

BILE SALTS MIXTURE #3 (7230)

Intended Use

Bile Salts Mixture #3 is a mixture of bile salts for use in preparing microbiological culture media.

Product Summary and Explanation

Bile Salts Mixture #3 is a mixture of sodium cholate and sodium deoxycholate. It's primary use is as a selective agent for the isolation of gram-negative microorganisms, inhibiting gram-positive cocci. Bile Salts Mixture #3 is prepared especially for use in MacConkey Agar and Violet Red Bile Agar. Bile Salts Mixture #3 is soluble in distilled or deionized water and neutral to slightly alkaline in pH. It is used in preparing culture media without pre-filtration or adjustment of reaction. Several media containing Bile Salts Mixture #3 are recommended in standard methods for multiple applications.¹⁻³

Principles of the Procedure

Bile is derived from the liver. Bile Salts Mixture #3 contains bile extract standardized to provide inhibitory properties for selective media. Bile Salts Mixture #3 inhibits the growth of gram-positive organisms and spore-forming bacilli without affecting the development of gram-negative enteric bacilli.

Precautions

1. For Laboratory Use.
2. IRRITANT. Irritating to eyes, skin, and respiratory system.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free flowing and white in color.

Prepared Appearance (2.0 % wt/vol): Prepared medium is clear, colorless to light amber without a precipitate.

pH (2% Solution at 25°C): 7.8 - 8.6

Expected Cultural Response: Cultural response in MacConkey Agar after incubation at 35°C for 18 - 24 hours.

Microorganism	Response
<i>Escherichia coli</i> ATCC 25922	good to excellent growth, pink to red colonies surrounded by a zone of precipitated bile
<i>Staphylococcus aureus</i> ATCC 25923	complete inhibition

Test Procedure

Refer to appropriate references for specific procedures using Bile Salts Mixture #3.

Results

Refer to appropriate references for test results.

Storage

Store sealed bottle containing Bile Salts Mixture #3 at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

Expiration

Refer to expiration date stamped on container. Bile Salts Mixture #3 should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to Bile Salts Mixture #3 in its intact container when stored as directed.

Packaging

Bile Salts Mixture #3	Code No.	7230A	500 g
		7230B	2 kg
		7230C	10 kg

References

1. **Eaton, A. D., L. S. Clesceri, and A. E. Greenberg (eds.)**. 1995. Standard methods for the examination of water and wastewater, 19th ed. American Public Health Association, Washington, D.C.
2. **U.S. Food and Drug Administration**. 1995. Bacteriological analytical manual, 8thed. AOAC International, Gaithersburg, MD.
3. **Vanderzant, C., and D. F. Splittstoesser (eds.)**. 1992. Compendium of methods for the microbiological examination of food, 3rd ed. American Public Health Association, Washington, D.C.

Technical Information

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (410)780-5120 or fax us at (410)780-5470.