

MATERIAL SAFETY DATA SHEET

Product Name: PZA Rehydration Buffer

MSDS #: L-MSDS7116-4

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Section 1: Product and Company Information

Product Name: PZA Rehydration Buffer

Product Code: 7116-70

Manufacturer: TREK Diagnostic Systems
982 Keynote Circle, Suite 6
Cleveland, OH 44131
USA

European: TREK Diagnostic Systems
Unit 17-19
Birches Industrial Estate
East Grinstead
West Sussex, RH19 1XZ
UK

Phone Number: (800) 871-8909

Fax: (216) 351-5456

24-hour Emergency: (800) 642-7029

Telephone No. 44-1342-318777

Section 2: Composition and Ingredient Information

<u>Common Name</u>	<u>Chemical Name</u>	<u>CAS No.</u>	<u>EINECS/E LINCS</u>	<u>Wt. %</u>	<u>Symbol</u>	<u>*R- phrases</u>
Glycerine	1,2,3-propanetriol	56-81-5	200-289-5	0.2	Not available	Not available
Ammonium Sulfate	Sulfuric acid, diammonium salt	7783-20-2	231-984-1	0.05	Xn	R36/37/38
Sodium Phosphate	Phosphoric acid, disodium salt	7558-79-4	231-448-7	0.3	Xi	R36/37/38
Phosphoric Acid	Hydrogen phosphate	7664-38-2	231-633-2	0.5	C	R34
Water	Water	7732-18-5	231-791-2	98.8	Not available	Not available

* See section 16 for the full text of the R-phrases declared above.

Note: See Section 8 of this MSDS for exposure limit data for these ingredients.

Section 3: Hazards Identification

Appearance, Color and Odor: Clear, colourless liquid

Primary Route(s) of Exposure: Inhalation, ingestion, skin, eyes.

Potential Health Effects: **ACUTE (short term): see Section 8 for exposure controls**
Inhalation: Irritating to mucous membranes and may be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin: Contact causes irritation.
Eyes: Causes irritation.

CHRONIC (long term): see Section 11 for additional toxicological data
None.

Medical Conditions Aggravated by Exposure: None.

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Section 4: First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Eye Contact: Rinse immediately with plenty of water and seek medical advice.

Skin Contact: Wash immediately with plenty of water.

Ingestion: Seek medical advice immediately and show this container.

Section 5: Fire Fighting Measures

Flash Point and Method (°F): Not considered to be a fire hazard.

Flammability Limits (%): Not applicable.

Auto Ignition Temperature (°F): Not applicable.

Extinguishing Media: Use appropriate extinguishing media for surrounding material.

Unusual Fire and Explosion Hazards: None.

Fire Fighting Instructions: Wear self-contained breathing apparatus, and protective clothing to prevent contact with eyes and skin.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, phosphorous oxides.

Section 6: Accidental Release Measures

Air Release: Do not breathe mist. General room ventilation should be sufficient to eliminate vapours.

Land Spill: While wearing protective equipment, soak up with non-combustible absorbent material and place in a container for proper disposal.

Water Spill: Completely soluble in water.

Section 7: Handling and Storage

Storage Temperature: 2 – 8°C

Storage Pressure: Not applicable.

General: Keep container tightly closed and store in a cool, dry place.

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Section 8: Exposure Controls and Personal Protection

<u>Ingredient</u>	<u>ACGIH TLV</u> <u>(8-hr. TWA)</u> <u>(mg/m³)</u>	<u>U.S. OSHA PEL</u> <u>(8-hr. TWA)</u> <u>(mg/m³)</u>	<u>UK OEL</u> <u>(8-hr. TWA)</u> <u>(mg/m³)</u>
Glycerine	10 (mist)	15 (mist)	Not established
Ammonium Sulfate	Not established	Not established	Not established
Sodium Phosphate	Not established	Not established	Not established
Phosphoric Acid	1	1	Not established
Water	Not established	Not established	Not established

Engineering Controls: Provide general and/or local exhaust ventilation to control airborne concentrations below the recommended exposure guideline.

Personal Protection:

Respiratory Protection: Use a NIOSH/MSHA approved respirator for large spills only.

Skin Protection: Chemical resistant gloves and body-covering clothing to prevent contact. Nitrile or neoprene gloves recommended.

Eye Protection: Safety goggles.

Other: None.

