

Mueller-Hinton/Broth

356-9444

DEFINITION

A broth that is a complement to the agar medium of the same name (**code 356-4884**) used to study the sensitivity of bacteria to antibiotics.

PRINCIPLE

The nutrient substances provided by the infusion of meat and casein hydrolysate favor growth of most bacteria.

PRESENTATION

Dehydrated

500 g

code 356-9444

STORAGE

- Dehydrated: + 15°C to 25°C, in carefully-sealed bottles in a cool, dry place.
- Expiration date and batch number are shown on the package.

THEORETICAL FORMULA

Dehydrated beef extract infusion	6 g
Casein hydrolysate	17.5 g
Starch	1.5 g
Distilled water	1,000 ml
Final pH (25°C) = 7.3 ± 0.2	

OTHER PRODUCTS REQUIRED (NOT SUPPLIED)

- Distilled water

EQUIPMENT REQUIRED (NOT SUPPLIED)

(non-exhaustive)

- Hotplate
- Mixer-homogenizer
- Vortex-type shaker
- Test tubes (16 x 160 mm) with autoclave-proof stoppers
- Sterile Pasteur pipettes (code 355-0751) or inoculating loops
- Thermostatically-controlled incubator or incubating room, precise to ± 1°C
- Autoclave.

PREPARATION OF DEHYDRATED MEDIUM

Always shake well before use.

Dissolve 25g of powder in 1 liter of distilled water. Mix until a homogenous suspension is obtained.

Heat gently, swirling frequently, then bring to the boil until completely dissolved.

Dispense in tubes and sterilize in autoclave at 121°C ± 1°C for 15 minutes.

Reconstitution ratio: 25 g/l.

500 g of powder makes 20 liters of medium.

PROTOCOL

Inoculate widely with an isolated strain to be tested for sensitivity to various antibiotics. Incubate at the optimal temperature for the growth of the micro-organism tested.

PRECAUTIONS

Comply with Good Laboratory Practice.

PERFORMANCES / QUALITY CONTROL OF THE TEST

The growth performances of the media are verified with the following strains:

STRAINS	Growth after 24h at 37°C
<i>Escherichia coli</i> ATCC 25922	Reasonable and comparable to control
<i>Staphylococcus aureus</i> ATCC 25923	Reasonable and comparable to control
<i>Enterococcus faecalis</i> var <i>zymogenes</i> ATCC 29212	Reasonable and comparable to control

QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product. Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.

KEY WORDS

Mueller-Hinton / Antibiotics / Sensitivity / Broth.