

MSDS Number: **P3900** * * * * * *Effective Date: 08/17/06* * * * * * *Supersedes: 11/12/03*



From: Mallinckrodt Baker, Inc.
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All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. And Canada
Chemtrec: 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.

Phosphate Buffer, M/15, pH 6.8

1. Product Identification

Synonyms: None

CAS No.: Not applicable to mixtures.

Molecular Weight: Not applicable to mixtures.

Chemical Formula: Not applicable to mixtures.

Product Codes: U033

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Potassium Phosphate Monobasic	7778-77-0	< 1%	No
Sodium Phosphate, Dibasic	7558-79-4	< 1%	No
Sodium Azide	26628-22-8	< 1%	Yes
Water	7732-18-5	> 97%	No

3. Hazards Identification

Emergency Overview

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY AFFECT CENTRAL NERVOUS SYSTEM, KIDNEYS, AND CARDIOVASCULAR SYSTEM.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate (Life)

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate (Life)

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Inhalation of concentrated vapors may cause headache, dizziness, and drowsiness.

Ingestion:

Sodium Azide is highly toxic, affecting the central nervous system, kidneys and cardiovascular system. Dilute solutions are expected to be less toxic. Symptoms may include headache, nausea, vomiting, dizziness and gastrointestinal irritation.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin with possible systemic effects.

Eye Contact:

Causes irritation, redness, pain, and blurred vision.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician:

Accidental ingestion of sodium azide is potentially life threatening. Treatment includes gastric lavage, followed by saline catharsis. EKG and blood pressure monitoring and support are recommended.

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:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with

full facepiece operated in the pressure demand or other positive pressure mode.

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. Do not flush to the sewer. 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.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. CAUTION: Product contains Sodium Azide as a preservative. Do not allow product to evaporate to dryness. 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.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

For Sodium Azide, NaN₃ (note: hydrazoic acid, HN₃, vapor is present where sodium azide is handled):

- NIOSH Recommended Exposure Limit (REL) -
0.1 ppm as HN₃ (Ceiling), skin
0.3 mg/m³ as NaN₃ (Ceiling), skin.

- ACGIH Threshold Limit Value (TLV) -
0.11 ppm as HN₃ (Ceiling), A4 - Not classifiable as a human carcinogen
0.29 mg/m³ as NaN₃ (Ceiling), A4 - Not classifiable as a human carcinogen.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

Skin Protection:

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

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear, colorless liquid.

Odor:

No information found.

Solubility:

Complete (100%)

Specific Gravity:

No information found.

pH:

6.8

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

ca. 97

Boiling Point:

No information found.

Melting Point:

No information found.

Vapor Density (Air=1):

Not applicable.

Vapor Pressure (mm Hg):

Not applicable.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Hydrazoic acid fumes (explosion hazard), and oxides of phosphorus, sodium and nitrogen.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong acids and strong oxidizers.

For Sodium Azide: Benzoyl chloride + potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromalnonitrile, dimethyl sulfate, lead, barium carbonate, sulfuric acid, water, and nitric acid.

Conditions to Avoid:

Heat, incompatibles.

11. Toxicological Information

For Sodium Azide: 27 mg/kg oral rat LD50; 20 mg/kg skin rabbit LD50; investigated as a tumorigen and mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Potassium Phosphate Monobasic (7778-77-0)	No	No	None
Sodium Phosphate, Dibasic (7558-79-4)	No	No	None
Sodium Azide (26628-22-8)	No	No	None
Water (7732-18-5)	No	No	None

12. Ecological Information

Environmental Fate:

For Sodium Azide: When released into the soil, this material is not expected to biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the air, this material may be moderately degraded by photolysis.

Environmental Toxicity:

For Sodium Azide: Dangerous to the environment. Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste 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
Potassium Phosphate Monobasic (7778-77-0)	Yes	Yes	Yes	Yes
Sodium Phosphate, Dibasic (7558-79-4)	Yes	Yes	Yes	Yes
Sodium Azide (26628-22-8)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada--		
		DSL	NDSL	Phil.
Potassium Phosphate Monobasic (7778-77-0)	Yes	Yes	No	Yes
Sodium Phosphate, Dibasic (7558-79-4)	Yes	Yes	No	Yes
Sodium Azide (26628-22-8)	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.
Potassium Phosphate Monobasic (7778-77-0)	No	No	No	No
Sodium Phosphate, Dibasic (7558-79-4)	No	No	No	No
Sodium Azide (26628-22-8)	1000	500	Yes	No
Water (7732-18-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8(d)
Potassium Phosphate Monobasic (7778-77-0)	No	No	No
Sodium Phosphate, Dibasic (7558-79-4)	5000	No	No
Sodium Azide (26628-22-8)	1000	P105	No
Water (7732-18-5)	No	No	No

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

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: **1** Flammability: **0** Reactivity: **0**

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY AFFECT CENTRAL NERVOUS SYSTEM, KIDNEYS, AND CARDIOVASCULAR SYSTEM.

Label Precautions:

- Wash thoroughly after handling.
- Avoid contact with eyes, skin and clothing.
- Avoid breathing vapor or mist.
- Keep container closed.
- Use only with adequate ventilation.

Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:

Laboratory Reagent.

Revision Information:

New MSDS.

Disclaimer:

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