

CM 23953 - CASEIN ACID HYDROLYSATE, (TECHNICAL) (Culture Media Ingredient)

INTENDED USE

Used in antibiotic sensitivity testing media, vaccine preparation media etc.

PRODUCT SUMMARY AND EXPLANATION

Casein Acid Hydrolysate, (Technical) is the result of acidic digestion of milk protein by hydrochloric acid. Absence of sulphonamide inhibitors makes Casein Acid Hydrolysate, (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

PRINCIPLE

Casein Acid Hydrolysate, Technical is the result of acidic digestion of milk protein-casein by hydrochloric acid. As such, it contains all amino acids (except Tryptophan and Cystine which are destroyed during acid hydrolysis) present in Casein.

INSTRUCTION FOR USE

Casein Acid Hydrolysate, Technical used as an ingredient in Mueller Hinton Agar.

QUALITY CONTROL SPECIFICATIONS

| | | |
|-------------------------------|---|--|
| Appearance | : | Off white to creamish yellow colour, free flowing powder, having characteristic odour but not pungent smell. |
| Solubility (2% soln. at 25°C) | : | Soluble in distilled Water, Clear. Insoluble in alcohol. |
| Clarity (2% Soln. at 121°C) | : | Clear solution. No ppt. |
| pH (2% Soln. at 25°C) | : | 4.7 – 5.7 |
| Loss on drying (at 105°C) | : | NMT – 6.0% |
| Total Nitrogen (DWB) | : | NLT – 7.0% |
| α-Amino Nitrogen | : | 5.0 – 6.5% |
| AN/TN x 100 | : | 72.0 – 76.0% |
| Total Ash | : | NMT – 40.0% |
| Sodium Chloride (NaCl) | : | NMT – 45.0% |
| Heavy Metals (Pb) | : | NMT- 20ppm |
| Indole Test | : | Negative |
| Microbial test | : | Passes Test |
| Growth Promotional Test | : | Passes Test |

INTERPRETATION

Cultural Characteristic observed in 1.75% Casein Acid Hydrolysate used as an ingredient in Mueller Hinton Agar after incubation at 35-37°C for 18-24 hours.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth |
|------------------------|-------|-------------------|------------------|
| Staphylococcus aureus | 25923 | 50-100 | Good - Luxuriant |
| Escherichia coli | 25922 | 50-100 | Good - Luxuriant |
| Pseudomonas aeruginosa | 27853 | 50-100 | Good - Luxuriant |



AMINO ACID PROFILE

| Amino Acids | Symbols | Total-T (g/100g) |
|---------------|---------|------------------|
| Alanine | Ala | 1.8 |
| Arginine | Arg | 2.19 |
| Aspartic Acid | Asp | 4.2 |
| Cystine | Cys | 0 |
| Glutamic Acid | Glu | 12.3 |
| Glycine | Gly | 1.17 |
| Histidine | His | 1.6 |
| Isoleucine | Ileu | 2.2 |
| Lucien | Leu | 3.2 |
| Lysine | Lys | 5.4 |
| Methionine | Met | 1.15 |
| Phenylalanine | Phe | 2.3 |
| Proline | Pro | 5.8 |
| Serine | Ser | 2.5 |
| Threonine | Thr | 2.1 |
| Tyrosine | Tyr | 0.6 |
| Tryptophan | Trp | -- |
| Valine | Val | 3.6 |

PACKAGING:

Standard packing is 500gm in HDPE bottle. After packing tightly closed in a dry and well-ventilated place.

STORAGE

Store at room temperature in cool place, Keep HDPE bottle tightly closed in a dry and well-ventilated place. 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.

Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

DISPOSAL

After use, contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product.

REFERENCES

1. J.H. Müller, J. Hinton, Proc. Soc. Exptl. Biol. 48, 330 (1941)
2. G.M. Eliopoulos, et al., Enhancement of cefotaxime and other cephalosporins against *Enterococcus faecalis* by blood supplemented Mueller-Hinton agar, Diagn. Microbiol. Infect. Dis. 12, 149 (1989);



QTY.

Quantity

**LOT/
B. NO.**

Lot / Batch Number



Temperature Unit



Best Before



QR
Code

REF

Catalogue No.



Consults Instructions for use :



Manufacturer

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*ForLab Use Only

