

## Material Safety Data Sheet

### **SECTION 1 – IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY**

**Product Name:** Brotab Milk Preservative  
**Product Number:** 955  
**Manufacturer/Supplier:** Advanced Instruments, Inc.  
Two Technology Way  
Norwood, MA 02062  
1-781-320-9000  
**Origin:** USA  
**Date of Issue:** 2011-05-02

**Chemical Identification(s):** Bronopol and Antifungal Agent  
**Intended Use:** Brotab Milk Preservative is used to preserve milk samples for testing.  
**Emergency Contact:** RMPDC  
(303) 739-1110  
(877) 740-5015 (toll free)

### **SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS**

**Component:**  
Bronopol  
**CAS #:**  
52-51-7  
**Percent:**  
< 44 %

**Component:**  
Antifungal Agent (Confidential)  
**CAS #:**  
Not available  
**Percent:**  
< 2 %

**Component:**  
Inert tablet excipient/lubricant  
**CAS #:**  
Not Available  
**Percent:**  
< 55 %

### **SECTION 3 – HAZARDS IDENTIFICATION**

#### **Health**

**Routes of Entry:**  
Inhalation, ingestion, or eye/skin contact.

**Health Hazards:**  
The tablets are harmful if swallowed. Dust of tablets may cause irritation to skin, eyes, and mucus membrane.

**Carcinogenicity:**  
No evidence

**Symptoms of Exposure:**  
None indicated

**Medical Conditions Aggravated by Exposure:**  
None indicated

### **SECTION 4 – FIRST AID MEASURES**

**Emergency and First Aid Procedures:**  
SEEK MEDICAL ASSISTANCE IN ALL CASES OF OVEREXPOSURE.

**Eyes:**  
Immediately flush eyes with copious amounts of water for at least 15 minutes. Obtain medical attention.

**Skin:**

Immediately drench with water. Remove contaminated clothing. Swab affected area with water and soap and water. Obtain medical attention.

**Inhalation:**

Remove to fresh air. Keep warm and at rest. Obtain urgent medical attention.

**Ingestion:**

Wash out mouth thoroughly with water and give sips of water to drink. Obtain medical attention.

**SECTION 5 – FIRE FIGHTING MEASURES****Flash Point (°F):**

No data available

**Flammable Limits:**

LEL: No data available

UEL: No data available

**Extinguishing Media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Fire Fighting Procedures:**

Wear self contained breathing apparatus for firefighting if in confined space.

**Fire and Explosion Hazards:**

Not flammable or explosive. Product does not ignite when exposed to open flame.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Spill Response:**

Wear respiratory protection, rubber gloves, and chemical safety goggles. Prevent entry into watercourses. Immediately sweep up or vacuum (avoiding dust) and remove spillage to a polythene lined container for correct disposal. Clean the spillage site with detergent and water and retain washings for correct disposal. Clean up and place in closed container for proper disposal as described under, Section 13, Disposal Considerations. Comply with local, state, and country regulations on reporting releases. Refer to Section 15, Regulatory Information, for regulatory data.

**SECTION 7 – HANDLING AND STORAGE**

Keep container tightly closed. Do not get in eyes, on skin, or on clothing. Ensure good ventilation/exhaustion at the workplace. Store away from oxidizing agents and/or bases, heat or sources of ignition and food, drink, or animal feed.

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION****Occupational Exposure Limits:**

Bronopol: In-house exposure level of 0.5 mg/m<sup>3</sup> has been established.

Natamycin: In-house exposure level of 0.1 mg/m<sup>3</sup> has been established.

**Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:**

Adequate ventilation is required. Protective gloves must be worn to prevent skin contact (Neoprene or equivalent).

Safety glasses with side shields must be worn at all times.

**Work/Hygienic Practices:**

Wash hands thoroughly after handling. Do not take internally. Eyewash and safety equipment should be readily available.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES****Appearance:**

Yellow-orange tablets

**Boiling Point:**

No data available

**Specific Gravity (H<sub>2</sub>O = 1):**

No data available

**Explosiveness (°C):**

140°C

**pH:**

5 to 7 (1% w/v solution of Bronopol @ 20°C)

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

No data available

**Vapor Pressure (mm Hg):**

No data available

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

No data available

**Volatility:**

No data available

**Solubility in Water (%):**

Soluble

**SECTION 10 – STABILITY AND REACTIVITY**

**Stability:**

Stable under normal temperatures and pressures

**Conditions to Avoid:**

Heat and sources of ignition

**Materials to Avoid:**

Oxidizing agents and/or bases; metals (especially aluminum)

**Hazardous Decomposition:**

Oxides of nitrogen and hydrogen bromide

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**For Homidium Bromide**

**Symptoms of Exposure:**

Irritating on contact with skin, eyes, mucous membranes, or upper respiratory tract. Harmful if swallowed.

**Medical Conditions Aggravated by Exposure:**

None indicated.

**Routes of Entry:**

Inhalation, ingestion, or skin contact

**Carcinogenicity:**

None indicated

**Toxicity Data:**

LD50 Oral Rat – 307/342 mg/kg (male/female)

LC50 Dermal Rat – 1600 mg/kg

**Toxicological Findings:**

Weak or negative sensitization response in guinea pig maximization tests. Irritant to skin and eyes of rabbit. No evidence of carcinogenicity in oral and dermal rat studies. Not mutagenic, teratogenic or toxic to reproductive organs.

**SECTION 12 – ECOLOGICAL INFORMATION**

**Ecological effects:**

None indicated

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**EPA Waste Numbers:**

Not available

**Treatment:**

Dispose of in accordance with current legislation. Contaminated empty packaging materials should be treated in a similar manner. ALWAYS CONTACT A PERMITTED WASTE DISPOSAL SITE (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE, AND COUNTRY REGULATIONS.

**SECTION 14 – TRANSPORTATION INFORMATION**

**DOT Proper Shipping Name:**

Not restricted

**DOT ID Number:**

Not restricted

**SECTION 15 – REGULATORY INFORMATION**

**European Information:**

Not available

**Reviews, Standards, and Regulations:**

Not available

**SECTION 16 – OTHER INFORMATION**

**Comments:**

None

**NFPA Hazard Ratings:**

Health: 3

Flammability: 1

Reactivity: 0

Special Hazards: Not available

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