

DEXTROSE (7203)

Intended Use

Dextrose 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 Dextrose, play an important role as an energy source to increase the growth of bacteria and fungi.

Principles of the Procedure

Dextrose is used in microbiological culture media as an energy source. Dextrose is also used in the study of fermentation reactions of microorganisms, aiding in their identification. Dextrose 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 Dextrose was tested, and met or exceeded established performance specifications as listed below.

Physical and Chemical Characteristics

Specification	Expected Results
Moisture (%)	Less than 0.2
Specific Rotation	52.6-53.252.8
Purity (as D-Glucose)	Greater than 99.8%
Residue on Ignition (%)	Less than 0.1
Chlorides, ppm	Meets U.S.P.
Arsenic, ppm	Meets U.S.P.
Heavy Metals, ppm	Meets U.S.P.
Sulfate, ppm	Meets U.S.P.
Acidity	Meets U.S.P.
Soluble Starch Sulfites	Meets U.S.P.
Dextrin	Meets U.S.P.
Color of Solution	Meets U.S.P.
Identity	Meets U.S.P.

Test Procedure

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

Results

Refer to appropriate references for test results.

Storage

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

Packaging

Dextrose	Code No.	7203A	500 g
		7203B	2 kg
		7203C	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 (410)780-5120 or fax us at (410)780-5470.