

MATERIAL SAFETY DATA SHEET

HTK buffer

Page 1 of 2
Date of Issue: 18 Sept. 06

STATEMENT OF HAZARDOUS NATURE

Hazardous according to criteria of Worksafe Australia

COMPANY DETAILS

Company: ProSciTech
Address: PO Box 111, Thuringowa Central Qld. 4817 Australia
Street Address: 1/11 Carlton Street, Kirwan, Qld. 4817 Australia
Telephone Number: (07) 4773 9444
Fax Number: (07) 4773 2244

IDENTIFICATION SECTION

Product Name	HTK Buffer
Other Names	Automated Haematology stainer, Buffer solution
Product Code	AHBUF-500
U.N. Number	1230
Dangerous Goods Class and Subsidiary Risk	3 6.1
Hazchem Code	2WE
Poison Schedule	None allocated
Use	For use in Hospital and Pathology Laboratories only on automated haematology slide staining equipment.

Physical Description and Properties

Appearance	Clear Liquid
Boiling Point/Melting Point	Not available
Vapour Pressure	128 hPa @ 20°C
Specific Gravity	1L = 0.99kg
Flash Point	12°C
Flammability Limits	5.5 – 44% by vol.
Solubility in water	Soluble in all proportions

Other Properties May froth when shaken.

Ingredients

Chemical Name	CAS Number	Proportion
POTASSIUM DIHYDROGEN PHOSPHATE	7778-77-0	0.147%
SODIUM ACID PYROPHOSPHATE	7758-16-9	0.086%
METHANOL	67-56-1	7.5%
POLYOXY ETHYLENE	9005-64-5	0.2%
SORBITAN MONOLAURATE		
WATER	7732-18-5	92%

HEALTH HAZARD INFORMATION**Health Effects:***Acute*

Swallowed:	Harmful if swallowed. May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach.
Eye:	May cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision.
Skin:	May cause irritation to the skin, with effects including: Redness and itchiness.
Inhaled:	Harmful if inhaled. May cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache and possible confusion.

Chronic:

Prolonged or repeated skin contact may lead to dermatitis. Prolonged or repeated exposure may lead to irreversible damage to health. Additional information for Chronic: No significant long term exposure effects have been reported. However, repeated ingestion of some phosphates (120-240mg/kg/day) has been shown to cause increased calcium excretion and soft tissue calcification in man.

First Aid:

Swallowed:	If swallowed, DO NOT induce vomiting. Seek urgent medical assistance.
Eye:	If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eye lids are held open. Immediately transport to hospital or doctor.
Skin:	If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available.
Inhaled:	Remove victim to fresh air. Apply resuscitation if victim is not breathing - DO NOT USE DIRECT MOUTH - TO - MOUTH METHOD if victim ingested or inhaled substance; use alternative respiratory method or proper respiratory device - Administer oxygen if breathing is difficult.
First Aid Facilities:	Eye wash fountain, safety shower and normal wash room facilities.
Advice to Doctor	Treat symptomatically.

PRECAUTIONS FOR USE**Exposure Standards:**

SODIUM ACID PYROPHOSPHATE
(Worksafe Australia)
[TWA]10 mg/m³
(OEL)
[TWA]2 mg/m³

METHANOL [METHYL ALCOHOL]
(Worksafe Australia)
[TWA]200 ppm 262 mg/m³
[STEL]250 ppm 328 mg/m³

Notices: H

(ACGIH)
[TWA]200 ppm 262 mg/m³
[STEL]250 ppm 328 mg/m³

Notices: Sk

Engineering Controls:

Highly flammable and toxic liquid. Single significant exposure may cause death. Maintain adequate ventilation at all times. Prevent accumulation of gas(es) in hollows or sumps. Eliminate any sources of ignition. DO NOT enter room unless monitored by another person (ie buddy-buddy system). Sampling

HTK buffer

of the atmosphere if possible should be conducted automatically, for example, by use of sensors, instead of human operator and any leaks discovered should then be directed digitally to a command centre where the event can be acted upon, with all appropriate procedures being implemented and including any protective equipment as outlined in this MSDS.

Personal Protection:

CLOTHING: PVC or rubber apron. GLOVES: PVC or rubber. EYES: Chemical goggles or faceshield to protect eyes. RESPIRATORY PROTECTION: Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. When gases exceed the exposure standards then the use of a half-face respirator with organic vapour cartridge is recommended. For high concentration use an atmosphere-supplied, positive pressure demand self-contained or airline breathing apparatus, complying with the requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

Flammability:

Highly flammable liquid. Avoid all sources of ignition, heat and naked flames. Vapours may travel a considerable distance to source of ignition and ignite.

SAFE HANDLING INFORMATION

Storage and Transport:

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids, combustibles and oxidizing agents. All equipment must be earthed. Store in original packages as approved by manufacturer. Check all fittings, valves, reticulation (piping) and any ancillary equipment for leaks. A supplied air respirator or a Self-Contained Breathing Apparatus (SCBA) for emergencies should be available and checked regularly. For further information please refer to the Engineering Controls of this MSDS.

Spills and Disposal:

EMERGENCY ACTION: Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Isolate for 800 m in all directions if tank, rail car or tanker truck is involved in fire. SPILL OR LEAK PROCEDURE: Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour; but it may not prevent ignition in closed spaces. SMALL SPILLS: Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools. Place into labelled drum(s) for later disposal. LARGE SPILLS: Notify Emergency Services (Police or Fire Brigade). Tell them location, nature and any information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Trained personnel should wear Personal Protective equipment as highlighted in this MSDS. Blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

Fire/Explosion Hazard:

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide, foam or water spray. SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire. Use water spray to spray to cool fire-exposed surfaces and to protect personnel. Avoid spreading burning liquid with water used for cooling fire exposed containers when using water spray, boil-over may occur when the product temperature reaches the boiling point of water. UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapours from this product may travel or be moved by air currents and be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge or other ignition sources at locations distant from the point of handling.

OTHER INFORMATION

**Incompatibilities
(Materials to avoid)**

Strong alkalis, acids, nitrates and oxidizing agents.

Animal Toxicity Data:

The information published in this Material Safety Data Sheet has been compiled from data in various technical publications. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.