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

1.1. Product identifier

Product name : Acetate buffer solution pH 4.6

SDS-number : 000000021952

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 : 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

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Not a hazardous substance or mixture.

2.2. Label elements

REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture.

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

products:

2.3. Other hazards

This product is a mixture. Health hazard information is based on its components.

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
Acetic acid	64-19-7 607-002-00-6 200-580-7	Flam. Liq. 3; H226 Skin Corr. 1A; H314	>= 5 % - < 10 %	Eye Irrit. 2; H319:10 - < 25 % Skin Corr. 1B; H314:25 - < 90 % Skin Corr. 1A; H314:>= 90 % Skin Irrit. 2; H315:10 - < 25 %
Sodium acetate	127-09-3 204-823-8		>= 5 % - < 10 %	N.C.*

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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.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray

Foam

Carbon dioxide (CO2)

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:

Sodium oxides

Carbon 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.

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:

General industrial hygiene practice.

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

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
Acetic acid	EH40 WEL STEL	50 mg/m3 20 ppm	15 minutes	
Acetic acid	EH40 WEL TWA	25 mg/m3 10 ppm		
Acetic acid	EU ELV TWA	25 mg/m3 10 ppm		Indicative
Acetic acid	EU ELV STEL	50 mg/m3 20 ppm		Indicative

STEL - Short term exposure limit TWA - Time weighted average

DNEL/ PNEC-Values

Component	End- use/impact	Exposure duration	Value	Exposure routes	Remarks
Acetic acid	Workers / Long-term local effects		25 mg/m3	Inhalation	
Acetic acid	Workers / Acute local effects		25 mg/m3	Inhalation	
Acetic acid	Consumers / Long-term local effects		25 mg/m3	Inhalation	
Acetic acid	Consumers / Acute local effects		25 mg/m3	Inhalation	
Sodium acetate	Workers / Long-term systemic		1057,9 mg/m3	Inhalation	

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	effects			
Sodium acetate	Workers / Acute systemic effects	6347,36 mg/m3	Inhalation	
Sodium acetate	Workers / Long-term systemic effects	12mg/kg bw/d	Skin contact	
Sodium acetate	Workers / Acute systemic effects	72mg/kg bw/d	Skin contact	
Sodium acetate	Consumers / Long-term systemic effects	521,73 mg/m3	Inhalation	
Sodium acetate	Consumers / Acute systemic effects	3103,45 mg/m3	Inhalation	
Sodium acetate	Consumers / Long-term systemic effects	6mg/kg bw/d	Skin contact	
Sodium acetate	Consumers / Acute systemic effects	36mg/kg bw/d	Skin contact	
Sodium acetate	Consumers / Long-term systemic effects	6mg/kg bw/d	Ingestion	
Sodium acetate	Consumers / Acute systemic effects	36mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
Acetic acid	Fresh water: 3,06 mg/l	Assessment factor:

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		100
Acetic acid	Marine water: 0,3 mg/l	Assessment factor: 1000
Acetic acid	Sewage treatment plant: 85 mg/l	Assessment factor: 10
Acetic acid	Fresh water sediment: 11,36 mg/kg dw	
Acetic acid	Marine sediment: 1,1 mg/kg dw	
Acetic acid	Soil: 0,47 mg/kg dw	
Sodium acetate	Fresh water: 0,1 mg/l	Assessment factor: 1000
Sodium acetate	Marine water: 0,01 mg/l	Assessment factor: 10000
Sodium acetate	Sewage treatment plant: 720 mg/l	Assessment factor: 10
Sodium acetate	Fresh water sediment: 0,000402 mg/kg dw	
Sodium acetate	Marine sediment: 0,00004 mg/kg dw	
Sodium acetate	Soil: 0,0004 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 Break through time: 480 min

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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 recomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.

 $\label{lem:manufacturer} \mbox{Manufacturer's directions for use should be observed because of great diversity of types} \; .$

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 : 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 : 4,6

at 20,5 °C

Viscosity, kinematic : No data available

Water solubility : completely miscible

Vapour pressure : No data available

Density : 1,00 g/cm3

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.

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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 bases 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

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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 No data available

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

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No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

We have no quantitative data concerning the ecological effects of this product.

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

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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 not 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).

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
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959

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
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166

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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
Commany	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
	Munich : 089/19240
Latvia	+37167042473

1	
Slovenia	+386 1 400 6051
Spain	+34915620420
	112 (begär
Sweden	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) On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)

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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

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 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.

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