



LABORATORY CHEMICALS AND CONSUMABLES

MATERIAL SAFETY DATA SHEET

BUFFER PH2.00

1. Chemical Product and Company information.

Product name: Buffer Solution, pH 2.00

Contact Information:

Radchem cc
PO Box 166982
Brackendowns
Alberton 1454
Telephone : **011 867 3726 / 2864**

2. Hazard Identification

Extremely hazardous in case of eye contact (irritant). Very hazardous in case of skin contact (corrosive, irritant), of ingestion, of inhalation. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

3. Composition / information on ingredients

CAS #: Mixture

Synonym:

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 immediately.

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: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

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: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

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.

Large Spill: Corrosive liquid. 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.

7. Handling and storage

Precautions: Keep container dry. Do not breathe gas/fumes/ vapour/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as alkalis.

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. Vapour respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.



Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapour respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. 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: Not available

Taste: Acid (Strong)

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

Odour Threshold: Not available

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol

Solubility: Easily soluble in cold water. Soluble in hot water, methanol

10. Stability and reactivity

Stability: The product is stable

Instability Temperature: Not available.

Conditions of Instability: Not available

Incompatibility with various substances: Highly reactive with alkalis

Corrosivity Slightly corrosive in presence of steel, of aluminium, of copper. Non-corrosive in presence of glass.

Special Remarks on Reactivity: Reacts violently with water especially when water is added to the product. (Hydrogen chloride)

Special Remarks on Corrosivity: Highly corrosive. Incompatible with copper alloys. (Hydrogen chloride)

Polymerization: Will not occur.

11. Toxicological information

Routes of Entry: Eye contact. Inhalation. Ingestion

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

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: Very hazardous in case of skin contact (corrosive, irritant), of ingestion, of inhalation.



Special Remarks on Toxicity to Animals: Not available

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

Special Remarks on other Toxic Effects on Humans: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. (Hydrogen chloride)

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: The products of degradation are more toxic.

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: Class 8: Corrosive material

Identification: : Sodium Hydroxide, Solution UNNA: UN1824 PG: III

Special Provisions for Transport: Not available

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