

according to Regulation (EC) No. 1907/2006

Revision Date 17-Mar-2024 Revision Number 3

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: <u>Alkaline running buffer solution</u>

Cat No. : J63170

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

Thermo Fisher (Kandel) GmbH

Erlenbachweg 2, 76870 Kandel, Germany

Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300

**Swiss distributor -** Fisher Scientific AG Neuhofstrasse 11, CH 4153 Reinach

Tel: +41 (0) 56 618 41 11

https://www.fishersci.ch/ch/en/customer-help-

support/forms/email-us.html

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

customers in Switzerland:

Tox Info Suisse Emergency Number: 145 (24hr)

Tox Info Suisse: +41-44 251 51 51 (Emergency number from abroad)

Chemtrec (24h) Toll-Free: 0800 564 402 Chemtrec Local: +41-43 508 20 11 (Zurich)

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

**Physical hazards** 

ALFAAJ63170

#### Alkaline running buffer solution

Revision Date 17-Mar-2024

Based on available data, the classification criteria are not met

## **Health hazards**

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 2 (H315) Category 2 (H319)

#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



#### Signal Word

#### Warning

#### **Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

## **Precautionary Statements**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical advice/attention

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Water	7732-18-5	231-791-2	96.1	-
Sodium hydroxide	1310-73-2	215-185-5	2	Skin Corr. 1A (H314) Eye Dam. 1 (H318)
Glycine, N,N-1,2-ethanediylbis[N-(carboxymethyl)-, disodium salt, dihydrate	6381-92-6	613-386-6	1.9	Acute Tox. 4 (H332) STOT RE 2 (H373)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Sodium hydroxide	Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Eye Irrit. 2 :: 0.5%<=C<2% Skin Irrit. 2 :: 0.5%<=C<2%	-	-

Revision Date 17-Mar-2024

Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

**General Advice** If symptoms persist, call a physician.

**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. If skin irritation persists,

call a physician.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

None reasonably foreseeable.

#### 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**

Not combustible.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### 5.2. 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), Sodium oxides.

#### 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

Ensure adequate ventilation. Use personal protective equipment as required.

#### Alkaline running buffer solution

#### 6.2. Environmental precautions

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

## 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

#### 7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510

Storage Class (LGK) (Germany)

Storage Class/LGK 12

Switzerland - Storage of hazardous substances

Storage class - SC 10/12

https://www.kvu.ch/de/themen/stoffe-und-produkte https://www.kvu.ch/fr/themes/substances-et-produits https://www.kvu.ch/it/temi/sostanze-e-prodotti

Revision Date 17-Mar-2024

## 7.3. Specific end use(s)

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

#### **Exposure limits**

List source(s): **UK** - EH40/2005 Work Exposure Limits, Forth edition. Published 2020. **IRE** - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority. **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	European Union	The United Kingdom	France	Belgium	Spain
Sodium hydroxide		2 mg/m <sup>3</sup> STEL	TWA / VME: 2 mg/m <sup>3</sup> (8	2 mg/m³ VLE	STEL / VLA-EC: 2
•		_	heures).	-	mg/m³ (15 minutos).

Component	Italy	Germany	Portugal	The Netherlands	Finland
Sodium hydroxide		2 mg/m3 TWA (inhalable	Ceiling: 2 mg/m <sup>3</sup>		Ceiling: 2 mg/m <sup>3</sup>
		fraction)			

	Component	Austria	Denmark	Switzerland	Poland	Norway
Ī	Sodium hydroxide	MAK-KZGW: 4 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup> 15	STEL: 1 mg/m <sup>3</sup> 15	Ceiling: 2 mg/m <sup>3</sup>
ı	-	15 Minuten		Minuten	minutach	

## Alkaline running buffer solution

Revision Date 17-Mar-2024

MAK-TMW: 2 mg/m³ 8	TWA: 2 mg/m <sup>3</sup> 8	TWA: 0.5 mg/m <sup>3</sup> 8	
Stunden	Stunden	godzinach	

	Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
I	Sodium hydroxide	TWA: 2.0 mg/m <sup>3</sup>	STEL-KGVI: 2 mg/m <sup>3</sup> 15	STEL: 2 mg/m <sup>3</sup> 15 min		TWA: 1 mg/m <sup>3</sup> 8
-			minutama.			hodinách.
-						Ceiling: 2 mg/m <sup>3</sup>

