

MATERIAL SAFETY DATA SHEET

Product Name: 0.5 McFarland Barium Sulfate Standard
MSDS #: L-MSDS1040-2

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SECTION 1: PRODUCT AND COMPANY INFORMATION

Product Name: 0.5 McFarland Barium Sulfate Standard
Product Code: E1040
Manufacturer: TREK Diagnostic Systems
982 Keynote Circle, Suite 6
Cleveland, OH 44131
(800) 871-8909

SECTION 2: HAZARDOUS INGREDIENTS

<u>Hazardous Components</u>	<u>CAS No.</u>	<u>Chemical Family</u>	<u>Molecular Formula</u>	<u>Approximate Concentration</u>
Sulfuric Acid 1%	7664-93-9	Inorganic Acid	H ₂ SO ₄ .H ₂ O	99.5%
Barium Sulfate	7727-43-7	Inorganic Salt	BaSO ₄	0.5%

SECTION 3: PHYSICAL DATA

<u>Physical State:</u>	Liquid	<u>Vapor Pressure:</u>	Not available
<u>Appearance:</u>	Clear, colorless liquid with a white precipitate.	<u>Vapor Density:</u>	Not available
<u>pH:</u>	Not available	<u>Solubility in Water:</u>	Not available
<u>Specific Gravity:</u>	Not available	<u>Flash Point:</u>	Not available
<u>Boiling Point:</u>	Not available	<u>Evaporation Rate:</u>	Not available
<u>Melting Point:</u>	Not available	<u>Odor:</u>	None

SECTION 4: FIRE AND EXPLOSION HAZARD

<u>Flammable:</u>	No
<u>Flammability Limits:</u>	Upper: Not applicable. Lower: Not applicable.
<u>Extinguish Media:</u>	Carbon dioxide, dry chemical, "alcohol" or polymer foam.
<u>Unusual Fire and Explosion Hazards:</u>	Heating with Aluminum may cause an explosion.
<u>Special Hazards:</u>	Wear self-contained, positive pressure breathing apparatus.

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SECTION 5: REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: Heat. Sparks. Open flame.

Materials to Avoid: Strong bases. Strong oxidizers. Aluminum may cause an explosion. Phosphorous.

Hazardous Decomposition Products: When heated to decomposition emits toxic fumes of SO₃.

SECTION 6: HEALTH HAZARD DATA

To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated. Presented below are specific data on each of the subcomponent ingredients:

<u>Hazardous Component</u>	<u>%</u>	<u>Threshold Limit Value</u>	<u>TXDS</u>
Sulfuric Acid 1%	99.5%	1 mg/M ³	Not available
Barium Sulfate	0.5%	10 mg/M ³	Not available

Effects of Overexposure: (Acute and Chronic)

Ingestion: Ingestion may cause stomach pains, vomiting, and/or diarrhea. If ingested in the presence of soluble barium salts, may cause toxic reactions due to bioaccumulation.

Inhalation: Inhalation of dry barium sulfate powder is tumorigenic to the lungs, thorax, or respiratory system.

Carcinogenicity: This product does not contain any carcinogens at 0.1% or greater.

First Aid Procedure:

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

Eye Contact: Immediately flush thoroughly with large amounts of water for at least 15 minutes.

Skin Contact: Immediately wash thoroughly with large amounts of water and soap.

Ingestion: Induce vomiting. Wash out mouth with water, provided person is conscious. Seek medical attention immediately.

In all cases of overexposure seek medical attention.
Wash contaminated clothing before reuse.

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SECTION 7: SPILL OR LEAK PROCEDURES OR DISPOSAL

Steps to be taken if material is released or spilled:

While wearing protective equipment, pick up using absorbent material and hold for waste disposal.

Waste Disposal:

Observe all local, provincial, state, and federal regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

Provide adequate general mechanical and local exhaust ventilation.

Avoid prolonged or repeated inhalation of vapor.

Protect eyes and with skin safety goggles and gloves.

Wash thoroughly after handling.

SECTION 9: SPECIAL HANDLING AND STORAGE PRECAUTIONS

Keep container tightly closed. Store in a cool, dark place. Protect from physical harm.

SECTION 10: OTHER INFORMATION

Preparation date:

September 18, 2002. Revised to reflect new TREK address November 7, 2002.

Disclaimer:

This material is for *In Vitro Diagnostic* use only. All use of this material must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. The above information is believed to be correct but does not purport to be all-inclusive. All materials may present unknown hazards and should be used with caution. TREK Diagnostic Systems, Inc. shall not be held liable for any damage resulting from handling or contact with above products.