Tryptone Type-II (Casitose, Type-II)

RM028

Principle And Interpretation

Tryptone, Type-II (Casitose, Type II) is carefully manufactured under controlled conditions of enzyme hydrolysis using high quality lactose free milk protein and is equivalent to Casitone and is specially used in Antibiotic Assay Media. And is ideal in culture media wherein microbial growth is determined by optical means. Also it is a very rich source of Amino Nitrogen. It is equivalent to Casein Enzyme Hyrolysate,Type II.

Quality Control

Appearance

Off white to light 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 is clear without any haziness after autoclaving at 15 lbs pressure (121ºC) for 15 minutes.

Reaction

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

pH

6.20- 7.20

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 sample2. *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 sample5. *Candida albicans*- Negative in 10 gms of sample6. *Clostridia*- Negative in 10 gms of sample

Indole Test

Tryptophan content: Passes

Cultural response

Cultural response observed after an incubation at 35-37ºC for 18-48 hours by preparing Soyabean Casein Digest Medium (M011) using Tryptone Type-II (Casitose, Type-II) as an ingredient.

Cultural Response

Organism	**Growth**
Cultural response	
Bacillus subtilis ATCC 6633	characteristic,luxuriant growth
Bacillus vulgatus ATCC 8482	characteristic,luxuriant growth
Candida albicans ATCC 10231	characteristic,luxuriant growth
Staphylococcus aureus ATCC 25923	characteristic,luxuriant growth

Streptomyces albus ATCC 3004	characteristic,luxuriant growth
Streptococcus pyogenes ATCC 19615	luxuriant w/beta haemolysis (with addition of sterile 5%sheep blood in above medium after 48 hours of incubation at 35-37°C).
Neisseria meningitidis ATCC 13090	luxuriant w/beta haemolysis (with addition of sterile 10%sheep blood to above medium heated to 80 to 90°C until blood has turned to chocolate brown 10% CO_2 atmosphere after 48 hours of incubation at 35-37°C).

Chemical Analysis

Total Nitrogen	>= 12.0%
AminoNitrogen	>= 3.50%
Sodium chloride	<= 4.0%
Loss on drying	<= 5.0%
Residue on ignition	<= 12.0%

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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