

Buffer solution pH 4.0 (20 °C)**33665-1L**

Version 1.1

Revision Date 08/22/2018

Print Date 10/17/2019

SECTION 1. IDENTIFICATION

Product name : Buffer solution pH 4.0 (20 °C)

Number : 000000021869

Product Use Description : Laboratory chemicals
Scientific research and development

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171

(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid

Color : red

Odor : odourless

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Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

Precautionary statements : **Prevention:**
Use personal protective equipment as required.

Hazards not otherwise classified : Repeated or prolonged exposure may irritate eyes, skin and respiratory system.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Water	7732-18-5	>=90.00 - <=100.00 %
Sodium dihydrogen citrate	18996-35-5	<1.00 %
Disodium hydrogen citrate	144-33-2	<0.50 %
Sodium chloride	7647-14-5	<0.50 %

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SECTION 4. FIRST AID MEASURES

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|----------------|---|--|
| 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. |

SECTION 5. FIREFIGHTING MEASURES

- | | | |
|---|---|---|
| Suitable extinguishing media | : | Water spray
Foam
Carbon dioxide (CO ₂)
Dry powder |
| Specific hazards during firefighting | : | Fire may cause evolution of:
Sodium oxides
Carbon oxides
Gaseous hydrogen chloride (HCl). |
| Special protective equipment for firefighters | : | Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear. |
| Further information | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

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SECTION 6. ACCIDENTAL RELEASE MEASURES

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|---|---|--|
| Personal precautions,
protective equipment and
emergency procedures | : | Provide adequate ventilation.
Wear personal protective equipment. Unprotected persons
must be kept away. |
| Environmental precautions | : | Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system. |
| 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. |

SECTION 7. HANDLING AND STORAGE**Handling**

- | | | |
|--|---|--|
| Precautions for 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. |

Storage

- | | | |
|--|---|---|
| Conditions for safe storage,
including any
incompatibilities | : | Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated
place. |
|--|---|---|

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | | |
|---------------------|---|---|
| Protective measures | : | Ensure that eyewash stations and safety showers are close to
the workstation location.
Legal requirements are to be considered in regard of the |
|---------------------|---|---|

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selection, use and care of personal protective equipment.
Avoid contact with skin, eyes and clothing.

- Engineering measures : Provide adequate ventilation.
- Eye protection : Safety glasses with side-shields
- Hand protection : Latex gloves
Gloves must be inspected prior to use.
Replace when worn.
- Skin and body protection : Protective suit
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures : General industrial hygiene practice.

Exposure Guidelines

Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : liquid
- Color : red
- Odor : odourless
- Odor threshold : Note: no data available
- pH : 4.0 at , 20 °C
- Melting point/range : Note: no data available
- Boiling point/boiling range : ca. 100 °C at 1,013 hPa

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Flash point	: Note: Not applicable
Evaporation rate	: Note: no data available
Flammability	: no data available
Lower explosion limit	: Note: no data available
Upper explosion limit	: Note: no data available
Vapor pressure	: Note: no data available
Vapor density	: Note: no data available
Density	: 1.0 g/cm3
Water solubility	: Note: completely miscible
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: Note: no data available
Decomposition temperature	: Note: Stable under recommended storage conditions.
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

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SECTION 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: None known.
Incompatible materials	: Strong bases Strong oxidizing agents Strong reducing agents
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: Note: no data available
Acute inhalation toxicity	: Note: no data available
Acute dermal toxicity	: Note: no data available
Skin irritation	: Note: no data available
Eye irritation	: Note: no data available
Sensitisation	: Note: no data available

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Genotoxicity in vitro : Note: no data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish : Note: no data available

Toxicity to daphnia and other : Note: no data available
aquatic invertebrates

Toxicity to algae : Note: no data available

Further information on ecology**SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods : Observe all Federal, State, and Local Environmental
regulations.**SECTION 14. TRANSPORT INFORMATION****DOT** Not dangerous goods**TDG** Not dangerous goods**IATA** Not dangerous goods**IMDG** Not dangerous goods

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SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances
Control Act : Not On TSCA Inventory

Australia. Industrial
Chemical (Notification and
Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian
Environmental Protection
Act (CEPA). Domestic
Substances List (DSL) : Not in compliance with the inventory

Japan. Kashin-Hou Law List : Not in compliance with the inventory

Korea. Existing Chemicals
Inventory (KECI) : Not in compliance with the inventory

Philippines. The Toxic
Substances and Hazardous
and Nuclear Waste Control
Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing
Chemical Substances : Not 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

National regulatory information

TSCA : This material must be used in compliance with the TSCA
Research and Development Exemption requirements (40 CFR

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720.36).

:

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : No SARA Hazards

California Prop. 65 :



WARNING: This product can expose you to chemicals, listed below, known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Phenylmercury chloride

100-56-1

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 1	1
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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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.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group