

## PANCREATIC DIGEST OF CASEIN 2 (9189) (Peptone C 2)

### Intended Use

**Pancreatic Digest of Casein 2 (Peptone C 2)** is an enzymatic digest of casein for use in preparing microbiological culture media.

### Product Summary and Explanation

Pancreatic Digest of Casein 2 is recommended for preparing media where an enzymatic hydrolyzed casein is desired. Pancreatic Digest of Casein 2 is used to support the growth of fastidious microorganisms. The high tryptophan content of Pancreatic Digest of Casein 2 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 2.

Pancreatic Digest of Casein is recommended for preparing media for sterility testing according to US Pharmacopeia XXIII (USP).<sup>1</sup> Several media containing Pancreatic Digest of Casein are specified in standard methods for multiple applications.<sup>2-4</sup>

### Principles of the Procedure

Pancreatic Digest of Casein 2 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

#### Chemistry

**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%
Amino Nitrogen (AN):	4.4 – 5.0%
Ash:	≤6.5%
Moisture:	≤6.0%
pH (2% Solution)	6.6 – 7.5

#### **Microbiological Analysis:**

Aerobic Plate Count:	< 3000 CFU / g
Thermophiles:	< 1000 CFU / g

#### **Growth Supporting Properties on 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 fair to growth

### **Test Procedure**

Refer to appropriate references for specific procedures using Pancreatic Digest of Casein and Pancreatic Digest of Casein 2.

### **Results**

Refer to appropriate references for test results.

### **Storage**

Store sealed bottle containing Pancreatic Digest of Casein 2 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 2 should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to Pancreatic Digest of Casein 2 in its intact container when stored as directed.

### **Packaging**

<b>Pancreatic Digest of Casein 2 (Peptone C 2) Code No.</b>	<b>9189A</b>	<b>500 g</b>
	<b>9189B</b>	<b>2 kg</b>
	<b>9189C</b>	<b>10 kg</b>

### **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, 8<sup>th</sup>ed., 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, 19<sup>th</sup> 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, 3<sup>rd</sup> 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.