Warning

Hazard Statements

H319 - Causes serious eye irritation

Precautionary Statements

RIPA buffer with EGTA Revision Date 31-Mar-2025

Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Storage

P403 - Store in a well-ventilated place

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

Contains a known or suspected endocrine disruptor Included in the list established in accordance with Article 59(1) for having endocrine disrupting properties

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Water	7732-18-5	96.66
Polyethylene glycol octylphenyl ether	9036-19-5	1
Sodium chloride	7647-14-5	0.9
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	1185-53-1	0.8
Cholan-24-oic acid, 3,12-dihydroxy-, monosodium salt,	302-95-4	0.5
(3.alpha.,5.beta.,12.alpha.)-		
Sodium lauryl sulfate	151-21-3	0.1
6,9-Dioxa-3,12-diazatetradecanedioic acid, 3,12-bis(carboxymethyl)-	67-42-5	0.04

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

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

Self-Protection of the First Aider No special precautions required.

Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

RIPA buffer with EGTA

Extinguishing media

Suitable Extinguishing Media

Not combustible.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride, Sodium oxides.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Use personal protective equipment as required.

Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

Conditions for Safe Storage, Including any Incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Specific End Uses

Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Revision Date 31-Mar-2025

RIPA buffer with EGTA Revision Date 31-Mar-2025

Exposure Controls
Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles)

Hand Protection Protective gloves
Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection No protective equipment is needed under normal use conditions

Recommended Filter type: Particle filter

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls No information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical State Liquid

Odor No information available
Odor Threshold No data available
PH No information available

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information availablePoint Point Information available

Flash Point No information available Method - No information available

Evaporation Rate No data available Flammability (solid,gas) Not applicable

Flammability (solid,gas)

Not applicable

Liquid

Explosion Limits

No data available

Vapor Pressure No data available

Vapor Density No data available (Air = 1.0)

Specific Gravity / Density

No data available

Not applicable

Liquid

Water Solubility Miscible

Solubility in other solvents No information available

RIPA buffer with EGTA Revision Date 31-Mar-2025

Partition Coefficient (n-octanol/water)

Component log Pow

1,3-Propanediol, -3.6

2-amino-2-(hydroxymethyl)-,

hydrochloride

Cholan-24-oic acid, 3,12-dihydroxy-, 5.35

monosodium salt,

(3.alpha.,5.beta.,12.alpha.)-

Sodium lauryl sulfate 1.6

Autoignition Temperature
Decomposition Temperature
Viscosity
Explosive Properties
Oxidizing Properties
No data available
No data available
No information available
No information available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known, based on information available.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization No Hazardous Reactions Nor

No information available. None under normal processing.

Conditions to Avoid

None known.

Incompatible Materials

None known.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Sulfur oxides. Hydrogen chloride. Sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Product Information

RIPA buffer with EGTA Revision Date 31-Mar-2025

(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Polyethylene glycol octylphenyl ether	LD50 = 1700 mg/kg (Rat)	-	-
Sodium chloride	LD50 = 3550 mg/kg (Rat)	LD50 > 10000 mg/kg (Rabbit)	LC50 > 42 mg/L (Rat) 1 h
1,3-Propanediol,	OECD 425 (Rat)	OECD 402 (Rat)	-
2-amino-2-(hydroxymethyl)-, hydrochloride	LD50 > 5000 mg/kg bw	LD50 > 5000 mg/kg bw	
Cholan-24-oic acid, 3,12-dihydroxy-, monosodium salt, (3.alpha.,5.beta.,12.alpha.)-	LD50 = 1370 mg/kg (Rat)	-	-
Sodium lauryl sulfate	LD50 = 1288 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	LC50 > 3900 mg/m ³ (Rat) 1 h
6,9-Dioxa-3,12-diazatetradecanedioic acid, 3,12-bis(carboxymethyl)-	LD50 = 3587 mg/kg (Rat)	-	-

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory SkinNo data available

No data available

Component	Test method	Test species	Study result
1,3-Propanediol,	OECD Test Guideline 406	guinea pig	non-sensitising
2-amino-2-(hydroxymethyl)-, hydrochloride			_
1185-53-1 (0.8)			

(e) germ cell mutagenicity; No data available

	Component	Test method	Test species	Study result
7		OECD Test Guideline 471	Mammalian	negative
	2-amino-2-(hydroxymethyl)-, hydrochloride	Bacterial Reverse Mutation Test	in vitro	-
	1185-53-1 (0.8)			

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target OrgansNo information available.

