

## Technical Information

### Cyanophycean Agar

**Product Code: DM 1699**

**Application:** - Cyanophycean Agar is recommended for the isolation and cultivation of Blue green Algae.

#### Composition\*\*

Ingredients	Gms / Litre
Potassium nitrate	5.000
Dipotassium phosphate	0.200
Magnesium sulphate	0.100
Agar	15.000

\*\*Formula adjusted, standardized to suit performance parameters

#### Principle & Interpretation

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.

Potassium is required for maintenance of maximum growth rate of blue green algae (1). Nitrate serves as nitrogen source. Dipotassium phosphate buffers the media. Magnesium sulphate is a source of divalent cations.

#### Methodology

Suspend 20.3 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 3 minutes. Cool to 45°C. Aseptically add one drop of 1% separately autoclaved solution of ferrous ammonium citrate to 100 ml sterile medium. Mix well before pouring into sterile Petri plates.

#### Quality Control

##### Appearance

White to cream homogeneous free flowing powder.

##### Gelling

Firm, comparable with 1.5% Agar gel.

##### Colour and Clarity

Colourless clear to slightly opalescent gel forms in Petri plates.

##### Cultural Response

DM 1699: Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Growth
<i>Anabena cylindrica</i>	luxuriant
<i>Anacystis nidulans ATCC27344</i>	luxuriant
<i>Plectonema boryanum ATCC 18200</i>	luxuriant



Dehydrated Culture Media  
Bases / Media Supplements

## Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on label.

**Prepared Media:** 2-8° in sealable plastic bags for 2-5 days.

## Further Reading

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

## Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specification for identity and performance parameters.

