

SAFETY DATA SHEET (SDS)

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008, (EU) No. 453/2010

Revision Date 11-Sep-2024 WAI2 - EGHS - EUROPEAN Revision Number 1

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name Eutech pH 10.01 Buffer Solution

Product No 01X608101
Unique Formula Identifier (UFI) Not applicable

REACH registration number Not applicable

Pure substance/mixture Mixture

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

Recommended Use Use as laboratory reagent

Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Manufacturer, Importer, Supplier Eutech Instruments Pte Ltd

part of Thermo Fisher Scientific

7 Gul Circle, #2M-01 Keppel Logistics Building Singapore 629563

E-mail address wlp.techsupport@thermofisher.com

Made in Singapore

1.4. Emergency telephone number 24 Hour Emergency Phone Number

CHEMTREC®

Within USA and Canada: 1-800-424-9300 Outside USA and Canada: 1-703-527-3887

(collect calls accepted)

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SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification - Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label elements

Signal Word

None

Hazard Statements

None

Precautionary Statements

2.3. Other hazards **General Hazards**

This product does not contain any known or suspected endocrine disruptors

Toxic to terrestrial vertebrates

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No	CAS No	Weight %	CLP Classification - Regulation (EC) No 1272/2008	REACH Reg. No
Water	EEC No. 231-791-2	7732-18-5	90 - 100%	Not classified	No information available
2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfo-1-naph alenyl)azo]-, trisodium sali	nth	915-67-3	0 - 10%		No information available
Sodium bicarbonate	EEC No. 205-633-8	144-55-8	0 - 10%		No information available
Benzoic acid, 4-hydroxy-, methyl ester	EEC No. 202-785-7	99-76-3	0 - 10%		No information available
C.I. Acid Blue 9, disodium s	alt EEC No. 223-339-8	3844-45-9	0 - 10%		No information available

Component	CAS No	Specific concentration limits (SCL's)	M-Factor	Component notes
Water	7732-18-5	-	-	-
2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfo-1-naphthalenyl)azo]-, trisodium salt	915-67-3	-	-	-
Sodium bicarbonate	144-55-8	-	-	-
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	-	-	-
C.I. Acid Blue 9, disodium salt	3844-45-9	-	-	-

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice Use first aid treatment according to the nature of the injury. For further assistance, contact

your local Poison Control Center. Show this safety data sheet to the doctor in attendance.

Eye Contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also

under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms

occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call

a physician or poison control center immediately.

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

4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and

effects

See section 11, See section 2 for more information

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician 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.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

6.1. Personal precautions, protective equipment and emergency procedures

Personal PrecautionsUse personal protective equipment as required. Evacuate personnel to safe areas.

6.2. Environmental precautions

Environmental Precautions Should not be released into the environment. Collect spillage. Dispose of waste product or

used containers according to local regulations.

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6.3. 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 Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Reference to Other Sections

Refer to protective measures listed in Sections 7 and 8

See Section 8 for information on appropriate personal protective equipment

See Section 12 for additional Ecological Information

See Section 13 for additional waste treatment information

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

To avoid risks to human health and the environment, comply with the instructions for use. Wear personal protective equipment/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas.

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. Store at room temperature in the original container. Protect from direct sunlight.

7.3. Specific end use(s)

Specific Use(s)

Use as laboratory reagent

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **CH** - The Government of Switzerland has set a directive on limit values for working materials (Grenzwerte am Arbeitsplatz) which is based on the Swiss Federal Regulation "Verordnung über die Verhütung von Unfällen und Berufskrankheiten". This directive is administered, periodically revised and enforced by SUVA (Swiss National Accident Insurance Fund).

