

PRODUCT CODE: 413788

Mueller-Hinton Broth (Dehydrated Culture Media) for microbiology

Preparation

Suspend 21 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. **DO NOT OVERHEAT.**

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

MUELLER HINTON BROTH is used together with Mueller Hinton Agar to carry out the sensitivity testing of a great number of antimicrobial agents, for the determination of MIC (Minimal Inhibitory Concentrations) of bacteria isolated for example in urine.

It was also developed for the cultivation of pathogenic *Neisseria* and other fastidious microorganisms. It has the same formula as Mueller Hinton Agar but can be used when the fluid medium is preferred. The medium can be used with complete confidence because it is a rich nutrient medium able to grow fastidious organisms. The use of a medium with suitable growth characteristics is essential to test the susceptibility of microorganisms to antibiotics.

Beef infusion and Acid Casein peptone (H) provide nitrogen, vitamins, minerals and amino acids essential for growth. The starch in the medium acts as a growth factor, probably functioning like a colloid protector, and neutralizes toxic products that form during the development of the organisms.

Inoculate and incubate at 35 ± 2°C for 18-24 hours.

Composition

See in Data Sheet (TDS).

Microbiological Test

Response of the sensitivity test to the different antibiotics, using standard strains incubating at 35 ± 2 °C and observed at 24 hours.

Microorganism	Growth
<i>Escherichia coli</i> ATCC 25922	Good
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good
<i>Enterococcus faecalis</i> ATCC 33186	Good
<i>Staphylococcus aureus</i> ATCC 25923	Good
<i>Streptococcus pyogenes</i> ATCC 19615	Good
<i>Listeria monocytogenes</i> ATCC 11913	Good

Storage

Once opened keep powdered medium closed to avoid hydration.