
Product Specification

Product Name: Marine Broth 2216E
Product Code: SG7045

Product Description:

Marine bacteria are present in nutrient sea water and are essential to the life cycle of all marine flora and fauna. The enumeration and activity of marine bacteria are important to the food industry for the conservation of marine life. 2216E Broth is prepared according to the formula of ZoBell. The media contain all the nutrients necessary for the growth of marine bacteria. 2216E Broth contains minerals that nearly duplicate the major mineral composition of sea water, and these minerals are required for the growth of marine bacteria. Peptone and yeast extract provide nitrogen, vitamins and minerals. The high salt content helps to simulate sea water. Numerous minerals are also included to duplicate the major mineral composition of sea water.

Use:

Stir to suspend 37.4g of dehydrated medium in 1L H₂O. Mix well with heat with frequent agitation and boil for 1min to completely dissolve the powder. Dispense into flask. Autoclave for 15 minutes at 121°C to sterilize. Allow to cool before making additions, such as antibiotics (if desired).

Components:

Peptone – 5.0g/L
Yeast Extract – 1.0g/L
Ferric Citrate – 0.1g/L
Sodium chloride – 19.45g/L
Magnesium chloride – 5.98g/L
Sodium sulphate – 3.24g/L
Calcium chloride – 1.8g/L
Potassium chloride – 0.55g/L
Sodium bicarbonate – 0.16g/L
Potassium bromide – 0.08g/L
Strontium chloride – 0.034g/L
Boric acid – 0.022g/L
Sodium silicate – 0.004g/L
Sodium fluorate – 0.0024g/L
Ammonium nitrate – 0.0016g/L
Disodium phosphate – 0.008g/L
Final pH 7.4 – 7.8 @25°C

*Adjusted and/or supplemented as required to meet performance criteria.

Test Items

Specifications

Physical and Chemical Tests

Appearance (dry)

Free flowing yellow Powder

Appearance (in medium)

Yellowish opalescent Solution

pH (@25°C)

7.4 – 7.8

Microbiological Tests

Expected Results

Vibrio fischeri (ATCC 7744)

50 – 100 CFU

Vibrio parahaemolyticus (ATCC 17802)

50 – 100 CFU

Vibrio harveyi (ATCC 14126)

50 – 100 CFU

* The microbiological test results were obtained from type cultures after incubation at a temperature of 36±1°C and observed after 40 - 72 hours.

Storage: 18 – 25°C (dehydrated), 2 – 8°C (prepared medium, avoid direct light contact)