TM 228- MOTILITY TEST MEDIUM (EDWARDS AND EWING)
(IS : 5887 (Part I and V) 1976, reaffirmed 2005)

INTENDED USE

For testing motility of enteric bacteria.

PRODUCT SUMMARY AND EXPLANATION

Motility Test Medium is the modification of the original formulation as per Edwards and Ewing and is used for testing motility of Enterobacteriaceae. Motility can be visualized as a diffused zone of growth flaring out from the line of inoculation. BIS has recommended this medium for testing the motility of *E. coli*, *V.cholerae* and *V. parahaemolyticus.*

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	10.000
Sodium chloride	5.000
Agar	4.000
Meat extract	3.000

PRINCIPLE

The medium contains Beef extract and peptic digest of animal tissue which serve as sources of essential growth nutrients required for bacterial metabolism. Sodium chloride maintains the osmotic equilibrium of the medium. Small amount of agar helps to create a semisolid medium.

INSTRUCTION FOR USE

1. Dissolve 22.00 grams in 1000ml distilled water.
2. Gently heat to boiling with swirling to dissolve the medium completely.
3. Dispense 8 ml amounts into test tubes.
4. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
5. Cool the tubed medium in upright position.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder : Yellow coloured, Homogeneous free flowing powder
Appearance of Prepared medium : Yellow coloured, clear gel forms in tube as butts.
pH (at 25°C) : 7.5± 0.1

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Motility	Incubation temperature	Incubation period
Escherichia coli	25922	50-100	Luxuriant	Positive, Growth away from stab line causing turbidity	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	Positive, Growth away from stab line causing	35-37°C	18-24 Hours

				turbidity		
Klebsiella pneumoniae	13883	50-100	Luxuriant	Negative, growth along the stab line, surrounding medium remains clear	35-37°C	18-24 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	Positive, Growth away from stab line causing turbidity	35-37°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	Negative, growth along the stab line, surrounding medium remains clear	35-37°C	18-24 Hours
Vibrio cholerae	15748	50-100	Luxuriant	Positive, Growth away from stab line causing turbidity	35-37°C	18-24 Hours
Vibrio parahaemolyticus	17802	50-100	Luxuriant	Positive, Growth away from stab line causing turbidity	35-37°C	18-24 Hours

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 powder if they 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.Edward P.R. and Ewing W.H. 1972, Cited from, Colour Atlas and Textbook of Diagnostic Microbiology,1992, 4th ed., J.B. Lippincott Co. Philadelphia.
2.Bureau of Indian Standards, IS : 5887 (Part - I) 1976, reaffirmed 1986.
3.Bureau of Indian Standards, IS : 5887 (Part - V) 1976, reaffirmed 1986.
4.Howard B. J. and Other (Eds.), 1994, Clinical and Pathogenic Microbiology, The C. V. Mosby. Year Book, Inc. 5.Baron. E. J. and Finegold S. M. (Eds.), 1990, Bailey and Scott's `Diagnostic Microbiology, 8th ed., The C. V. Mosby. Co, St., Louis, Missouri.

GMP Good Manufacturing Practices Certified
Best Before
QTY. Quantity
REF Catalogue Number
Manufacturer
Temprature 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**

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