

TM 938 – B.C. MOTILITY TEST MEDIUM (BC MOTILITY MEDIUM)

INTENDED USE

For motility testing of *Bacillus cereus*.

PRODUCT SUMMARY AND EXPLANATION

Bacillus cereus is widely distributed in nature and can be isolated from a variety of foods. *B. cereus* causes food poisoning due to the consumption of contaminated rice, eye infections and a wide range of other clinical conditions like abscess formation, meningitis, septicemia and wound infection. *Bacillus cereus* is a known cause of disease mastitis, especially in ewes and heifers among the veterinarians. BC Motility Test Medium is formulated as per APHA for the cultivation and examination of motility of *B. cereus* strains.

This medium is inoculated by stabbing down the center with 3 mm loopful of culture and incubated at 18-24 hours at 30°C. Rhizoid strains of *B. cereus* var *mycoides* produce characteristic fuzzy growth in semisolid media due to expansion of the filamentous growth but they are not motile by means of flagella.

COMPOSITION

| Ingredients | Gms / Ltr |
|-----------------------------|-----------|
| Tryptone | 10.000 |
| Yeast extract | 2.500 |
| Dextrose (Glucose) | 5.000 |
| Disodium hydrogen phosphate | 2.500 |
| Agar | 3.000 |

PRINCIPLE

The medium contains tryptone, yeast extract and dextrose that provide nutrients while phosphate helps in maintaining the pH. Agar content of the medium is crucial for determining motility. 0.3% agar renders the medium semisolid in which motile bacteria produce diffused turbidity due to growth, while non-motile bacteria exhibit a line of growth only along the line of inoculation.

INSTRUCTION FOR USE

- Dissolve 23.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in 2-3 ml amounts in screw capped tubes.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Allow the tubes to cool in an upright position.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured, clear to very slightly opalescent gel forms in tubes as butts.
pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Motility | Incubation Temperature | Incubation Period |
|-------------------------------|-------|-------------------|----------------|--|------------------------|-------------------|
| <i>Bacillus anthracis</i> | 14578 | 50-100 | Good-luxuriant | Negative reaction, growth along the stabline | 35-37°C | 18-24 Hours |
| <i>Bacillus cereus</i> | 10876 | 50-100 | Good-luxuriant | Positive reaction, growth away the stabline | 35-37°C | 18-24 Hours |
| <i>Bacillus thuringiensis</i> | 10792 | 50-100 | Good-luxuriant | Positive reaction, growth away the stabline | 35-37°C | 18-24 Hours |

PACKAGING:

In pack size of 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

1. Bouza E., Grant S., Jordan C., et al, 1979, Arch.Ophthalmol., 97:498
2. Mortimer P.R. and McCann.G, 1974, Lancet, 104:3.
3. Wohlgemuth K., Kirkbride, C.A., Bicknell, E. J. and Ellis, R.P., 1972, J. Am. Vet. Med. Ass. 161:1691.

| | | | | | |
|---|---|--|---|--|---|
|  Good Manufacturing Practices Certified |  For In Vitro Diagnostic Use |  Quantity |  Lot / Batch Number |  Catalogue Number |  Manufacturer |
|  Temperature Unit |  Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Münster, 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**
Revision: 08 Nov., 2019

