

TM 422 – CETRIMIDE BROTH

INTENDED USE

For selective isolation of *Pseudomonas aeruginosa*.

PRODUCT SUMMARY AND EXPLANATION

Pseudomonas aeruginosa grows well on all normal laboratory media. Cetrimide Broth Base is the modification of the formula designed by King, Ward and Raney and is useful for the cultivation of *P. aeruginosa*. This medium is selective as it contains cetrimide (Cetyl trimethyl ammonium bromide), which inhibits other bacteria except *P.aeruginosa*. This medium is therefore, important in the identification of *P.aeruginosa*. Cetrimide Broth is used for the examination of cosmetics and clinical specimens for the presence of *P. aeruginosa*, as well as for evaluating the efficacy of disinfectants against this organism.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Beef extract	10.000
Sodium chloride	5.000
Cetrimide	0.300

PRINCIPLE

Peptone and beef extract provide necessary nutrients for *P.aeruginosa*. Cetrimide acts as a quaternary ammonium, cationic detergent that causes release of nitrogen and phosphorus from bacterial cells other than *Pseudomonas aeruginosa*. Sodium chloride maintains osmotic equilibrium in the medium.

INSTRUCTION FOR USE

- Dissolve 25.3 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes or flasks or as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow coloured homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent solution in tubes.
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	35-37°C	24-48 Hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	$\geq 10^3$	Inhibited	35-37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- Forbes B. A., Sahm A. S. and Weissfeld D. F., Bailey & Scotts Diagnostic Microbiology, 10th Ed., 1998, Mosby, Inc., St. Louis, Mo.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- King E.O., Ward M.K. and Raney D.E., 1954, J. Lab. Clin. Med., 44(2):301. 2. USFDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
- Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
- Williams, (Ed.), 2005, Official Methods of Analysis of the Association of Official Analytical Chemists, 19th Ed., AOAC, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Balkstrasse 10, 49163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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