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Sodium hydroxide	TWA: 1 mg/m <sup>3</sup> 8		STEL: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup> 15	STEL: 2 mg/m <sup>3</sup>
	tundides.		TWA: 2 mg/m <sup>3</sup>	percekben. CK	_
	STEL: 2 mg/m <sup>3</sup> 15		_	TWA: 1 mg/m <sup>3</sup> 8	
	minutites.			órában. AK	

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Sodium hydroxide	TWA: 0.5 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>			

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Sodium hydroxide		TWA: 2 mg/m <sup>3</sup>		Binding STEL: 2 mg/m <sup>3</sup>	
		_		15 minuter KGV	
				TLV: 1 mg/m <sup>3</sup> 8 timmar.	
				NGV	

## **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) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Oral)	Acute effects systemic (Oral)	Chronic effects local (Oral)	Chronic effects systemic (Oral)
Glycine, N,N-1,2-ethanediylbis[N-(carbox ymethyl)-, disodium salt, dihydrate 6381-92-6 ( 1.9 )				DNEL = 25 mg/kg

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Sodium hydroxide			DNEL = 1mg/m <sup>3</sup>	
1310-73-2 ( 2 )				
Glycine,	$DNEL = 3 \text{ mg/m}^3$	$DNEL = 3 \text{ mg/m}^3$	$DNEL = 0.6 \text{ mg/m}^3$	DNEL = $1,5 \text{ mg/m}^3$
N,N-1,2-ethanediylbis[N-(carbox				
ymethyl)-, disodium salt,				
dihydrate				
6381-92-6 ( 1.9 )				

## **Predicted No Effect Concentration (PNEC)**

No information available.

Component	Fresh water	Fresh water sediment	Microorganisms in sewage treatment	` ' '
Glycine,	PNEC = 2,5 mg/l		_	PNEC = 1,1 mg/kg
N,N-1,2-ethanediylbis[N-(c	-			

Revision Date 17-Mar-2024

#### Alkaline running buffer solution

arboxymethyl)-, disodium			
salt, dihydrate			
6381-92-6 ( 1.9 )			

Component	Marine water	Marine water sediment	Marine water Intermittent	Food chain	Air
Glycine,	PNEC = 0,25 mg/l				
N,N-1,2-ethanediylbis[N-(c					
arboxymethyl)-, disodium					
salt, dihydrate					
6381-92-6 ( 1.9 )					

#### 8.2. Exposure controls

#### **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material Natural rubber Nitrile rubber Neoprene	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
PVC				

**Skin and body protection** Long sleeved clothing.

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) 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, gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

**Recommended half mask:-** Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

**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** 

Odor No information available
Odor Threshold No data available

Liquid

Alkaline running buffer solution

Revision Date 17-Mar-2024

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information availableFlammability (liquid)No data available

Flammability (solid,gas)

Not applicable

Explosion Limits No data available

Flash Point No information available Method - No information available

Autoignition TemperatureNo data availableDecomposition TemperatureNo data availablepHNo information availableViscosityNo data available

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor Pressure<=1100 hPa @ 50 °C</th>Density / Specific GravityNo data available

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous PolymerizationNo information available.Hazardous ReactionsNone under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Sodium oxides.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

(a) acute toxicity;

Oral

Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met

Toxicology data for the components

#### Alkaline running buffer solution

Revision Date 17-Mar-2024

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Sodium hydroxide	LD50 = 325 mg/kg (Rat)	LD50 = 1350 mg/kg ( Rabbit )	-

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

RespiratoryNo data availableSkinNo data available

(e) germ cell mutagenicity; No data available

(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 Organs No information available.

(j) aspiration hazard; No data available

 $\textbf{Symptoms I effects,} \textbf{both acute and } \ \ \textbf{No information available}.$ 

delayed

11.2. Information on other hazards

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**

# 12.1. Toxicity Ecotoxicity effects

 Component
 Freshwater Fish
 Water Flea
 Freshwater Algae

 Sodium hydroxide
 LC50: = 45.4 mg/L, 96h static

(Oncorhynchus mykiss)	

