17124 Algae Culture Broth NutriSelect® Plus

For the isolation and cultivation of algae from soil, water, and sewage.

Composition:

Ingredients	Grams/Litre
Sodium nitrate	1.0
Dipotassium phosphate	0.25
Magnesium sulphate	0.513
Ammonium Chloride	0.05
Calcium chloride	0.058
Ferric chloride	0.003

Final pH 7.0 +/- 0.2 at 25°C

Store granulated media between 10-30°C in tightly closed container and the prepared medium at 15-25°C. Avoid freezing and overheating. Once opened keep powdered medium closed to avoid hydration. Use before expiry date on the label.

Appearance(color):	White to off white yellow, free flowing powder
Color and Clarity:	White coloured clear to slightly opalescent solution in tubes.
Reaction :	Reaction of 0.187% w/v aqueous solution at 25°C. pH : 7.0±0.2

Directions:
Suspend 1.87 g in 1 litre distilled water. Boil to dissolve the medium completely. Dispense as desired. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:
Algae (singular alga) represent a highly diverse consortium of ancient plants comprising different evolutionary lineages of mostly photoautotrophic organisms. Most algae possess chlorophyll a. As primary producers, they use the sunlight energy to convert inorganic substances into simple organic compounds and provide the principal basis of food webs on the Earth (1).
Algae range from single-cell organisms to multicellular organisms, some with fairly complex differentiated form and (if marine) called seaweeds. Algae are usually found in damp places or water bodies and thus are common in terrestrial as well as aquatic environments. Various algae play significant roles in aquatic ecology. Algae are used by humans in several ways. Because many species are aquatic and microscopic, they are cultured in clear tanks or ponds and either harvested or used to treat effluents pumped through ponds (2,5). Algae Culture Broth is recommended for the isolation and cultivation of algae from soil, water, and sewage. Algae Culture Broth is used to prepare the inoculum for the bioassay of algicidal chemicals. Algae Culture Broth is similar in composition to Algae Culture Agar, except the agar.
The medium contains all necessary nutrients for good growth of Algae but does not contains nutrients for other than minimal growth of bacteria and fungi

Cultural characteristics observed under suitable light source after an incubation at 20-25°C within 1 week.

Organisms (ATCC)	Growth
Chlorella pyrenoidosa (50476)	++/+++

References:

1. L. Krienitz, in Encyclopedia of Inland Waters, 2009
2. Guiry M. D. and Blunden G., (Ed.), 1991, Seaweed Resources in Europe: Uses and Potential. John Wiley and Sons Ltd.
3. Lembi C. A. and Waaland J. R., (Ed.), Algae and Human Affairs, 1988, Cambridge University Press.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.