HM Peptone B, Certified

CR002

Principle And Interpretation

HM Peptone B, Certified is a mixture of peptides and amino acids, nucleotide fractions, organic acids, minerals and some vitamins, providing an undefined source of nutrients which supports good growth of a wide variety of microorganisms. It is employed in production of extracellular proteases from Alcaligenes faecalis and to extract somatic coliphages from sludge, soil and treated biowaste. It can also be used for bulk production of antibiotics, enzymes and other products.It is equivalent to Meat Extract B,Certified.

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.

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 Nutrient Agar (M001) using HM Peptone B, certified as an ingredient.

Cultural response

Organism	Growth
Escherichia coli ATCC 25922	Luxuriant
Pseudomonas aeruginosa ATCC 27853	Luxuriant
Staphylococcus aureus ATCC 25923	Luxuriant
Salmonella Typhi ATCC 6539	Luxuriant
Streptococcus pyogenes ATCC 19615	Luxuriant

Chemical Analysis

Total Nitrogen	>= 12.0%
Amino Nitrogen	>= 3.80%
Sodium chloride	<= 5.0%
Loss on drying	<= 5.0%
Residue on ignition	<= 11%

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.

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