Component	Microtox	M-Factor
Sodium hydroxide	•	

## 12.2. Persistence and degradability

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

Alkaline running buffer solution Revision Date 17-Mar-2024

**12.3. Bioaccumulative potential** Bioaccumulation is unlikely

12.4. 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

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

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

## **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains.

Switzerland - Waste Ordinance Disposal should be in accordance with applicable regional, national and local laws and

regulations. Ordinance on the Avoidance and the Disposal of Waste (Waste Ordinance,

ADWO) SR 814.600

https://www.fedlex.admin.ch/eli/cc/2015/891/en

## **SECTION 14: TRANSPORT INFORMATION**

## IMDG/IMO

**14.1. UN number** UN1824

14.2. UN proper shipping name SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es) 8
14.4. Packing group III

ADR

**14.1. UN number** UN1824

14.2. UN proper shipping name SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es) 8 14.4. Packing group III

IATA

**14.1. UN number** UN1824

14.2. UN proper shipping name SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

Alkaline running buffer solution Revision Date 17-Mar-2024

14.4. Packing group III

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

## **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). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Water	7732-18-5	231-791-2	-	-	Х	X	KE-35400	Х	-
Sodium hydroxide	1310-73-2	215-185-5	-	-	Х	X	KE-31487	X	Х
Glycine,	6381-92-6	-	-	-	Х	X	-	-	-
N,N-1,2-ethanediylbis[N-(carboxy									
methyl)-, disodium salt, dihydrate									

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Water	7732-18-5	Х	ACTIVE	Х	-	Х	Х	Х
Sodium hydroxide	1310-73-2	X	ACTIVE	Х	-	X	Х	Х
Glycine, N,N-1,2-ethanediylbis[N-(carboxy	6381-92-6	-	-	Х	-	Х	Х	Х
methyl)-, disodium salt, dihydrate								

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

#### Authorisation/Restrictions according to EU REACH

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	-	-	-
Sodium hydroxide	1310-73-2	-	Use restricted. See item 75. (see link for restriction details)	-
Glycine, N,N-1,2-ethanediylbis[N-(carboxym ethyl)-, disodium salt, dihydrate	6381-92-6	-	-	-

#### **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

#### Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Water	7732-18-5	Not applicable	Not applicable
Sodium hydroxide	1310-73-2	Not applicable	Not applicable
Glycine, N,N-1,2-ethanediylbis[N-(car boxymethyl)-, disodium salt,		Not applicable	Not applicable

#### Alkaline running buffer solution

Revision Date 17-Mar-2024

dihydrate		

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

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

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)	Germany - TA-Luft Class
Sodium hydroxide	WGK1	
Glycine, N,N-1,2-ethanediylbis[N-(carboxy methyl)-, disodium salt, dihydrate		

#### **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
Sodium hydroxide	Prohibited and Restricted		
1310-73-2 ( 2 )	Substances		
Glycine,	Prohibited and Restricted		
N,N-1,2-ethanediylbis[N-(carboxymethyl)-,	Substances		
disodium salt, dihydrate			
6381-92-6 ( 1.9 )			

#### 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## **SECTION 16: OTHER INFORMATION**

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

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H332 - Harmful if inhaled

#### 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

Substances List

TWA - Time Weighted Average

#### Alkaline running buffer solution

Revision Date 17-Mar-2024

PICCS - Philippines Inventory of Chemicals and Chemical Substances **ENCS** - Japanese Existing and New 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 IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC) **DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LD50 - Lethal Dose 50%

LC50 - Lethal Concentration 50% EC50 - Effective Concentration 50% NOEC - No Observed Effect Concentration POW - Partition coefficient Octanol:Water PBT - Persistent, Bioaccumulative, Toxic vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of ICAO/IATA - International Civil Aviation Organization/International Air

Dangerous Goods by Road **Transport Association** 

IMO/IMDG - International Maritime Organization/International Maritime MARPOL - International Convention for the Prevention of Pollution from

Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate VOC - (volatile organic compound)

**BCF** - Bioconcentration factor

Key literature references and sources for data https://echa.europa.eu/information-on-chemicals

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

**Physical hazards** On basis of test data **Health Hazards** Calculation method Calculation method **Environmental hazards** 

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

**Prepared By** Health, Safety and Environmental Department

**Revision Date** 17-Mar-2024

**Revision Summary** New emergency telephone response service provider.

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

For Switzerland - Compiled in accordance with the technical provisions referred to in Annex 2, Number 3, ChemO (SR 813.11 - Ordinance on Protection against Dangerous Substances and Preparations).

#### 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**