Bio Peptone

RM021

It is recommended for cultivation of fastidious microorganisms and large scale production of antibiotics, enzymes & other products of microbiological origin.

Principle And Interpretation

Biopeptone is a mixture of enzymic digest of casein and animal tissues.It meets the nutritional requirements not supplied by meat peptone or casein hydrolysate individually. It is carefully processed to increase nutritive values to meet the growth requirements of wide variety of microorganisms. It provides a broad spectrum of peptides and amino acids and hence can be used in the manufacture of various culture media.

Quality Control

Appearance
Light yellow to brownish yellow homogenous free flowing powder ,having characteristic odour but not putrescent.

Solubility
Freely soluble in distilled/purified water, insoluble in alcohol and ether.

Clarity
1% w/v aqueous solution remains clear without haziness after autoclaving at 15 lbs pressure (121ºC) for 15 minutes.

Reaction
Reaction of 2% w/v aqueous solution at 25ºC.

pH
5.90- 6.90

Microbial Load:

Total aerobic microbial count (cfu/gm)

By plate method when incubated at 30-35°C for not less than 3 days.
Bacterial Count : <= 2000 CFU/gram

Total Yeast and mould count (cfu/gm)

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

Test for Pathogens
1. *Escherichia coli* -Negative in 10 gms of sample 2. *Salmonella* species-Negative in 10 gms of sample 3. *Pseudomonas aeruginosa*-Negative in 10 gms of sample 4. *Staphylococcus aureus*- Negative in 10 gms of sample 5. *Candida albicans*- Negative in 10 gms of sample 6. *Clostridia*- Negative in 10 gms of sample

Indole Test
Tryptophan Content:Passes

Cultural response
Cultural response observed after an incubation at 35-37ºC for 18-24 hours by preparing Columbia Broth (M145) using Biopeptone as an ingredient.

Cultural Response

Organism	Growth Cultural response
Clostridium perfringens ATCC 12924	Luxuriant
Neisseria meningitidis ATCC 13090	Luxuriant
Staphylococcus aureus ATCC 25923	Luxuriant
Streptococcus pyogenes ATCC 19615	Luxuriant
Streptococcus mitis ATCC 9895	Luxuriant

Chemical Analysis

Total Nitrogen	>= 12.0%
AminoNitrogen	>= 3.50%
Sodium chloride	<= 6.0%
Loss on drying	<= 5.0%
Residue on ignition	<= 12.0%

Storage and Shelf Life

Store below 30°C. Use before expiry date on the label.