Soya Peptone Type I

RM7714

Principle And Interpretation

Soya peptone type I, is a soluble end product of the enzymic digestion of soyabean meal by papain.It is excellent source of mixed peptides,free amino acids and growth factors. It is use as growth stimulant in culture media for the mass cultivation of variety of microorganisms including bacteria and fungi.

Quality Control

Appearance

Yellow to yellowish brown homogenous free flowing characteristic odour of protein, derived from vegetable source.

Solubility

Freely soluble in distilled/purified water, insoluble in chloroform.

Reaction

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

pH

6.0 - 7.0

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 incubation for bacterial at 35 - 37°C for 18-24 hours and for fungal at 20-25°C for not less than 5 days by preparing HiVeg Soyabean Casein Digest Medium (MV011) and Soyabean Casein Digest Medium (M011), using Soya Peptone,Type-I as an ingredient.

Cultural Response

Organism	Growth
Bacteroides vulgatus ATCC 8482	luxuriant
Pseudomonas aeruginosa ATCC 27853	luxuriant
Streptococcus pyogenes ATCC 19615	luxuriant
Salmonella Typhi ATCC *6539*	luxuriant
Staphylococcus aureus ATCC 25923	luxuriant
Aspergillus brasiliensis ATCC16404	luxuriant
Candida albicans ATCC 10231	luxuriant
Bacillus subtilis ATCC 6633	luxuriant
Enterococcus faecalis ATCC 29212	luxuriant

Neisseria meningitidis ATCC 13090	luxuriant
Proteus vulgaris ATCC 13315	luxuriant
Shigelle flexeneri ATCC 12022	luxuriant
Saccharomyces cerevisiae ATCC 9763	luxuriant

Chemical Analysis

Total Nitrogen	>= 9%
AminoNitrogen	>= 2.20%
Sodium chloride	<= 5%
Loss on drying	<= 7%
Residue on ignition	<= 12%

Storage and Shelf Life

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