

PRODUCT CODE: 415382

Lethen Broth (modified) (Dehydrated Culture Media) for microbiology

Preparation

Suspend 43.8 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 at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C.

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

Uses

LETHEEN BROTH MODIFIED is based on the formula described in FDA Bacteriological Analytical Manual and is a modification of Lethen Broth Base. It is a highly nutritious liquid medium recommended for use in the microbiological testing of cosmetics.

Beef extract and Casein peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is the source of vitamins, particularly of the B-group. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Glucose is the fermentable carbohydrate providing carbon and energy. Lecithin, Polisorbate 80 and Sodium bisulfite neutralize quaternary ammonium compounds and partially neutralize the preservative system commonly found in cosmetics.

The medium is also used for microbiological samples from surfaces that have been treated with disinfectants. Inoculate and incubate at 35°C ± 2°C during 18- 24 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 35°C ± 2°C and observed after 18- 24 hours.

Microorganism	Growth	Inoculum cfu	Recovery
<i>Escherichia coli</i> ATCC 25922	Good	10 ² -10 ³	≥70
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good	10 ² -10 ³	≥70
<i>Staphylococcus aureus</i> ATCC 25923	Good	10 ² -10 ³	≥70
<i>Staphylococcus epidermidis</i> ATCC 12228	Good	10 ² -10 ³	≥70
<i>Salmonella typhimurium</i> ATCC 14028	Good	10 ² -10 ³	≥70

Storage

Once opened keep powdered medium closed to avoid hydration.

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