

PANCREATIC DIGEST OF CASEIN (7179) (Peptone C)

Intended Use

Pancreatic Digest of Casein (Peptone C) is an enzymatic digest of casein for use in preparing microbiological culture media.

Product Summary and Explanation

Pancreatic Digest of Casein is recommended for preparing media where an enzymatic hydrolyzed casein is desired. Pancreatic Digest of Casein is used to support the growth of fastidious microorganisms. The high tryptophane content of Pancreatic Digest of Casein is valuable for use in detecting indole production. This media ingredient is biologically free of carbohydrates, and is recommended for fermentation studies. Nitrate reduction can also be determined using Pancreatic Digest of Casein.

Media used for the enumeration of coliforms in water use Pancreatic Digest of Casein as a nitrogen source. Pancreatic Digest of Casein is recommended for preparing media for sterility testing according to US Pharmacopeia (USP).¹ Several media containing Pancreatic Digest of Casein are specified in standard methods for multiple applications.²⁻⁴

Principles of the Procedure

Pancreatic Digest of Casein provides nitrogen, vitamins, minerals, and amino acids in prepared culture media. Casein is the main protein of milk, and a rich source of amino acid nitrogen.

Precaution

1. For Laboratory Use.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free-flowing, and off-white to beige.

Prepared Appearance (2% wt/ vol): Prepared medium is brilliant to clear, light yellow to yellow, and may have a light precipitate.

Chemical Composition:

CAS #	91079-40-2
Total Nitrogen (TN):	11.5 – 14.2%
Amino Nitrogen (AN):	3.6 – 4.9%
Ash:	≤ 6.5%
Moisture:	≤ 6.0%
pH (2% Solution)	6.9 ± 0.2

Microbiological Analysis:

Standard Plate Count:	< 1000 CFU / g
Coliform Count	< 10 CFU / g
Salmonella	Negative / 100 g

Expected Cultural Response: Cultural response on 2% Peptone Agar at 35°C after 18 - 24 hour incubation.

Microorganism	Response
<i>Escherichia coli</i>	Good to excellent growth
<i>Staphylococcus aureus</i>	Poor to fair growth

Test Procedure

Refer to appropriate references for specific procedures using Pancreatic Digest of Casein.

Results

Refer to appropriate references for test results.

Storage

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

Packaging

Pancreatic Digest of Casein (Peptone C)	Code No.	7179A	500 g
		7179B	2 kg
		7179C	10 kg

References

1. **United States Pharmacopeial Convention.** 2007. The United States pharmacopeia, Amended Chapters 61, 62, 111. The United States Pharmacopeial Convention, Rockville, MD.
2. **U.S. Food and Drug Administration.** 1995. Bacteriological analytical manual, 8thed., AOAC International, Gaithersburg, MD.
3. **Eaton, A. D., L. S. Clesceri, and A. E. Greenberg (eds.).** Standard methods for the examination of water and wastewater, 19th ed. American Public Health Association, Washington, D.C.
4. **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 (517)372-9200 or fax us at (517)372-2006.