

SAFETY DATA SHEET

pH 4 Buffer Solution

1. Identification

Product Name: pH 4 Buffer Solution

Synonyms: NONE

CAS Number: N/A

Product Use: Prevent changes in the pH of a solution.

Manufacturer/Supplier: Rosemount Analytical Inc

Address: 2400 Barranca Parkway, Irvine Ca 92606

General Information: Part number 905-3506

Transportation Emergency Number: CHEMTREC: 800-424-9300

2. Hazards Identification

GHS Classification:

GHS Classification

Skin irritation (Category 3)

Eye irritation (Category 2A)

GHS Label elements, including precautionary statements

Pictogram



Signal word warning

Hazard statement(s)

H303 May be harmful if swallowed

Precautionary statement(s)

P261 Avoid breathing vapor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P273: Avoid release to the environment

SAFETY DATA SHEET

pH 4 Buffer Solution

Other hazards

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Potassium hydrogen Phthalate	877-24-7	1
Non-hazardous ingredients (deionized water)	-	99

(See Section 8 for Exposure Limits)

4. First Aid Measures

Eye: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin: Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. If irritation, redness, or burning sensation develops and persists, obtain medical advice. Wash contaminated clothing before reuse.

Inhalation: Nasal irritation, headache, dizziness, nausea, vomiting, heart palpitations, breathing difficulty, cyanosis, tremors, weakness, red flushing of face, irritability. Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting unless directed by medical personnel.

5. Fire Fighting Measures

Conditions of flammability: Not flammable or combustible

SAFETY DATA SHEET

pH 4 Buffer Solution

Suitable extinguishing media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide

Fire Fighting Procedures: Do not flush down sewers or other drainage systems. Exposed firefighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing

Unusual Fire and Explosion Hazards: N data available

6: Accidental Release Measures

Personal Precaution

Keep unnecessary people away; isolate area. Use safety glasses. Keep area ventilated and soak up spill with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials (Also see Section 8)

Do not flush to sewer or waterways. Prevent release to the environment if possible. Refer to Section 15 for spill/release reporting information.

7. Handling and Storage

Precaution for safe handling

Do not get in eyes, on skin. Do not breathe vapors or mists. Keep container closed. Use only with adequate ventilation.

Hygiene

Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

Storage

Keep containers closed and upright when not in use. Protect against physical damage.
Incompatible materials: None Known

SAFETY DATA SHEET

pH 4 Buffer Solution

8. Exposure Controls / Personal Protection

Exposure Limits

Substance	ACGIH TLV (STEL)	OSHA PEL		NIOSH REL	
		TWA	STEL	TWA	STEL
Potassium hydrogen Phthalate	-	-	-	-	-

Engineering Controls: Local exhaust ventilation may be necessary to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Provide mechanical ventilation for confined spaces.

Personal Protective Equipment (PPE)

Eye Protection: Wear chemical safety goggles, face shield or safety glasses. Have eye-wash stations available where eye contact can occur.

Skin Protection: Avoid skin contact. Wear gloves impervious to conditions of use. Additional protection may be necessary to prevent skin contact including use of apron, face shield, boots or full body protection. A safety shower should be located in the work area. Wear impervious gloves such as nitrile, minimum thickness 0.11 mm

Respiratory Protection: Respiratory protection is not needed

9. Physical and Chemical Properties

Flashpoint: No data available

Auto ignition Temperature: any data available

SAFETY DATA SHEET

pH 4 Buffer Solution

Boiling Point: 100°C (212° F) @ 760 mm Hg

Freezing/melting Point: -No data available

Vapor Pressure (MMHG): 24

Vapor Density(Air=1): 1.0

% Solubility in Water: Aqueous solution

Pour Point: NA

Molecular Formula: Mixture

Odor/Appearance: clear or green solution, odorless

Lower Flammability Limit: No data available

Upper Flammability Limit: No data available

Specific Gravity: 1

% Volatile: 99+

Evaporation Rate: slow (Water=1): (Butyl Acetate =1): 1

Viscosity: No data available

Octanol/Water Partition Coefficient: No data available

pH: 4

Molecular Weight: Mixture

10. Stability and Reactivity

Stability: Stable under normal conditions

Hazardous Reactions/Decomposition Products: Carbon oxide, Potassium oxides. Other decomposition products-No data available

