



## Tryptone Certified (Casitose, Certified)

CR014

### Principle And Interpretation

Tryptone, Certified (Casitose, Certified) is manufactured by a controlled enzymatic hydrolysis of milk protein. It is rich in tryptophan and used by a wide variety of microorganisms, recommended in a number of media such as Sterility Testing media, Diagnostics Media, media for biochemical characterization etc. It is equivalent to Casein Enzyme Hydrolysate, certified.

### 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 (121°C) for 15 minutes.

#### Reaction

Reaction of 2% w/v aqueous solution at 25°C

#### pH

6.30- 7.30

#### 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 35-37°C for 18-48 hours by preparing Soyabean Casein Digest Medium (M011) using Tryptone Certified (Casitose, Certified) as an ingredient.

#### Cultural Response

##### Organism

##### Growth

*Escherichia coli* ATCC 25922

Characteristic, luxuriant growth

*Pseudomonas aeruginosa* ATCC 27853

Characteristic, luxuriant growth

*Enterobacter aerogenes* ATCC 13048

Characteristic, luxuriant growth

*Salmonella Typhi* ATCC 6539

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 gonorrhoeae* ATCC 19424

Luxuriant (with addition of sterile 10% sheep blood to above medium heated to 80 to 90°C until blood has turned to chocolate brown and incubated in 10% CO<sub>2</sub> atmosphere after 48 hours of incubation at 35-37°C).

**Chemical Analysis**

Total Nitrogen	>= 11.0%
Amino Nitrogen	>= 4.0%
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.

Revision : 6/ 2018

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