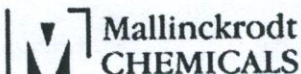


MSDS Number: **B5628** \* \* \* \* \* Effective Date: 08/24/05 \* \* \* \* \* Supersedes: 08/10/04**MSDS****Material Safety Data Sheet**From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 0886524 Hour Emergency Telephone: 800-850-2151  
CHEMTREC: 1-800-424-9300National Response in Canada  
CANUTEC: 613-996-6666Outside U.S. and Canada  
Chemtec: 703-527-3887**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

**BUFFER SOLUTIONS pH 6.86, pH 7.00, and pH 7.2****1. Product Identification****Synonyms:** Buffer Reference Solution pH 6.86; BuffAR® pH 7.00 Concentrate; BuffAR® pH 7.00; Phosphate Buffer Stock pH 7.2 (for Biochemical Oxygen Demand)**CAS No.:** Not applicable to mixtures.**Molecular Weight:** Not applicable to mixtures.**Chemical Formula:** Not applicable.**Product Codes:** 0031, 0098**2. Composition/Information on Ingredients**

Ingredient	CAS No	Percent	Hazardous
Mercury, (acetato-O)phenyl-	62-38-4	< 0.01%	No
Potassium Phosphate Monobasic	7778-77-0	< 1%	No
Potassium Phosphate Dibasic Anhydrous	7758-11-4	< 1%	No
Sodium Phosphate, Dibasic	7558-79-4	< 1%	No
Water	7732-18-5	99%	No
Contains sodium or potassium salts at less than 1%. High pH gives rise to hazards of product.			

**3. Hazards Identification****Emergency Overview****As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.****SAF-T-DATA<sup>(tm)</sup> Ratings** (Provided here for your convenience)

Health Rating: 0 - None

Flammability Rating: 0 - None

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)



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### Potential Health Effects

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**Inhalation:**

No adverse health effects expected from inhalation.

**Ingestion:**

Large doses may cause stomach upset.

**Skin Contact:**

Not expected to be a health hazard from skin exposure. May cause mild irritation and redness.

**Eye Contact:**

Not expected to be a health hazard. May cause mild irritation, possible reddening.

**Chronic Exposure:**

No information found.

**Aggravation of Pre-existing Conditions:**

No information found.

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## 4. First Aid Measures

**Inhalation:**

Not expected to require first aid measures.

**Ingestion:**

Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical advice.

**Skin Contact:**

Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.

**Eye Contact:**

Not expected to require first aid measures. Wash thoroughly with running water. Get medical advice if irritation develops.

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## 5. Fire Fighting Measures

**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:**

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage, direct sunlight, and freezing. Containers of this material may be hazardous when empty since they retain product residues

(vapors, liquid); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

Not expected to require any special ventilation.

**Personal Respirators (NIOSH Approved):**

Not expected to require personal respirator usage.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Safety glasses.

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## 9. Physical and Chemical Properties

**Appearance:**

Clear solution or yellow color coded solution.

**Odor:**

Odorless.

**Solubility:**

Soluble in water.

**Specific Gravity:**

ca. 1.0

**pH:**

6.86, 7.00 and 7.2

**% Volatiles by volume @ 21C (70F):**

No information found.

**Boiling Point:**

ca. 100C (ca. 212F)

**Melting Point:**

ca. 0C (ca. 32F)

**Vapor Density (Air=1):**

Essentially the same as water.

**Vapor Pressure (mm Hg):**

Essentially the same as water.

**Evaporation Rate (BuAc=1):**

Essentially the same as water.

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## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Phosphorus oxides may form when heated to decomposition.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

No incompatibility data found.

**Conditions to Avoid:**

No information found.

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## 11. Toxicological Information



-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Mercury, (acetato-O)phenyl- (62-38-4)	No	No	None
Potassium Phosphate Monobasic (7778-77-0)	No	No	None
Potassium Phosphate Dibasic Anhydrous (7758-11-4)	No	No	None
Sodium Phosphate, Dibasic (7558-79-4)	No	No	None
Water (7732-18-5)	No	No	None

## 12. Ecological Information

### Environmental Fate:

No information found.

### Environmental Toxicity:

No information found.

## 13. Disposal Considerations

Dilute with water and flush to sewer if local ordinances allow, otherwise, whatever cannot be saved for recovery or recycling should be managed in an appropriate and 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.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Mercury, (acetato-O)phenyl- (62-38-4)	Yes	Yes	Yes	Yes
Potassium Phosphate Monobasic (7778-77-0)	Yes	Yes	Yes	Yes
Potassium Phosphate Dibasic Anhydrous (7758-11-4)	Yes	Yes	Yes	Yes
Sodium Phosphate, Dibasic (7558-79-4)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada--		
		DSL	NDSL	Phil.
Mercury, (acetato-O)phenyl- (62-38-4)	No	Yes	No	Yes
Potassium Phosphate Monobasic (7778-77-0)	Yes	Yes	No	Yes
Potassium Phosphate Dibasic Anhydrous (7758-11-4)	Yes	Yes	No	Yes
Sodium Phosphate, Dibasic (7558-79-4)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Mercury, (acetato-O)phenyl- (62-38-4)	100	500*	No	Mercury comp
Potassium Phosphate Monobasic (7778-77-0)	No	No	No	No
Potassium Phosphate Dibasic Anhydrous (7758-11-4)	No	No	No	No
Sodium Phosphate, Dibasic (7558-79-4)	No	No	No	No
Water (7732-18-5)	No	No	No	No



-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8 (d)
Mercury, (acetato-O)phenyl- (62-38-4)	100	P092	No
Potassium Phosphate Monobasic (7778-77-0)	No	No	No
Potassium Phosphate Dibasic Anhydrous (7758-11-4)	No	No	No
Sodium Phosphate, Dibasic (7558-79-4)	5000	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
 SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No  
 Reactivity: No (Mixture / Liquid)

**WARNING:**

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 0 Flammability: 0 Reactivity: 0

**Label Hazard Warning:**

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

**Label Precautions:**

None.

**Label First Aid:**

Not applicable.

**Product Use:**

Industrial chemical.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 3.

**Disclaimer:**

\*\*\*\*\*  
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**Prepared by:** Environmental Health & Safety

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