

**Buffer solution pH 9.00 (20°C)**

33648-500ML

Version 1.5

Revision Date 16.12.2022

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

**1.1. Product identifier**

Product name : Buffer solution pH 9.00 (20°C)  
SDS-number : 000000021582  
Type of product : Mixture  
Remarks : Document according to Art. 32 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. Honeywell International, Inc.  
115 Tabor Road 115 Tabor Road  
07950-2546 Morris Plains Morris Plains, NJ 07950-2546  
USA 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**

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Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.2. Label elements**

**REGULATION (EC) No 1272/2008**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Special labelling of certain products : Safety data sheet available on request.

**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
Sodium tetraborate	1330-43-4 005-011-00-4 215-540-4	Repr. 1B; H360FD	< 0,3 %	

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.

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**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. Call a physician immediately.

**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.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

*Suitable extinguishing media:*

Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
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

#### 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.

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### 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.

#### 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

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**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. Handle in accordance with good industrial hygiene and safety practice.

*Advice on protection against fire and explosion:*

Normal measures for preventive fire protection.

*Hygiene measures:*

Remove and wash contaminated clothing before re-use. When using do not eat or drink. Wash hands before breaks and at the end of workday.

**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.

**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
Sodium tetraborate	Workers / Long-term systemic		6,7 mg/m3	Inhalation	

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	effects				
Sodium tetraborate	Workers / Long-term systemic effects		316,4mg/kg bw/d	Dermal	
Sodium tetraborate	Consumers / Long-term systemic effects		3,41 mg/m3	Inhalation	
Sodium tetraborate	Consumers / Long-term systemic effects		159,5mg/kg bw/d	Dermal	
Sodium tetraborate	Consumers / Long-term systemic effects		0,79mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
Sodium tetraborate	Fresh water: 2,9 mg/l	
Sodium tetraborate	Marine water: 2,9 mg/l	
Sodium tetraborate	Sewage treatment plant: 10 mg/l	
Sodium tetraborate	Soil: 5,7 mg/kg dw	

**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.

**Personal protective equipment**

*Respiratory protection:*

In the case of vapour formation use a respirator with an approved filter.

*Hand protection:*

Glove material: Natural Latex

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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 recommends to use the chemical protective glove in practice not longer than 50% of the recommended 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	:	No data available
Odour	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	No data available

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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	:	9
Viscosity, kinematic	:	No data available
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Density	:	ca. 1 g/cm <sup>3</sup>
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

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under recommended storage conditions.



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**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**

None known.

**10.5. Incompatible materials**

Strong oxidizing agents

**10.6. Hazardous decomposition products**

Fire may cause evolution of:  
Boron oxides

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**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

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*Carcinogenicity:*

Note: No data available

*Germ cell mutagenicity:*

Note: No data available

*Reproductive toxicity:*

Remarks: No data available

*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

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**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

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**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

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**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.

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**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

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**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
Directive 2012/18/EC		Not applicable
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 $\geq 0.1$ % (w/w).

**VOC:**

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control), 0 %

**VOC:**

Directive 2004/42/EC, 0 %

**Poison Control Center**

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

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
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

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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)  
On the inventory, or 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.

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**SECTION 16: Other information**

**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 bioaccumulative substance  
PBT Persistent, bioaccumulative und toxic substance

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