

LACTOSE (7231)

Intended Use

Lactose is used in preparing microbiological culture media.

Product Summary and Explanation

A basic characteristic of a microorganism is its nutritional requirements, and without the proper nutrients the organism cannot survive. An essential variety of ingredients are used in the preparation of dehydrated culture media to ensure optimal growth of the microorganism. Carbohydrates, including Lactose, play an important role as an energy source to increase the growth of bacteria and fungi.

Principles of the Procedure

Lactose is used in microbiological culture media as an energy source. Lactose is also used in the study of fermentation reactions of microorganisms, aiding in their identification. Lactose is generally added at 0.5 to 1.0% concentration in fermentation media.

Precaution

1. For Laboratory Use.

Quality Control Specifications

A representative sample of Lactose was tested, and met or exceeded established performance specifications as listed below.

Physical and Chemical Characteristics	Expected Results
Moisture (%)	Less than 1
Specific Rotation	+ 54.4 to 55.9
Residue on Ignition (%)	Less than 1
Heavy Metals, ppm	Less than 5
Acidity	Less than 0.4
Color of Solution	Colorless
Identity	Passes

Test Procedure

Refer to appropriate references for specific procedures using Lactose, or the dehydrated culture media containing Lactose.^{1,2}

Results

Refer to appropriate references for test results.

Storage

Store sealed container of Lactose 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. Lactose should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to Lactose in its intact container when stored as directed.

Packaging

Lactose	Code No.	7231A	500 g
		7231B	2 kg
		7231C	10 kg

References

1. **Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Tenover (eds.).** 1995. Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
2. **Isenberg, H. D. (ed.).** 1992. Clinical microbiology procedures handbook. Vol. 1. American Society for Microbiology, Washington, D.C.

Technical Information

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.