

## CM 20477 – CHU’S MEDIUM NO. 10

### INTENDED USE

For cultivation of Blue Green Algae.

### PRODUCT SUMMARY AND EXPLANATION

Soil algae are ubiquitous in nature wherever moisture and sunlight are available. They are visible to the unaided eye in the form of a green slum on the surfaces of soils. Morphologically, they may be unicellular or filamentous and belong to the families Chlorophyceae (green algae) and Cyanophyceae (blue-green algae) Cyanobacteria is a phylum (or “division”) of bacteria that obtain their energy through photosynthesis. They are often still referred to as blue-green algae, although they are in fact prokaryotes like bacteria. They are a major primary producer of the planetary ocean. They are found in almost every conceivable habitat, from oceans to fresh water to bare rock to soil. Chu's Medium No. 10 is formulated as per Chu for cultivation of blue green algae.

### COMPOSITION

Ingredients	Milligrams / Ltr
Calcium nitrate	40.000
Magnesium sulphate	25.000
Dipotassium hydrogen phosphate	5.000
Sodium carbonate	20.000
Sodium silicate	25.000
Iron (II) chloride	8.000

### PRINCIPLE

Calcium nitrate serves as inorganic nitrogen source and other inorganic salts supply the necessary growth requirements. Sodium carbonate provides ions to the medium.

### INSTRUCTION FOR USE

- Dissolve 123mg in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and dispense as desired.

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder :White to light yellow homogeneous free flowing powder.
- Appearance of prepared medium :Colourless clear solution.

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Growth	Recovery	Incubation Temperature	Incubation Period



Anabena cylindrica	-	Good	40-50%	25-30°C	10-15 Days
Anacystis nidulans	27344	Good	40-50%	25-30°C	10-15 Days
Plectonema boryanum	18200	Good	40-50%	25-30°C	10-15 Days

**PACKAGING:**

Inpacksizeof100 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.







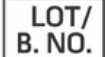


Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

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

**REFERENCES**

1. ChuS. P., 1942, J. Ecol., 30, 284-325.
2. Subba Rao N. S., 1997, Oxford and IBH Publishing Co., India.

 <b>GMP</b> Good Manufacturing Practices Certified	 Best Before	 Quantity	 Cataloge Number	 Manufacturer
 Temperature Unit	 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 LabUse Only

