

Rocky Mountain Reagents, Inc. TM

Scientific Solutions Since 1951 TM

Material Safety Data Sheet

1. PRODUCT and COMPANY IDENTIFICATION

Product: Buffer Solution pH 1.0 (Clear)

Product Code(s): D82-3103, D82-3163, D82-3181

Synonyms: Mixture

Manufacturer: Rocky Mountain Reagents, Inc. 4621 Technology Drive, Golden, CO 80403 Ph: (303)762-0800 Fax: (303)762-1240

IN CASE OF HEALTH **EMERGENCY CALL** POISON CONTROL: (800)222-1222

All non-emergency questions may be directed to customer service (303)762-0800 or info@rmreagents.com

2. COMPOSITION and INFORMATION on INGREDIENTS

| | | Chemical | Formula | | % by |
|--------------------|-----------|----------------|---------------|------------------|--------|
| <u>Ingredients</u> | CAS# | <u>Formula</u> | <u>Weight</u> | <u>Hazardous</u> | Weight |
| Hydrochloric Acid | 7647-01-0 | HCI | 36.46 | Yes | <1.5 |
| Potassium Chloride | 7447-40-7 | KCI | 74.55 | Yes | 0.35 |
| Formaldehyde | 50-00-0 | HCHO | 30.03 | Yes | 0.02 |
| Methanol | 67-56-1 | CH₃OH | 32.04 | Yes | < 0.01 |
| Water | 7732-18-5 | H_2O | 18.015 | No | >98.0 |

3. HAZARDS IDENTIFICATION

Emergency Overview:

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, RESPIRATORY TRACT, AND/OR GASTROINTESTINAL TRACT. MAY BE HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN. NOT FOR HUMAN CONSUMPTION.

SAFETY RATINGS: Health: 1, Slight Reactivity: 0, None

Flammability: 0, None Contact: 1, Slight **Protective Equipment:** Safety Glasses, Lab Coat or Apron, Gloves

Storage Code: Green: General

Potential Health Effects:

INHALATION:

May be harmful.

INGESTION:

May be harmful.

SKIN CONTACT:

May cause irritation.

EYE CONTACT:

May cause irritation. **POTENTIAL CHRONIC HEALTH EFFECTS:**

This product is not expected to produce any chronic health effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED by EXPOSURE:

Repeated or prolonged exposure may cause irritation to eyes and skin.

4. FIRST AID MEASURES

INHALATION:

Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, perform mouth-to-mouth resuscitation. If irritation persists, get medical attention.

INGESTION:

Give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

SKIN CONTACT:

Wash with mild soap and water. If irritation develops, get medical attention.

EYE CONTACT:

Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. If irritation develops, get medical attention.

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5. FIRE FIGHTING MEASURES

NFPA RATINGS: Health: 1 Flammability: 0 Reactivity: 0

FIRE:

Not considered to be a fire hazard.

EXPLOSION:

Not considered to be an explosion hazard.

FIRE EXTINGUISHING MEDIA:

Use any means suitable for extinguishing surrounding fire.

SPECIAL INFORMATION:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Revision Date: 12/12/2011

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Wear appropriate personal protective equipment as specified in the Exposure Control and Personal Protection Section 8. Pick up and place in a suitable container for reclamation or disposal.

7. HANDLING and STORAGE

NOT FOR HUMAN CONSUMPTION! Store in a cool, dry, ventilated area. Keep containers tightly closed and upright. Protect from physical damage. Keep out of direct sunlight and separate from incompatible materials. Containers of this material may be hazardous when empty since they retain product residues (vapor, liquids). Observe all warnings and precautions listed for the product. Storage and use areas should be non-smoking. Wash thoroughly after handling.

8. EXPOSURE CONTROL and PERSONAL PROTECTION

EXPOSURE LIMITS:

No information found.

VENTILATION SYSTEM:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

PERSONAL RESPIRATORS (NIOSH) APPROVED:

Not expected to require use of a personal respirator.

SKIN PROTECTION:

Wear protective clothing, gloves, lab coat or apron, as appropriate, to prevent skin contact.

EYE PROTECTION:

Use chemical safety glasses or goggles. Maintain approved eye wash station in work area.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: Clear Liquid
ODOR: Odorless

SOLUBILITY: Miscible with water
SPECIFIC GRAVITY: No information found

nH: 1.0

% VOLATILES by VOLUME:

BOILING POINT:

MELTING POINT:

VAPOR DENSITY (Air =1):

VAPOR PRESSURE (mm Hg):

EVAPORATION RATE (BuAc=1):

No information found
No information found
No information found

10. STABILITY and REACTIVITY

STABILITY:

Stable under ordinary conditions of use and storage.

HAZARDOUS DECOMPOSITION PRODUCTS:

No information found

HAZARDOUS POLYMERIZATION:

Will not occur

INCOMPATIBILITIES:

No information found

CONDITIONS to AVOID:

Incompatibles

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11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA:

No information found.

12. ECOLOGICAL INFORMATION

ENVIROMENTAL FATE:

No information found.

ENVIROMENTAL TOXICITY:

No information found.

13. DISPOSAL INFORMATION

Whatever cannot be saved for recovery or recycling should be disposed of or incinerated at an approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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14. TRANSPORT INFORMATION

DOT (Land):

Not Regulated

IATA (Air):

Not Regulated

IMDG (Sea):

Not Regulated

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

This product contains the following chemicals which are considered "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200: Hydrochloric Acid, Potassium Chloride, Formaldehyde, Methanol

All components of this product are on the U.S. EPA TSCA 8(b) Inventory List

US EPCRA (SARA Title III) Sections 311/312:

| Hazard Categories | List (Yes/No) | |
|-----------------------------------|---------------|--|
| Section 311 – Hazardous Chemical: | No | |
| Immediate Hazard: | No | |
| Delayed Hazard: | No | |
| Fire Hazard: | No | |
| Pressure Hazard: | No | |
| Reactivity Hazard: | No | |

CERCLA (Superfund) Reportable Quantity:

Hydrochloric Acid (7647-01-0): 5000 lbs Formaldehyde (50-00-0): 100 lbs Methyl Alcohol (67-56-1): 5000 lbs

US EPCRA (SARA Title III) Section 313 - Toxic Chemical Notification and Release Reporting:

Formaldehyde, Methanol

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substances:

Formaldehyde

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16. OTHER INFORMATION

PRODUCT USE:

For manufacturing, industrial and laboratory use only, not for household use.

DISCLAIMER:

Rocky Mountain Reagents, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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