

BRAIN-HEART INFUSION SOLIDS (7262)

Intended Use

Brain-Heart Infusion Solids is dehydrated infusion of porcine brains and hearts for use in preparing microbiological culture media.

Product Summary and Explanation

Rosenow devised an excellent medium for culturing streptococci by supplementing Dextrose Broth with bovine brain tissue.¹ Hayden, revising Rosenow's procedure by adding crushed marble to the medium, reported favorable growth of organisms from dental pathogens. Brain-Heart Infusion Solids was developed as an alternative to bovine based Brain Heart Infusion containing media, replacing calf brain and beef heart with porcine brains and hearts. Brain-Heart Infusion Solids was developed for pharmaceutical and vaccine production, and can replace traditional bovine based BHI media in most applications.

The nutritionally rich formula of Brain-Heart Infusion Solids is used to grow a variety of microorganisms. The original Brain-Heart Infusion media are specified in standard methods for multiple applications.³⁻⁶

Principles of the Procedure

Brain-Heart Infusion Solids provides nitrogen, amino acids, and vitamins in microbiological culture media. Brain-Heart Infusion Solids is processed from large volumes of raw material, retaining all the nutritive and growth stimulating properties of fresh tissue.

Precaution

1. For Laboratory Use.

Physical and Performance Characteristics

Chemical Specifications

Dehydrated Appearance: Powder is homogenous, free-flowing and yellow-beige.

Prepared Appearance (2% wt/vol): Prepared medium is brilliant to clear, amber solution which may or may not have a light precipitate.

pH (2% Solution at 25°C): 6.5 - 7.5

Loss on Drying: ≤ 6.0%

Total Nitrogen: 11 – 13%

Ash: ≤ 15%

Microbiology

Standard Plate Count: ≤ 5000 cfu/g

Growth Supporting Properties As: Cultural response on 2% Peptone Agar at 35°C after 18 - 24 hours incubation.

Microorganism	Response
<i>Escherichia coli</i> ATCC 25922	Good to excellent recovery
<i>Staphylococcus aureus</i> ATCC 6538	Fair to good recovery

Test Procedure

Refer to appropriate references for specific procedures using Brain-Heart Infusion Solids.

Results

Refer to appropriate references for test results.

Storage

Store sealed bottle containing Brain-Heart Infusion Solids 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. Brain-Heart Infusion Solids should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to Brain-Heart Infusion Solids in its intact container when stored as directed.

Packaging

Brain-Heart Infusion Solids	Code No.	7262A	500 g
		7262B	2 kg
		7262C	10 kg

References

1. **Rosenow, E. C.** 1919. Studies on elective localization. J. Dent. Res. **1**:205-249.
2. **Hayden, R. L.** 1923. Elective localization in the eye of bacteria from infected teeth. Arch. Int. Med. **32**:828-849.
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.
4. **Association of Official Analytical Chemists.** 1995. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, MD.
5. **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.
6. **Cunniff, P. (ed.)**. 1995. Official methods of analysis, AOAC International, 16th ed. AOAC International, Arlington, VA.

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.