



Dehydrated Culture Media  
Bases / Media Supplements

## Technical Information

### Casein Acid Hydrolysate

**Product Code: BA2013**

#### Principle & Interpretation

Acicase, Technical is the result of acidic digestion of milk protein by hydrochloric acid. Absence of sulphonamide inhibitors makes Acicase, Technical ideal for preparation of Antibiotic Test Media, like Mueller Hinton Agar and Vaccine Preparation Media as a source of high concentration of free amino acids. It contains all amino acids (except Tryptophan and Cystine which are destroyed during acid hydrolysis) present in milk protein and high sodium chloride content.

#### Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Safety guidelines may be referred in individual safety data sheets.

#### Limitations

1. It is biological origin product since variation in colour of powder and clarity may observed.
2. Each lot of the product has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's requirement.
3. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium prepared by the product.

#### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

#### Quality Control

##### Appearance

Off white to light yellow homogeneous free flowing powder 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.

##### pH

pH of 2% w/v aqueous solution at 25°C                      5.0-7.0

##### Microbial Load

Bacterial Count : <= 2000 CFU/gram by plate method, when incubated at 30-35°C for not less than 3 days

Yeast & mould Count : <= 100 CFU/gram by plate method, when incubated at 20-25°C for not less than 5 days.

##### Test for pathogens

1. *Escherichia coli* - Absent/gram of sample
2. *Salmonella* species- Absent/10 gram of sample



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3. *Pseudomonas aeruginosa*- Absent/gram of sample
4. *Staphylococcus aureus*- Absent/gram of sample
5. *Candida albicans* - Absent/gram of sample
6. *Clostridia* - Absent/gram of sample.

**Indole test :** Tryptophan content: Absent

**Cultural response :**

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

**Cultural response**

**Organism**

*Escherichia coli* ATCC 25922 (WDCM 00013)  
*Haemophilus influenzae* ATCC 49247  
*Neisseria gonorrhoeae* ATCC 49226  
*Pseudomonas aeruginosa* ATCC 27853(WDCM 00025)  
*Staphylococcus aureus* sub sp. *aureus* ATCC25923 (WDCM 00034)  
*Enterococcus faecalis* ATCC 29212(WDCM 00087)  
*Streptococcus pneumoniae* ATCC 6305

**Growth**

Luxuriant  
Good-luxuriant (on Mueller Hinton Chocolate Agar)  
Luxuriant  
Luxuriant  
Luxuriant  
Luxuriant  
Luxuriant  
Luxuriant (on Mueller Hinton Blood Agar)

**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 (WDCM 00013) :**

Co-Trimoxazole COT 25mcg (SD1010): 23mm- 29mm

***Staphylococcus aureus* sub sp. *aureus* ATCC 25923 (WDCM 00034) :**

Co-Trimoxazole COT 25mcg (SD1010): 24mm- 32mm

***Enterococcus faecalis* ATCC 29212 (WDCM 00087) :**

Co-Trimoxazole COT 25mcg (SD1010): >= 20mm

Trimethoprim TR 5mcg (SD1039) :>= 20mm

***Staphylococcus aureus* sub sp. *aureus* ATCC 43300 (WDCM 00211) :**

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* sub sp. *aureus* ATCC 25923 (WDCM 00034) :**

Tetracycline TE 30mcg (SD1037) : 24mm- 30mm

***Escherichia coli* ATCC 25922 (WDCM 00013) :** Tetracycline TE 30mcg (SD1037) : 18mm- 25mm

***Pseudomonas aeruginosa* ATCC 27853 (WDCM 00025) :**

Amikacin AK 30mcg (SD1035) :18mm- 26mm

Gentamicin GEN 10mcg (SD1016) : 17mm-23mm

Tobramycin TOB 10mcg (SD1044) : 20mm-26mm

**Chemical Analysis**

Total Nitrogen : ≥7.00 %

Amino Nitrogen : ≥5.00 %

Sodium chloride : ≤37.00 %

Loss on drying : ≤5.00 %

Residue on ignition : ≤40.00 %



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IRON :  $\leq 100.00$  ppm

## 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.

## Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

## Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms 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.
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- 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 performance parameters.