TM 973 – CYANOPHYCEAN AGAR

INTENDED USE
For isolation and cultivation of Blue Green algae.

PRODUCT SUMMARY AND EXPLANATION
Blue green algae are a type of photosynthetic bacteria, called *Cyanobacteria* that rely on sunlight for energy. They are present in almost all aquatic ecosystems, including creeks, rivers, lakes and wetlands. Algal blooms can cover large areas of a water supply. Like all photosynthetic organisms, blue-green algae rely on sunlight for energy, with their growth rate determined by the level of nutrients available in the water. Cyanophycean Agar is used for the isolation and cultivation of blue green algae.

COMPOSITION

Ingredients	Gms / Ltr
Potassium nitrate	5.000
Dipotassium hydrogen phosphate	0.200
Magnesium sulphate	0.100

PRINCIPLE
Potassium is required for maintenance of maximum growth rate of blue green algae. Nitrate serves as nitrogen source. Dipotassium phosphate buffers the media. Magnesium sulphate is a source of divalent cations.

INSTRUCTION FOR USE
- Dissolve 20.3 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 3 minutes.
- Cool to 45-50°C and aseptically add one drop of 1% separately autoclaved solution of ferrous ammonium citrate to 100 ml sterile medium.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : White to cream homogeneous free flowing powder.
Appearance of prepared medium : Colourless clear to slightly opalescent gel forms in Petri plates.

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	Growth	Recovery	Incubation Temperature	Incubation Period
Anabena cylindrica	Luxuriant	>=70%	35-37°C	18-48 Hours

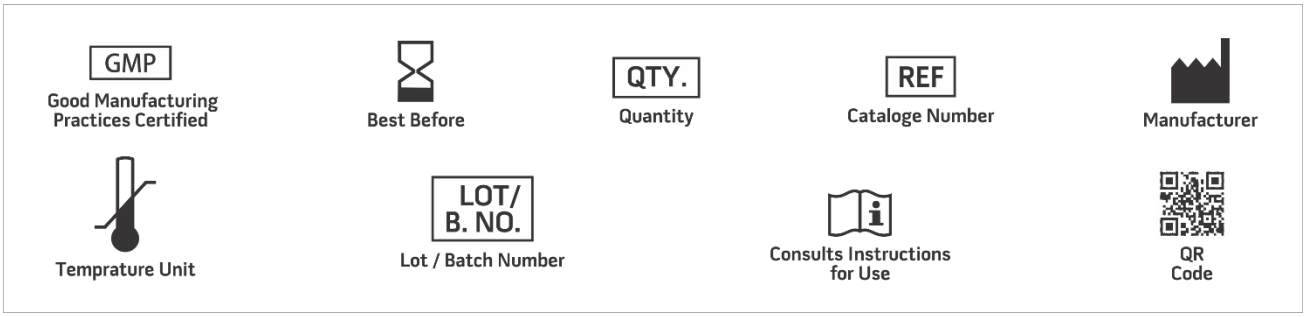
Anacystis nidulans	Luxuriant	>=70%	35-37°C	18-48 Hours
Plectonema boryanum	Luxuriant	>=70%	35-37°C	18-48 Hours

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. William A., Kratz, Jack Myers, 1955, Nutrition and Growth of Several Blue-Green Algae, American Journal of Botany, Vol. 42, No. 3, pp. 282-287.



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