according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0 Revision Date 20.12.2022 Supersedes 1

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

1.1. Product identifier

Product name : Buffer concentrate pH 9.00

SDS-number : 000000022042

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 : Laboratory chemicals

Substance/Mixture

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, : SafetyDataSheet@Honeywell.com

please contact:

1.4. Emergency telephone number

Emergency telephone : +1-703-527-3887 (ChemTrec-Transport)

number +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

Page 1 / 16

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0 Revision Date 20.12.2022 Supersedes 1

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.

2.3. Other hazards

None known. 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
disodium tetraborate	1303-96-4	Repr. 1B; H360FD	>= 0,5 % - < 8,5 %	

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

decahydrate	005-011-00-4 215-540-4			
hydrochloric acid	7647-01-0 017-002-01-X 231-595-7	Skin Corr. 1B; H314 STOT SE 3; H335; Respiratory system	< 0,2 %	STOT SE 3; H335:>= 10 % Skin Irrit. 2; H315:10 - < 25 % Eye Irrit. 2; H319:10 - < 25 % Skin Corr. 1B; H314:>= 25 %

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 immediately all contaminated clothing.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician immediately.

Skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician immediately.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Call a physician immediately.

Ingestion:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Drink 1 or 2 glasses of water. Call a physician immediately.

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

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:

Foam

Dry chemical

Carbon dioxide (CO2)

Water spray

Extinguishing media which shall not be used for safety reasons:

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced such as:

Hydrogen chloride gas

Sodium oxides

Boron oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

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

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

Wear personal protective equipment. Unprotected persons must be kept away. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid inhalation of vapour or mist. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

Sweep up and shovel into suitable containers for disposal.

Dispose of in accordance with local regulations.

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. Use only in well-ventilated areas. Avoid inhalation, ingestion and contact with skin and eyes.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

Hygiene measures:

Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Keep working clothes separately. When using do not eat, drink or smoke. 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.

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
disodium tetraborate decahydrate	EH40 OES TWA	5 mg/m3		
disodium tetraborate decahydrate	EH40 WEL TWA	5 mg/m3		

TWA - Time weighted average

DNEL/ PNEC-Values

DIVLE/ I IVEC-Values					
Component	End- use/impact	Exposure duration	Value	Exposure routes	Remarks
disodium tetraborate decahydrate	Workers / Long-term systemic effects		6,7 mg/m3	Inhalation	
disodium tetraborate decahydrate	Workers / Long-term systemic effects		316,4mg/kg bw/d	Skin contact	
disodium tetraborate decahydrate	Consumers / Long-term systemic effects		3,4 mg/m3	Inhalation	
disodium tetraborate decahydrate	Consumers / Long-term systemic effects		159,5mg/kg bw/d	Skin contact	
disodium tetraborate decahydrate	Consumers / Long-term systemic	D 0/40	0,79mg/kg bw/d	Ingestion	

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

	effects			
disodium tetraborate decahydrate	Consumers / Acute systemic effects	0,79mg/kg bw/d	Ingestion	
hydrochloric acid	Workers / Acute local effects	15 mg/m3	Inhalation	
hydrochloric acid	Workers / Long-term local effects	8 mg/m3	Inhalation	
hydrochloric acid	Consumers / Acute local effects	15 mg/m3	Inhalation	
hydrochloric acid	Consumers / Long-term local effects	8 mg/m3	Inhalation	

Component	Environmental compartment / Value	Remarks
disodium tetraborate decahydrate; borax decahydrate	Fresh water: 2,9 mg/l	
disodium tetraborate decahydrate; borax decahydrate	Marine water: 2,9 mg/l	
disodium tetraborate decahydrate; borax decahydrate	Sewage treatment plant: 10 mg/l	
disodium tetraborate decahydrate; borax decahydrate	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.

Do not breathe vapours or spray mist.

Engineering measures

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0 Revision Date 20.12.2022 Supersedes 1

Local exhaust

Personal protective equipment

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

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 recomends 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:

Wear suitable protective equipment.

Wear as appropriate:

Lab coat

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

Page 8 / 16

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0 Revision Date 20.12.2022 Supersedes 1

Colour : colourless

Odour : odourless

Melting point/range : No data available

Boiling point/boiling range : No data available

Flammability : Not applicable

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Flash point : Not applicable

Decomposition temperature : No decomposition if used as directed.

nH · 9

Water solubility : completely soluble

Density : No data available

9.2 Other Information

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Viscosity, dynamic : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Page 9 / 16

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Keep away from direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Hydrogen chloride gas Boron oxides Sodium oxides

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

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

Repeated dose toxicity: Note: No data available

Carcinogenicity:
Species: not specified
Note: No data available
Germ cell mutagenicity:
Note: No data available

Reproductive toxicity: Species: not specified

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

Biodegradability:

Page 11 / 16

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

The methods for determining the biological degradability are not applicable to inorganic substances.

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

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0 Revision Date 20.12.2022 Supersedes 1

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	Country	Phone Number

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

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
	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
Germany	Freiburg : 0761/19240
Comany	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

Page 14 / 16

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0 Revision Date 20.12.2022 Supersedes 1

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.

SECTION 16: Other information

Text of H-statements referred to under heading 3

disodium tetraborate

H360FD

May damage fertility. May damage the unborn

decahydrate

child.

hydrochloric acid : H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Further information

All directives and regulations refer to amended versions.

Page 15 / 16

according to Regulation (EC) No. 1907/2006



Buffer concentrate pH 9.00

38748-1EA

Version 2.0

Revision Date 20.12.2022

Supersedes 1

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 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. Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.