



## MATERIAL SAFETY DATA SHEET

### 1. Product And Company Identification

PRODUCT NAME: Bitrex Solutions, Sensitivity and Fit Test

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MSDS DATE OF PREPARATION/REVISION: 08/28/09

PRODUCT USE: Solution used in respirator fit tests

### 2. Hazards Identification

Clear, colorless solution with no odor. Extreme bitter taste.

### EMERGENCY OVERVIEW

May cause mild eye irritation. Extremely bitter taste. May be harmful if swallowed.

### 3. Composition/Information On Ingredients

Component	CAS No.	Amount
Bitrex <sup>®</sup> Anhydrous	3734-33-6	<1%
Water	7732-18-5	>99%

(See Section 8 for Exposure Limits)

### 4. First Aid Measures

INHALATION: Move to fresh air. Seek medical advice if cough, shortness of breath, or other respiratory problems occur.

SKIN CONTACT: Rinse thoroughly with water. Seek medical advice if redness, swelling, itching, or burning occurs.

EYE CONTACT: Rinse immediately with plenty of water for 15 minutes, also under the eyelids. Obtain medical attention if irritation persists.

INGESTION: Ingestion of large amounts is unlikely due to the extremely bitter taste. However, if large amounts are ingested, call a physician or Poison Control Center immediately. If victim is conscious, rinse mouth with a small amount of water. Never give anything by mouth to a person who is drowsy or unconscious.



**5. Firefighting Measures**

EXTINGUISHING MEDIA: Use media suitable for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

UNUSUAL FIRE HAZARDS: None known.

HAZARDOUS COMBUSTION PRODUCTS: None known.

**6: Accidental Release Measures**

Contain and collect with inert absorbent material and place in a suitable container for disposal.

**7. Handling and Storage**

Avoid contact with the eyes. No special storage conditions required.

**8. Exposure Controls / Personal Protection**

EXPOSURE LIMITS

CHEMICAL	EXPOSURE LIMIT
Bitrex <sup>®</sup>	None Established
Water	None Established

VENTILATION: None needed under normal use conditions.

RESPIRATORY PROTECTION: None under normal use conditions.

GLOVES: None under normal use conditions.

EYE PROTECTION: Safety glasses or goggles recommended.

**9. Physical and Chemical Properties**

APPEARANCE AND ODOR: Clear, colorless liquid with no odor. Extremely bitter taste.

pH: Not determined	SPECIFIC GRAVITY: ~1
BOILING POINT: ~100°C (212°F) (same as water)	VAPOR PRESSURE: Same as water
FREEZING POINT: Not determined	VAPOR DENSITY: Same as water
SOLUBILITY IN WATER: Complete	PERCENT VOLATILE: >99%
VISCOSITY: Not determined	EVAPORATION RATE: Same as water
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not determined	
FLASH POINT: None	AUTOIGNITION TEMP: None
FLAMMABILITY LIMITS: LEL: None UEL: None	



### 10. Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID: None currently known.

INCOMPATIBILITY: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition will produce oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

### 11. Toxicological Information

#### POTENTIAL HEALTH EFFECTS:

#### ACUTE HAZARDS:

INHALATION: Inhalation of aerosol may cause upper respiratory tract irritation.

SKIN CONTACT: Prolonged skin contact may cause mild irritation.

EYE CONTACT: May cause mild eye irritation.

INGESTION: May cause nausea, vomiting, diarrhea, dizziness, drowsiness, and other symptoms of central nervous system depression. The material has a profoundly bitter taste, so ingestion of large amounts is very unlikely.

CHRONIC HAZARDS: None expected.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGEN: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP or ACGIH.

#### Acute Toxicity Values:

Bitrex<sup>®</sup>: Oral rat LD50: 584 mg/kg

### 12. Ecological Information

No ecotoxicity data is available for this product or its components at this time.

### 13. Disposal Considerations

Recycle, incinerate or landfill in accordance with all local, state/provincial and federal regulations.

### 14. Transport Information

Not regulated for transport by DOT, IATA, or IMDG.

### 15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Not hazardous

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Chemical Name	CAS #	Weight %
None		



**CERCLA SECTION 103:** This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**EPA TSCA INVENTORY:** All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

**CALIFORNIA PROPOSITION 65:** This product contains the following substances known to the State of California to cause cancer, birth defects or other reproductive harm: None.

**INTERNATIONAL INVENTORIES:**

**CANADIAN ENVIRONMENTAL PROTECTION ACT:** All of the ingredients are listed on the Canadian Domestic Substances List.

**EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS):** All of the ingredients are listed on the EINECS inventory.

**AUSTRALIA:** All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances

**JAPAN:** All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (MITI) List.

**KOREA:** All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

**CHINA:** All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

**PHILIPPINES:** All of the ingredients of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS).

**NEW ZEALAND:** All of the ingredients of this product are listed on the Hazardous Substances and New Organisms (HSNO) List.

<b>16. Other Information</b>
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NFPA Rating: Fire: 0                      Health: 0                      Reactivity: 0

**REVISION SUMMARY:** New MSDS.

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