Material to avoid

Strong oxidizing agents

11. Toxicological Information

Signs and Symptoms of Overexposure: Eye and nasal irritation, headache, dizziness, nausea, vomiting, heart palpitations, difficulty breathing, cyanosis, tremors, weakness, itching or burning of the skin.

Acute Effects:

SAFETY DATA SHEET

pH 4 Buffer Solution

Not classified

Component	LD50 Oral rat	
Potassium hydrogen Phthalate	>3,200 mg/kg	

Skin Corrosion/Irritation: No data available

Serious eye damage/Irritation: No data available

Respiratory or Skin sensitisation: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No components of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC

ACGIH: No components of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC

Reproductive Toxicity: No data available

Teratogenicity: No data available

Specific target Organ toxicity-single exposure (Globally Harmonized System): No data available

Specific target Organ toxicity-repeated exposure (Globally Harmonized System): No data available

Aspiration Hazard: No data available

Potential Adverse human health effects and systems:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation

Ingestion: May be harmful if swallowed

Skin: May be harmful if absorbed through the skin. May cause skin irritation

Eyes: May cause eye irritation

Signs and symptoms of exposure: Nausea, vomiting, to the best of our knowledge, the chemical, physical and toxicological properties has not been thoroughly investigated.

Synergistic effects: No data available

SAFETY DATA SHEET

pH 4 Buffer Solution

Other adverse effects: No data available

12. Ecological Information

Not Available

Bioaccumulation is not expected to be significant. This product is readily biodegradable.

13. Disposal Considerations

Product: Dispose in a safe manner in accordance with local/national regulations

Contaminated packaging: Dispose in a safe manner in accordance with local/national regulations

14. Transport Information

U.S. Department of Transportation (**DOT**)

Proper Shipping Name: NA. Does not meet dangerous goods criteria

International Maritime Organization (**IMDG**)

Proper Shipping Name: NA. Does not meet dangerous goods criteria

International Air Transportation Association (**IATA**):

Proper Shipping Name: NA. Does not meet dangerous goods criteria

European Agreement concerning the International Carriage of Dangerous Goods by Road (**ADR**):

NA. Does not meet dangerous goods criteria

15. Regulatory Information

U.S. Federal Regulations

SAFETY DATA SHEET

pH 4 Buffer Solution

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):

Toxic Substances Control Act (TSCA): This product does not contain a substance listed under TSCA Clean Water Act (CWA): Potassium hydrogen Phthalate

Clean Air Act (CAA): This product does not contain hazardous substance under the Clean Air Act.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories: No Listed ingredients

Immediate Hazard: X

Delayed Hazard: X

Fire Hazard: X

Pressure Hazard: X

Reactivity Hazard: X

State Regulations

California Proposition 65: This product does not contains chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm isopropyl alcohol

Component CAS Number Maximum %

NA

International Regulations

Canadian Environmental Protection Act: This product contains a component, Potassium hydrogen Phthalate which is included on the Canadian Domestic Substances list (DSL). Class D Division 2 Subdivision B-Toxic material causing other toxic effects

EU-Regulations

No additional information available

This product has been classified in accordance with the hazard criteria of the Controlled Products

SAFETY DATA SHEET

pH 4 Buffer Solution

Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other Information

Health: 0

Flammability: 0

Reactivity: 0

Special: None

Protective equipment: B; Safety glasses, gloves

Revision Date: 02-27-14

SDS prepared by:

Julien C. Ollivierre

Rosemount Analytical Inc.

Telephone: (949) 757-8651 U.S.A

Supersedes: 07-13-13

Disclaimer: The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.