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Sodium bicarbonate					TWA: 5 mg/m ³ 8
					hodinách.
					Ceiling: 10 mg/m ³

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Sodium bicarbonate	TWA: 5 mg/m ³				

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Sodium bicarbonate	MAC: 5 mg/m ³				
Benzoic acid,	MAC: 4 mg/m ³				

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4-hydroxy-, methyl			
ester			

Biological limit values

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

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived No Effect Level (DNEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Benzoic acid, 4-hydroxy-, methyl ester				DNEL = 9.8mg/kg bw/dav
99-76-3 (0 - 10%)				2 3.2y

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Benzoic acid, 4-hydroxy-, methyl ester				DNEL = 58.76mg/m ³
99-76-3 (0 - 10%)				

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Benzoic acid, 4-hydroxy-,	$PNEC = 2.4 \mu g/L$	PNEC = 63.2µg/kg	PNEC = 0.112mg/L	PNEC = 2mg/L	$PNEC = 11.5 \mu g/kg$
methyl ester		sediment dw			soil dw
99-76-3 (0 - 10%)					

Component	Marine water	Marine water sediment	Marine water Intermittent	Food chain	Air
Benzoic acid, 4-hydroxy-,	$PNEC = 0.24 \mu g/L$	$PNEC = 6.32 \mu g/kg$			
methyl ester		sediment dw			
99-76-3 (0 - 10%)					

8.2. Exposure controls

Engineering Measures None under normal use conditions

Personal protective equipment

Eye/face Protection Wear chemical splash goggles and face shield. If splashes are likely to occur:. Goggles.

Skin and body protection Wear protective gloves/protective clothing.

Respiratory Protection No protective equipment is needed under normal use conditions.

Particle filter. **Recommended Filter type:**

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Remarks • Method

No information available **Environmental exposure controls**

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid **Appearance** Blue Odor Odorless

No information available **Odor Threshold**

10.01 @25 °C PH Range

Property Values Melting point/freezing point No information available

Boiling Point/Range ~ 100 °C

Flash Point (High in °C) No information available **Evaporation Rate** No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available **Vapor Density** No information available **Specific Gravity** No information available

Water Solubility Soluble

No information available Solubility in other solvents No information available **Partition coefficient**

Autoignition Temperature

No information available **Decomposition Temperature** Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive Properties** No information available **Oxidizing Properties** No information available

9.2. Other information

Softening Point No information available Molecular Weight No information available **VOC Content(%)** No information available 1.0 g/cm3 @25°C **Density** No information available **Bulk Density**

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available

10.2. Chemical stability

Stable under normal conditions

Explosion Data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None

10.3. Possibility of hazardous reactions

None under normal processing

10.4. Conditions to avoid

Extremes of temperature and direct sunlight

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10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	LD50 > 90 mL/kg (Rat)		
2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfo-1-naphthalenyl)azo]-, trisodium salt	LD50 = 6 g/kg (Rat)		
Sodium bicarbonate	LD50 = 4220 mg/kg (Rat)		
C.I. Acid Blue 9, disodium salt	LD50 > 1900 mg/kg (Rat)		

No information available Skin Corrosion/Irritation

Serious eye damage/eye irritation No information available

No information available Sensitization

Mutagenic Effects No information available

Carcinogenic effects No information available

Reproductive Effects No information available

No data available (h) STOT-single exposure;

(i) STOT-repeated exposure; No data available

Target Organs None known.

Aspiration hazard No information available

11.2. Information on other hazards

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

Component	EU National Authorities Endocrine Disruptor Lists - Health
Benzoic acid, 4-hydroxy-, methyl ester 99-76-3 (0 - 10%)	List II

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects

	Component	Freshwater Algae	Freshwater Fish	Water Flea
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Sodium bicarbonate	-	LC50: 8250 - 9000 mg/L, 96h static (Lepomis macrochirus)	EC50: = 2350 mg/L, 48h (Daphnia magna)
Benzoic acid, 4-hydroxy-, methyl ester	<u>-</u>	LC50: = 59.5 mg/L, 96h semi-static (Oryzias latipes)	-

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Component	log Pow	Bioconcentration factor (BCF)
2,7-Naphthalenedisulfonic acid,	-5.13	No data available
3-hydroxy-4-[(4-sulfo-1-naphthalenyl)azo]-,		
trisodium salt		
C.I. Acid Blue 9, disodium salt	<-6.4	No data available

12.4. Mobility in soil

Component	log Pow
2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfo-1-naphthalenyl)azo]-,	-5.13
trisodium salt	
915-67-3 (0 - 10%)	
C.I. Acid Blue 9, disodium salt	<-6.4
3844-45-9 (0 - 10%)	

12.5. Results of PBT and vPvB assessment

No information available

12.6. Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant This product does not contain any known or suspected substance This product does not contain any known or suspected substance **Ozone Depletion Potential**

