CM 20201 – B.C. MOTILITY TEST MEDIUM (BC MOTILITY MEDIUM)

INTENDED USE
For motility testing of Bacillus cereus.

PRODUCT SUMMARY AND EXPLANATION
Bacillus cereusiswidely distributedin 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.

INSTRUCTIONFOR USE
Dissolve 23.0gramsin 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
Culturalcharacteristics observed after incubation.

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

PACKAGING:

Inpacksizeof500 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.

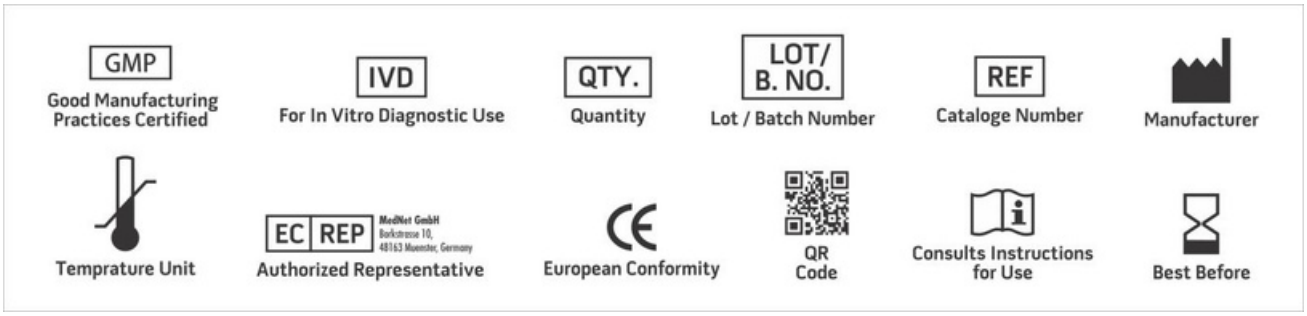
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. BouzaE., 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.



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

*For LabUse Only