

Technical Information

Proteose Peptone

Product Code: BA2005

Principle & Interpretation

Proteose Peptone is prepared under controlled conditions. It is rich in proteoses, peptones and free amino acids. It is used in culture media especially for *Corynebacterium diphtheria* toxin and other bacterial toxin preparations, and for bulk production of antibiotics and enzymes. It is also used in synthetic media for acclimatization of microorganisms in bioreactor studies. Also, it finds application as lyoprotectant in preparation of freeze-dried cultures of *Campylobacter jejuni* which is widely used in the food and microbiological industry for reference materials and culture collections.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. It is biological origin product since variation in colour of powder and clarity may observed.
2. Each lot of the product has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's requirement.
3. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium prepared by the product.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

Appearance

Light yellow to brownish yellow homogenous free flowing powder characteristic odour but not putrescent

Solubility

Freely soluble in distilled water, insoluble in alcohol.

Clarity

1% w/v aqueous solution is clear without any haziness after autoclaving at 15 lbs pressure (121°C) for 15 minutes.

pH

pH of 2% w/v aqueous solution at 25°C 6.3-7.3

Microbial Load :

Bacterial Count : ≤ 2000 CFU/gram by plate method, when incubated at 30-35°C for not less than 3 days

Yeast & mould Count : ≤ 100 CFU/gram by plate method, when incubated at 20-25°C for not less than 5 days.

Test for pathogens :

1. *Escherichia Coli*- Absent/gram of sample

2. *Salmonella* species- Absent/10 gram of sample

3. *Pseudomonas aeruginosa*- Absent/gram of sample

4. *Staphylococcus aureus*- Absent/gram of sample

5. *Candida albicans*- Absent/gram of sample

6. *Clostridia*- Absent/gram of sample

Indole test : Tryptophan content: Passes

Cultural response : Cultural response observed with added 5-7% sterile defibrinated blood after incubation at 35 -37°C for 18-48 hours by preparing Blood Agar Base No. 2 (DM1834), using Proteose Peptone as an ingredient.

Cultural response

Organism	Growth	Haemolysis
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (WDCM 00034)	Good Luxuriant	beta
<i>Streptococcus pyogenes</i> ATCC 19615	Good Luxuriant	beta
<i>Streptococcus pneumoniae</i> ATCC 6303	Good Luxuriant	alpha
<i>Neisseria meningitidis</i> ATCC 13090	Good Luxuriant	none

Chemical Analysis :

Total Nitrogen : ≥ 12.00 %

Amino Nitrogen : ≥ 3.50 %

Sodium chloride : ≤ 5.00 %

Loss on drying : ≤ 5.00 %

Residue on ignition : ≤ 15.00 %

Storage and Shelf Life

Store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
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