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Improper disposal or reuse of this container may be dangerous and illegal.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not Regulated 14.1 UN-No 14.2 Proper Shipping Name Not Regulated Not Regulated 14.3 Hazard Class 14.4 Packing Group Not Regulated 14.5 Marine Pollutant Not Applicable

14.6 Special Provisions None

14.7 Transport in bulk according to No information available

Annex II of MARPOL 73/78 and the

IBC Code

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ADR

14.1. UN number Not Regulated 14.2. UN proper shipping name Not Regulated Not Regulated 14.3. Transport hazard class(es) 14.4. Packing group Not Regulated

ICAO

14.1 UN-No Not Regulated Not Regulated 14.2 Proper Shipping Name 14.3 Hazard Class Not Regulated 14.4 Packing Group Not Regulated 14.5 Environmental hazard Not Applicable 14.6 Special Provisions None

IATA

Not Regulated 14.1 UN-No Not Regulated 14.2 Proper Shipping Name 14.3 Hazard Class Not Regulated 14.4 Packing Group Not Regulated 14.5 Environmental hazard Not Applicable 14.6 Special Provisions None

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS), U.S.A. (TSCA).

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Water	7732-18-5	231-791-2	-	ı	X	X	KE-35400	X	ı
2,7-Naphthalenedisulfonic acid,	915-67-3	213-022-2	-	-	Х	Х	KE-20344	Х	Х
3-hydroxy-4-[(4-sulfo-1-naphthalen									
yl)azo]-, trisodium salt									
Sodium bicarbonate	144-55-8	205-633-8	-	-	Х	Х	KE-31360	Χ	X
Benzoic acid, 4-hydroxy-, methyl	99-76-3	202-785-7	-	-	Х	Х	KE-20379	Х	Х
ester									
C.I. Acid Blue 9, disodium salt	3844-45-9	223-339-8	-	_	Х	Х	KE-13703	X	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Water	7732-18-5	X	ACTIVE	Х	-	X	X	Х
2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfo-1-naphthalen yl)azo]-, trisodium salt	915-67-3	X	ACTIVE	Х	-	X	Х	Х
Sodium bicarbonate	144-55-8	X	ACTIVE	Х	-	X	X	Х
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Х	ACTIVE	Х	-	Х	Х	Х
C.I. Acid Blue 9. disodium salt	3844-45-9	Х	ACTIVE	Х	-	X	Х	Х

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

European Union

Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Water	7732-18-5	-	-	-
2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfo-1-naphthalenyl	915-67-3	-	Use restricted. See entry 75.	-
)azo]-, trisodium salt			(see link for restriction details)	
Sodium bicarbonate	144-55-8	-	-	-
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	-	-	-
C.I. Acid Blue 9, disodium salt	3844-45-9	-	-	-

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

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

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 1 (self classification)

Component	Germany - Water Classification (AwSV)
Sodium bicarbonate 144-55-8 (0 - 10%)	WGK1
Benzoic acid, 4-hydroxy-, methyl ester 99-76-3 (0 - 10%)	WGK1
C.I. Acid Blue 9, disodium salt 3844-45-9 (0 - 10%)	WGK1

Swiss Regulations

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2).

Take note on Article 13 Maternity Ordinance (SR 822.111.52) with regards expectant and nursing mothers.

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Benzoic acid, 4-hydroxy-, methyl ester 99-76-3 (0 - 10%)	Prohibited and Restricted Substances		
C.I. Acid Blue 9, disodium salt 3844-45-9 (0 - 10%)	Prohibited and Restricted Substances		

15.2. Chemical safety assessment

A Chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

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SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

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

CAS - Chemical Abstracts Service

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

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

Substances/EU List of Notified Chemical Substances

Substances List

ENCS - Japanese Existing and New Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

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

TWA TWA (time-weighted average)

Ceiling Maximum limit value

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)

STEL STEL (Short Term Exposure Limit)

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 Regulatory Affairs

Prepared For Thermo Fisher Scientific Inc.

Issue Date No information available

Revision Date 11-Sep-2024

Reason for revision SDS sections updated.

Training Advice Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS),

Personal Protective Equipment (PPE) and hygiene.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006

Disclaimer

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End of Safety Data Sheet

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