CM 20230 – BASAL MINERAL MEDIUM

INTENDED USE

For cultivation of Beggiatoa species.

PRODUCT SUMMARY AND EXPLANATION

Beggiatoa is mostfrequently found in natural environments high in heterotrophic organisms. Beggiatoa is one of the few filamentous bacteria that is motile. They have sulphur granules within its cells and attached growth is usually uncommon. Beggiatoa has a cell width of 1.0-3.0 µm and filament length of 100-500 µm. The nutritional requirements of organisms in the genus Beggiatoa are poorly understood. These organisms require dilute culture media and are inhibited by conventional media. An increase in nutrients doesn't elicit a proportional increase in cell numbers. Basal Mineral Medium is recommended for the cultivation of Beggiatoa species.

COMPOSITION

Ingredients	Gms / Ltr
Ammonium chloride	0.800
Dipotassium phosphate	0.700
Magnesium sulphate heptahydrate	0.010
Disodium EDTA	0.0092
Ferrous sulphate.heptahydrate	0.007
Calcium sulphate,dihydrate	0.002
Boric acid	0.0001
Zinc sulphate, heptahydrate	0.0001
Manganese sulphate, quadrahydrate	0.00002
Cobalt nitrate	0.00001
Sodium molybdate dihydrate	0.00001
Copper sulphate.pentahydrate	0.0005

PRINCIPLE

This mediumcontains a variety of different salts in varying concentration, which provide the necessary nutrients required for the growth of Beggiatoa.

INSTRUCTION FOR USE

Dissolve 1.53 gramsin 1000 ml distilled water.
Mix thoroughly. Filter sterilize. DO NOT AUTOCLAVE.
Cool to 45°C and dispense into sterile test tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder :Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium :Colourless clear solution without any precipitate.

INTERPRETATION

Culturalcharacteristics observed afterincubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Saccharomyces cerevisiae	9763	50-100	Luxuriant	>=70%	25-30°C	3-5 Days

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.

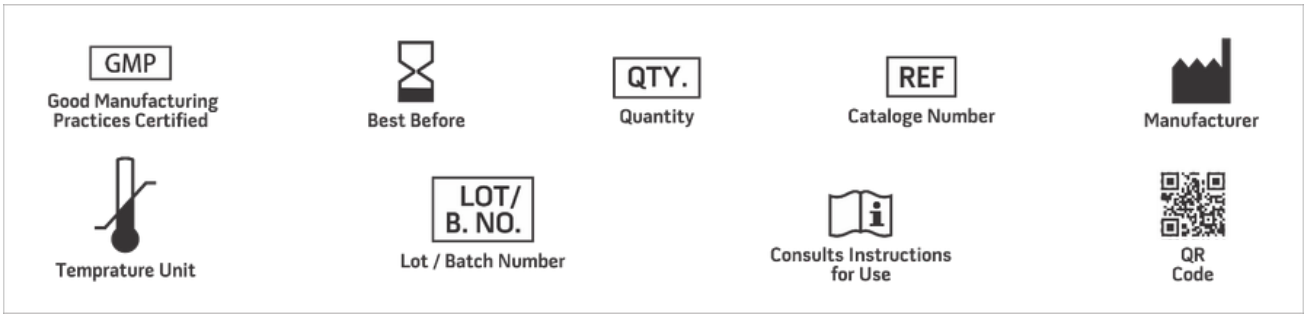
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Lois FaustandR. S. Wolfe, J Bacteriol., 1961 January; 81(1): 99106
2. Atlas R. M., 2004, Handbook of Microbiological Media, Lawrence C.Parks (Ed.), 3rd Edition, CRC Press.



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

*For LabUse Only