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Material Safety Data Sheet

EMERGENCY NUMBERS:

(USA) CHEMTREC : 1(800) 424-9300 (24hrs)
 (CAN) CANUTEC : 1(613) 996-6666 (24hrs)

WHMIS	Protective Clothing	TDG Road/Rail
Not controlled under WHMIS (Canada).		Not controlled under TDG (Canada). PIN: Not applicable. PG: Not applicable.
		

Section I. Product Identification and Uses

Product name	BUFFER SOLUTION, pH 4.00	CI#	Not available.
Chemical formula	Not applicable.	CAS#	Not applicable.
Synonyms	C-0723	Code	C-0723
		Formula weight	Not applicable.
		Supersedes	
Material uses	For laboratory use only.		

Section II. Ingredients

Name	CAS #	%	TLV
1) POTASSIUM BIPHTHALATE	877-24-7	1-5	Not established by ACGIH
2) WATER	7732-18-5	90-100	Not established by ACGIH

Toxicity values of the hazardous ingredients

POTASSIUM BIPHTHALATE:
 ORAL (LD50): Acute: >3200 mg/kg (Rat).
 DERMAL (LD50): Acute: >1000 mg/kg (Guinea Pig).

Section III. Physical Data

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Physical state and appearance / Odor	Colorless liquid. Odorless.
pH (1% soln/water)	Product = 4.00
Odor threshold	Not available.
Percent volatile	100% (w/w). (Water).
Freezing point	Not available.
Boiling point	Not available.
Specific gravity	>1 (Water = 1)
Vapor density	Not available.
Vapor pressure	Not available.
Water/oil dist. coeff.	Not available.
Evaporation rate	Not available.
Solubility	Miscible in water.

Section IV. Fire and Explosion Data

Flash point	Not available.
Flammable limits	Not available.
Auto-ignition temperature	Not available.
Fire degradation products	Oxides of potassium and carbon.
Fire extinguishing procedures	Use DRY chemical, carbon dioxide, alcohol-resistant foam or water spray. Wear adequate personal protection to prevent contact with material or its combustion products. Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode.
Fire and Explosion Hazards	Not expected to be sensitive to static discharge. Not expected to be sensitive to mechanical impact. Emits toxic fumes under fire conditions.

Section V. Toxicological Properties

Routes of entry	Inhalation and ingestion. Eye contact.
Effects of Acute Exposure	May be harmful by inhalation or ingestion. Target organs: eyes, skin, mucous membranes.
Eye	May cause irritation or corneal damage.
Skin	May cause irritation.
Inhalation	May cause respiratory tract irritation. May cause coughing, chest pains, difficulty in breathing.
Ingestion	May cause gastrointestinal irritation. May cause nausea and vomiting.

Section V. Toxicological Properties

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Effects of Chronic Overexposure Carcinogenic effects: Not available. Mutagenic effects: Not available. Teratogenic effects: Not available. Toxicity of the product to the reproductive system: Not available. To the best of our knowledge, the chemical, physical, and toxicity of this substance has not been fully investigated.

Section VI. First Aid Measures

Eye contact Immediately flush eyes with copious quantities of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Seek immediate medical attention.

Skin contact Immediately flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reusing.

Inhalation Remove patient to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Call a physician.

Ingestion If conscious, wash out mouth with water. Have conscious person drink several glasses of water or milk. Induce vomiting. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

Section VII. Reactivity Data

Stability Stable. Conditions to avoid: High temperatures, sparks, open flames and all other sources of ignition, contamination.

Hazardous decomp. products Not available.

Incompatibility Oxidizing agents, acids, bases, nitric acid. Water may react with water reactive materials (sodium, potassium, etc...).

Reaction Products Not available. Hazardous polymerization will not occur.

Section VIII. Preventive Measures

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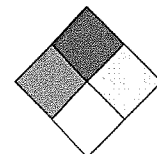
Protective Clothing in case of spill and leak	Wear respirator, safety glass, rubber boots and heavy rubber glove
Spill and leak	Evacuate and ventilate the area. Absorb on sand or vermiculite and place in a closed container for disposal. Ventilate area and wash spill site after material pick up is complete. DO NOT empty into drains. DO NOT touch damaged container or spilled material.
Waste disposal	According to all applicable regulations.
Storage and Handling	Store in a cool place away from heated areas, sparks, and flame. Store in a well ventilated area. Store away from incompatible materials. Do not add any other material to the container. Do not wash down the drain. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. Keep container tightly closed and dry. Manipulate under an adequate fume hood. Handle and open container with care. This product must be manipulated by qualified personnel. Do not get in eyes, on skin, or on clothing. Wash well after use. In accordance with good storage and handling practices. Do not allow smoking and food consumption while handling.

Section IX. Protective Measures

Protective clothing	Splash goggles. Impervious gloves, coveralls, and/or other resistant protective clothing. Sufficient to protect skin. In case of insufficient ventilation, wear suitable respiratory equipment. Do not wear contact lenses. Make eye bath and emergency shower available. Ensure that eyewash station and safety shower is proximal to the work-station location.
Engineering controls	Local mechanical exhaust ventilation capable of minimizing emissions at the point of use. Do not use in unventilated spaces.

Section X. Other Information

Special Precautions or comments Do not breathe vapor. Avoid all contact with the product. Avoid prolonged or repeated exposure. Manipulate in a well ventilated area or under an adequate fume hood. To the best of our knowledge, the chemical, physical and toxicity of this substance has not been fully investigated. Handle and open container with care. Container should be opened only by a technically qualified person.
RTECS NO: CZ4326000 (Potassium biphthalate).



NFPA

Prepared by MSDS Department/Département de F.S..

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