

## TM 1522- CETRIMIDE BROTH BASE (ISO 8360-2:1988)

### INTENDED USE

For cultivation of *Pseudomonas aeruginosa* from water samples using membrane filter technique.

### PRODUCT SUMMARY AND EXPLANATION

Cetrimide Broth Base is a selective medium for cultivation of *Pseudomonas aeruginosa*. The medium is a modification of the formula designed by King, Ward and Raney. It contains cetrimide as a selective agent, which inhibits others except *P.aeruginosa*. Cetrimide broth base is used for the examination of cosmetics and clinical specimens for the presence of *P.aeruginosa*, as well as for evaluating the efficiency of disinfectants. The composition and performance criteria of this medium are as per the specifications laid down in ISO 8360-1:2008.

### COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.000
Potassium sulphate	10.000
Magnesium chloride	1.400
Cetrimide	0.500

### PRINCIPLE

Medium contains Peptic digest of animal tissue which provides necessary nutrients. Cetrimide acts as a quaternary ammonium cationic detergent which inhibits other bacteria except *P.aeruginosa*. Magnesium chloride and Potassium sulphate stimulate the production of pyocyanin pigment, a blue water-soluble pigment.

### INSTRUCTION FOR USE

- Dissolve 31.90 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C.
- Aseptically add 25 ml filter sterilized ethanol.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Dehydrated powder</b>	:	Cream to yellow colored, Homogeneous free flowing powder
<b>Appearance of Prepared medium</b>	:	Light amber coloured, clear to slightly opalescent solution
<b>pH (at 25°C)</b>	:	7.2± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Pseudomonas aeruginosa</i>	27823	50-100	Luxuriant	>=50%	35-37°C	24-48 hours
<i>Escherichia coli</i>	25922	≥1000	Inhibited	0%	35-37°C	24-48 hours



<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	0%	35-37°C	24-48 hours
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### PACKAGING

In 500 gm packaging size.

### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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 powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

### DISPOSAL

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

### REFERENCES

1. Gilardi, 1985, In Manual of Clinical Microbiology, Lennett, Balows, Hausler and Shadomy (Eds.), 4th ed., ASM, Washington, D.C
2. International Organization for Standardization (ISO), 1988, Draft ISO/DIS 8360-2.
3. King, E. O., M. K. Ward, and E. E. Raney. 1954. Two simple media for the demonstration of pyocyanin and fluorescein. J. Lab. Clin. Med. 44:301.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

**\*For Lab Use Only**

**Revision: 8<sup>th</sup> July 2020**