

MATERIAL SAFETY DATA SHEET

BUFFER PH 1.68

1. Chemical Product and Company information.

Product name: Buffer Solution, pH 1.68 Contact Information:

Radchem cc PO Box 166982 Brackendowns Alberton 1454

Telephone: 011 867 3726 / 2864

2. Hazard Identification

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (permeator) . Non-corrosive for lungs.

3. Composition / information on ingredients

CAS #: Mixture

Synonym: Buffer Solution, Reference Standard, pH 1.68

Chemical Name: Not applicable

Chemical Formula: Not applicable

4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.



Serious Inhalation: Not available

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire-fighting measures

Flammability of the Product: Non-flammable

Fire Hazards in Presence of Various Substances: Not applicable

Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks

Fire Fighting Media and Instructions: Not applicable

Special Remarks on Fire Hazards: Not available

Special Remarks on Explosion Hazards: Not available

6. Accidental release measures

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapour drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and storage

Precautions: Keep locked up.. Keep container dry. Do not breathe gas/fumes/ vapour/spray. Never add water to this product. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure controls/personal protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value.

Personal Protection: Face shield. Full suit. Gloves. Boots.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. Physical and chemical properties Physical state and appearance: Liquid Odour Threshold: Not available Odour: Odourless Ionicity (in Water): Not available.



Taste: Acid

Colour: Clear Colourless

Boiling Point: The lowest known value is 100°C

(Water)

Melting Point: Not available

Critical Temperature: Not available

Specific Gravity: The only known value is 1 (Water =

1) (Water)

Vapour Density: The highest known value is 0.62

(Air = 1) (Water)

Volatility: Not available

Dispersion Properties: See solubility in water,

diethyl ether

Solubility: Easily soluble in cold water, hot water. Soluble in diethyl ether. Very slightly soluble in

methanol, n-octanol

10. Stability and reactivity

Stability: The product is stable

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Slightly reactive to reactive with oxidizing agents, metals, alkalis

Corrosivity Non-corrosive in presence of glass

Special Remarks on Reactivity: Incompatible with KMnO4, H2SO4, BrF3, and BrCl3. May react violently with BrF3. (Potassium chloride)

Special Remarks on Corrosivity: This compound is highly corrosive when in solution (especially to most metals except: gold, mercury, platinum, silver, and tantalum). The anhydrous gas is not corrosive. (Hydrogen chloride)

Polymerization: Will not occur.

11. Toxicological information

Routes of Entry: Absorbed through skin. Eye contact

Toxicity to Animals: LD50: Not available. LC50: Not available

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Potassium chloride]. Mutagenic for bacteria and/or yeast. [Potassium chloride]. May cause damage to the following organs: skin, eyes.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion. Slightly hazardous in case of skin contact (permeator), of inhalation.

Special Remarks on Toxicity to Animals: Not available

Special Remarks on Chronic Effects on Humans: May affect genetic material. Passes through the placental barrier in animal. (Potassium chloride)



Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation. Inhalation: May cause respiratory tract and mucous membrane irritation. Not likely to be hazardous by inhalation. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting and diarrhoea. May affect behaviour, the cardiovascular system, urinary system, respiratory system, liver, metabolism, and blood.

12. Ecological information

Ecotoxicity: Not available

BOD5 and **COD**: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not available

13. Disposal considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

DOT Classification: Not a DOT controlled material

Identification: : Not available

Special Provisions for Transport: Not available

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