Buffer solution pH 11.00 (20°C)

33650-500ML

Version 3.0 Revision Date 20.12.2022 Supersedes 2

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

1.1. Product identifier

Product name	:	Buffer solution pH 11.00 (20°C)
SDS-number	:	000000021871
Type of product	:	Mixture
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.

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

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell International Inc. 115 Tabor Road 07950-2546 Morris Plains USA	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:		
For further information, please contact:	:	SafetyDataSheet@Honeywell.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1-303-389-1414 (Medical)
Country based Poison Control Center	:	see chapter 15.1

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Reproductive toxicity Category 1B
H360FD May damage fertility. May damage the unborn child.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :

Signal word	:	Danger	
Hazard statements	:	H360FD	May damage fertility. May damage the unborn child.
Precautionary statements	:	P201	Obtain special instructions before use.
		P263	Avoid contact during pregnancy and while nursing.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
		P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Hazardous components which must be listed on the label : orthoboric acid, sodium salt

2.3. Other hazards

This product is a mixture. Health hazard information is based on its components. Results of PBT and vPvB assessment, see chapter 12.5.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
orthoboric acid, sodium salt	13840-56-7 005-011-00-4 237-560-2	Repr. 1B; H360FD	>= 0,5 % - < 4,5 %	
Potassium chloride	7447-40-7 231-211-8		<= 1 %	N.C.*

N.C.* - Non-hazardous substance - for information only

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:
If breathed in, move person into fresh air. If symptoms persist, call a physician.

Skin contact:
After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.

Eye contact:
Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.

Ingestion:
When swallowed, allow water to be drunk. Consult a physician.

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

No data available

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray
Foam
Carbon dioxide (CO_2)
Dry powder

Extinguishing media which shall not be used for safety reasons:
High volume water jet

5.2. Special hazards arising from the substance or mixture

Fire may cause evolution of:
Boron oxides
Sodium oxides
Potassium oxide
Chlorine compounds

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Do not use a solid water stream as it may scatter and spread fire.Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Wear personal protective equipment. Unprotected persons must be kept away. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Wear personal protective equipment. Avoid exposure - obtain special instructions before use. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion:
Normal measures for preventive fire protection.

Hygiene measures:
Remove and wash contaminated clothing before re-use. Recommended preventive skin protection
Wash hands before breaks and at the end of workday. Keep working clothes separately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
Potassium chloride	Workers / Long-term systemic effects		1064 mg/m3	Inhalation	
Potassium chloride	Workers / Acute systemic effects		5320 mg/m3	Inhalation	
Potassium chloride	Workers / Long-term systemic effects		303mg/kg bw/d	Dermal	
Potassium chloride	Workers / Acute systemic effects		910mg/kg bw/d	Dermal	
Potassium chloride	Consumers / Long-term systemic effects		273 mg/m3	Inhalation	
Potassium chloride	Consumers / Acute systemic effects		1365 mg/m3	Inhalation	
Potassium chloride	Consumers / Long-term systemic effects		182mg/kg bw/d	Dermal	
Potassium chloride	Consumers / Acute		910mg/kg bw/d	Dermal	

	systemic effects				
Potassium chloride	Consumers / Long-term systemic effects		91mg/kg bw/d	Ingestion	
Potassium chloride	Consumers / Long-term systemic effects		455mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
Potassium chloride	Fresh water: 0,1 mg/l	
Potassium chloride	Marine water: 0,1 mg/l	
Potassium chloride	Sewage treatment plant: 10 mg/l	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.
Avoid contact with skin, eyes and clothing.
Avoid exposure - obtain special instructions before use.

Personal protective equipment
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.

Hand protection:
Glove material: Natural Latex
Break through time: 480 min
Glove thickness: 0,6 mm
Lapren®706
Gloves must be inspected prior to use.
Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety glasses with side-shields

Skin and body protection:
Protective suit

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	colourless
Odour	:	odourless
Melting point/range	:	No data available
Boiling point/boiling range	:	ca. 100 °C
Flammability	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available

Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	Stable under recommended storage conditions.
pH	:	11 at 20 °C
Viscosity, kinematic	:	No data available
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Density	:	No data available
Relative vapour density	:	No data available

9.2 Other Information

Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Protect from contamination.

10.5. Incompatible materials

Strong acids
Strong oxidizing agents
Strong reducing agents

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:
No data available

Acute dermal toxicity:
No data available

Acute inhalation toxicity:
No data available

Skin irritation:
No data available

Eye irritation:
No data available

Respiratory or skin sensitisation:
No data available

Carcinogenicity:

Note: No data available

Germ cell mutagenicity:
Note: No data available

Reproductive toxicity:
Remarks: Classification based on Annex VI of regulation 1272/2008/EC.

Aspiration hazard:
No data available

11.2. Information on other hazards

Endocrine disrupting properties
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information:
No data available

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
No data available

Toxicity to aquatic plants:
No data available

Toxicity to aquatic invertebrates:
No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006

For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)

14.4 Packaging group

14.5 Environmental hazards
ADR/RID: no Marine pollutant: no

14.6 Special precautions for user
No data available

14.7 Maritime transport in bulk according to IMO instruments
No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).
Directive 2012/18/EC		Not applicable

Poison Control Center

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+)35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400

Buffer solution pH 11.00 (20°C)

33650-500ML

Version 3.0 Revision Date 20.12.2022 Supersedes 2

Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
	Munich : 089/19240
Latvia	+37167042473

Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftinformation);+46104566786
Switzerland	145
United Kingdom	(+44) 844 892 0111

Other inventory information

US. Toxic Substances Control Act
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
Not in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

orthoboric acid, sodium salt	:	H360FD	May damage fertility. May damage the unborn child.

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

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

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33650-500ML

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