Section 9: Physical and Chemical Properties

<u>Physical State:</u>	Liquid	<u>Vapor Pressure:</u> <u>(mm Hg @ 20°C)</u>	Not available
<u>Appearance:</u>	Clear, colourless liquid.	<u>Vapor Density:</u> <u>(Air = 1)</u>	Not available
<u>pH:</u>	2.0 +/- 0.1	<u>Solubility in Water:</u>	Complete
<u>Specific Gravity:</u> <u>(water = 1)</u>	1.7	<u>Water / Oil</u> <u>distribution</u> <u>coefficient:</u>	Not available
<u>Boiling Point:</u>	Not available	<u>Odour Type:</u>	Odourless
<u>Freezing Point:</u>	Not available	<u>Evaporation Rate:</u> <u>(n-Butyl Acetate = 1)</u>	Not available
<u>Viscosity:</u>	Not available	<u>Other:</u>	None.

Section 10: Stability and Reactivity

Stability: Stable.

Incompatible Materials and Conditions to Avoid: Strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, phosphorous oxides.

Hazardous Polymerization: Will not occur.

Other Reactivity Concerns: None.

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Section 11: Toxicological Information

Carcinogenicity: The table below indicates whether or not each agency has listed each ingredient as a carcinogen.

<u>Ingredient</u>	<u>ACGIH</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Glycerine	Not listed	Not listed	Not listed	Not listed
Ammonium Sulfate	Not listed	Not listed	Not listed	Not listed
Sodium Phosphate	Not listed	Not listed	Not listed	Not listed
Phosphoric Acid	Not listed	Not listed	Not listed	Not listed
Water	Not listed	Not listed	Not listed	Not listed

<u>Ingredient</u>	<u>LD₅₀ Oral</u> (mg/kg)	<u>LD₅₀ Dermal</u> (mg/kg)	<u>LC₅₀ Inhalation</u> (mg/m ³ , 4 hrs.)
Glycerine	12 600 (rat)	>10 000 (rabbit)	Not available
Ammonium Sulfate	2840 (rat) 640 (mouse)	Not available	Not available
Sodium Phosphate	17 000 (rat)	Not available	Not available
Phosphoric Acid	1530 (rat)	2740 (rabbit)	Not available
Water	Not available	Not available	Not available

Section 12: Ecological Information

The ecological effects have not been thoroughly investigated, but currently none have been identified.

Section 13: Disposal Considerations

Waste Disposal Method: This product is considered a RCRA hazardous waste. RCRA Code: D002
Follow Federal, State, and Local environmental regulations.

Section 14: Transport Information

<u>DOT Proper Shipping Name:</u>	Not regulated.
<u>DOT Hazard Classification:</u>	Primary: Not regulated.
	Secondary:
<u>DOT Special Provisions:</u>	None.
<u>DOT Packaging Exceptions:</u>	None.
<u>DOT Non-bulk Packaging:</u>	None.
<u>DOT Bulk Packaging:</u>	None.
<u>IMDG Proper Shipping Name:</u>	Not regulated
<u>IATA Proper Shipping Name:</u>	Not regulated

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Section 15: Regulatory Information

TSCA Status: This product is exempt under TSCA.
California Proposition 65: None.
SARA Title III:
Sec. 302/304: None.
Sec. 313: Phosphoric acid RQ 5000 lbs (2270 kg)
Sodium phosphate, disodium salt RQ 5000 lbs (2270 kg)
Right to Know: Massachusetts: Phosphoric acid, Phosphoric acid, disodium salt,
Sulfuric acid, diammonium salt, Glycerine
Minnesota: Phosphoric acid, Glycerine
New Jersey: Phosphoric acid, Phosphoric acid, disodium salt,
Sulfuric acid, diammonium salt
Pennsylvania: Phosphoric acid, Phosphoric acid, disodium salt,
Sulfuric acid, diammonium salt, Glycerine
EC Directive: This product is not hazardous as defined by the EC Directive.
Other: None

Section 16: Other Information

HMIS and NFPA Hazard Rating:

Category	HMIS	NFPA
Acute Health	1	1
Flammability	0	0
Reactivity	0	0

Full Text of R-phrases appearing in Section 2: R34 – Causes burns.
R36/37/38 – Irritating to eyes, respiratory system and skin.

Text of classifications appearing in Section 2: C - Corrosive
Xi - Irritant
Xn - Harmful

Preparation Information:

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Preparation date: September 23, 1999. Revised November 7, 2002 by TREK to update TREK USA address. Revised July 24, 2003 by TREK to update regulatory information. Revised August 14, 2010 by TREK to update TREK UK address.

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