(j) aspiration hazard; No data available

RIPA buffer with EGTA Revision Date 31-Mar-2025

Symptoms / effects,both acute and No information available.

delayed

Endocrine Disrupting Properties

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Sodium chloride	Pimephals prome:	EC50: 1000 mg/L/48h		
	LC50: 7650 mg/L/96h			
1,3-Propanediol,		Daphnia Magna		OECD 209
2-amino-2-(hydroxymethyl)-, hydrochloride		EC50 >100 mg/L (48h)		EC50 > 1000 mg/L (3h)
Sodium lauryl sulfate	1.31 mg/L LC50 96 h 9.9-20.1 mg/L LC50 96 h 4.5 mg/L LC50 96 h 4.62 mg/L LC50 96 h 7.97 mg/L LC50 96 h 10.2-22.5 mg/L LC50 96 h 10.8-16.6 mg/L LC50 96 h 13.5-18.3 mg/L LC50 96 h 15-18.9 mg/L LC50 96 h 22.1-22.8 mg/L LC50 96 h 4.06-5.75 mg/L LC50 96 h 4.3-8.5 mg/L LC50 96 h 5.8-7.5 mg/L LC50 96 h 8-12.5 mg/L LC50 96 h	EC50: = 1.8 mg/L, 48h (Daphnia magna)	EC50: 3.59 - 15.6 mg/L, 96h static (Pseudokirchneriella subcapitata) EC50: = 117 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: 30 - 100 mg/L, 96h (Desmodesmus subspicatus) EC50: = 53 mg/L, 72h (Desmodesmus subspicatus)	= 0.46 mg/L EC50 Photobacterium phosphoreum 30 min = 0.72 mg/L EC50
	8-12.5 mg/L LC50 96 h 4.2 mg/L LC50 96 h			

Persistence and degradability

Persistence

Miscible with water, Persistence is unlikely, based on information available.

Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
1,3-Propanediol,	-3.6	No data available
2-amino-2-(hydroxymethyl)-, hydrochloride		
Cholan-24-oic acid, 3,12-dihydroxy-,	5.35	No data available
monosodium salt,		
(3.alpha.,5.beta.,12.alpha.)-		
Sodium lauryl sulfate	1.6	No data available

Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

Endocrine Disruptor Information
Assess endocrine disrupting
properties for the environment

Substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Substances	Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated
	-	-	Substances

RIPA buffer with EGTA Revision Date 31-Mar-2025

Polyethylene glycol octylphenyl ether	Group III Chemical	

Co	mponent	EU National Authorities Endocrine Disruptor Lists - Environment	Japan - Endocrine Disruptor Information
	ycol octylphenyl ether 6-19-5 (1)	List I	

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

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated

Road and Rail Transport Not regulated

<u>IATA</u> Not regulated

Special Precautions for User No special precautions required

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
Water	231-791-2	Х	Х	Х	Х		Х	Х	KE-35400
Polyethylene glycol octylphenyl ether	-	Х	Х	Х	Х	Х	Х	Х	KE-33567
Sodium chloride	231-598-3	Х	X	Х	Х	X	Χ	Χ	KE-31387
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	214-684-5	Х	Х	X	X		X	Х	KE-34819
Cholan-24-oic acid, 3,12-dihydroxy-, monosodium salt, (3.alpha.,5.beta.,12.alpha.)-	206-132-7	Х	Х	-	-	Х	Х	Х	KE-10812
Sodium lauryl sulfate	205-788-1	X	X	Х	Х	X	Х	Χ	KE-21884
6,9-Dioxa-3,12-diazatetradecanedi oic acid, 3,12-bis(carboxymethyl)-	200-651-2	Х	Х	Х	-		Х	Х	-

National Regulations

RIPA buffer with EGTA Revision Date 31-Mar-2025

Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

Substances List

SECTION 16: OTHER INFORMATION

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Prepared By Health, Safety and Environmental Department

Revision Date 31-Mar-2025 **Revision Summary** Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

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