

PRODUCT CODE: 414698

Marine Broth (Dehydrated Culture Media) for microbiology

Preparation

Suspend 40.20 grams of the medium in one litre of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C.

The colour is amber, slightly opalescent. It may present a light precipitation. The dehydrated medium should be homogeneous, free-flowing and beige in colour. If there are any physical changes, discard the medium.

Uses

MARINE BROTH is similar to Marine Agar, lacking the agar, but containing all the nutrients necessary to cultivate the majority of marine bacteria.

Since the marine environment has environmental conditions completely different to those of other environments, its microflora is also very different. Marine Microorganisms are capable of surviving at very low temperatures and in high salinity levels. Both Marine Agar and Marine Broth are prepared according to ZoBell, containing almost double the mineral content of sea water. The high salt content helps to simulate sea water. Bacteriological peptone provides nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Bacteriological agar is the solidifying agent.

Dispense 50 ml of the broth in 250 ml Erlenmeyer flasks. Inoculate and incubate at 20-25°C for 24-72 hours.

Composition

See in Data Sheet (TDS).

Microbiological Test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 20-25°C and observed after 24 - 72 hours.

Microorganism	Growth
<i>Vibrio fischeri</i> ATCC 7744	Good
<i>Vibrio harveyi</i> ATCC 14126	Good

Storage

Once opened keep powdered medium closed to avoid hydration.

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