

Technical Information

Casein Acid Hydrolysate

Product Code: BA 2498

Principle & Interpretation

Acicase is an acid hydrolysis of milk protein specially processed to achieve minimum inorganic ions. It is virtually a mixture of free amino acids. It is specially standardized for the purpose of pertussis vaccine production. It can also be used as microbial nutrient requiring free amino acid content for other vaccines/ toxins production. It is equivalent to Casein Acid Hyrolysate.

Quality Control

Appearance

Off white to light yellow homogenous free flowing powder, having characteristic odour but not putrescent.

Solubility

Freely soluble in distilled 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.

рΗ

6.00- 7.00

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: Absent

Thymine / Thymidine content

Following discs were tested for standard ATCC strains and zone of inhibition were measured after an incubation 35-37°C for 18 hours. (As per CLSI Protocol M6-A2 & Standards as per CLSI M100-S19)

Escherichia coli ATCC 25922

Co-Trimoxazole COT 25mcg (SD010) 23mm-29mm

Staphylococcus aureus ATCC 25923

Co-Trimoxazole COT 25mcg (SD010) 24mm- 32mm

Enterococcus faecalis ATCC 29212

Co-Trimoxazole COT 25mcg (SD010) >= 20mm Trimethoprim TR 5mcg (SD039) >= 20mm

Staphylococcus aureus ATCC 43300





Oxacillin OX 1mcg (SD088) No zone or very hazy zone.

Divalent cation content

Following discs were tested for standard ATCC strains and zone of inhibition were measured after an incubation 35-37°C for 18 hours. (As per CLSI Protocol M6-A2 & Standards as per CLSI M100-S19)

Staphylococcus aureus ATCC 25923

Tetracycline TE 30mcg (SD037) 24mm- 30mm

Escherichia coli ATCC 25922

Tetracycline TE 30mcg (SD037) 18mm- 25mm

Pseudomonas aeruginosa ATCC 27853

Amikacin AK 30mcg (SD035) 18mm- 26mm Tobramycin TOB 10mcg (SD044) 19mm-25mm Gentamicin GEN 10mcg (SD016) 16mm-21mm

Cultural response

Cultural response observed after an incubation at 35-37^oC for 18-48 hours by preparing Mueller Hinton Agar (DM1173) using Acicase as an ingredient.

Organism	Growth

Escherichia coli ATCC 25922 Luxuriant

Haemophilus influenzae ATCC 49247 Good-luxuriant(on Mueller Hinton Chocolate Agar)

Neisseria gonorrhoeae ATCC 49226 Luxuriant
Pseudomonas aeruginosa ATCC 27853 Luxuriant
Staphylococcus aureus ATCC 25923 Luxuriant
Enterococcus faecalis ATCC 29212 Luxuriant

Streptococcus pneumoniae ATCC 6305 Luxuriant (on Mueller Hinton Blood Agar)

Chemical Analysis

Total Nitrogen >= 11.0%

Amino Nitrogen >= 6.0%

Sodium chloride <=19.0%

Loss on drying <= 5.0%

Residue on ignition <= 20.0%

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

Seal the container tightly after use.

Disclaimer:

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performens parameters.

