

# **Technical Data Sheet**

# C€ MUELLER-HINTON agar CLSI

Ordering number: 1.05435.0500

For the determination of antibiotic susceptibility including sulfonamides by the disc-agar diffusion method.

Mueller Hinton Agar is recommended for the diffusion of antimicrobial agents impregnated on paper disc through an agar gel as described in CLSI Approved Standard. This medium is suitable for use in routine susceptibility testing. It is a non-selective, non-differential medium and it is useful in identifying sulfonimide-resistant and responsive strains of gonococci.

IVD in vitro diagnosticum - For professional use only

#### **Mode of Action**

The medium complies with the requirement of the Clinical and Laboratory Standards Institute (CLSI) and is manufactured to contain low concentrations of thymine and thymidine as well as appropriate levels of calcium and magnesium ions.

Thymine and thymidine concentrations are determined by the disc diffusion procedure with trimethoprim and sulfamethoxazole and Enterococcus faecalis ATCC 29212.

Calcium and/or magnesium concentrations are controlled by obtaining the correct zone diameters with an inoglycoside antibiotics and Pseudomonas aeruginosa ATCC 27853.

# **Typical Composition**

| Meat infusion      | 2.0  |
|--------------------|------|
| Casein hydrolysate | 17.5 |
| starch             | 1.5  |
| Agar-agar          | 17.0 |

#### **Preparation**

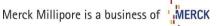
Suspend 38 g in 1 litre of demin. water and autoclave (15 min at 121°C). If required, cool to 45-50°C and add 5-10% defibrinated blood, poor plates.

pH: 7.3 ± 0.2 at 25°C

Without blood, the plates are clear to opalescent and brownish-yellow.

#### **Specimen**

e.g. Isolated bacteria from urine.



Clinical specimen collection, handling and processing. See general instructions of use.

#### **Experimental Procedure and Evaluation**

Carry out the sensitivity test acc. to CLSI-

Incubation for 24 h at 35°C aerobically.

### **Storage**

Usable up to expiry date when stored dry and tightly closed at +15 to 25°C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25°C.

# **Quality Control**

| Control Strains        | ATCC# | Incubation         | Expected Results  |
|------------------------|-------|--------------------|---|
| Escherichia coli       | 25922 | 16 – 18 h at 35 °C | Growth good / very good; Zone diameters within specifications |
| Staphylococcus aureus  | 25923 | 16 – 18 h at 35 °C | Growth good / very good; Zone diameters within specifications |
| Pseudomonas aeruginosa | 27853 | 16 – 18 h at 35 °C | Growth good / very good; Zone diameters within specifications |
| Enterococcus faecalis  | 29212 | 16 – 18 h at 35 °C | Growth good / very good; Zone diameters within specifications |

Please refer to the actual batch related Certificate of Analysis.

# Literature

Dewees, et al. 1970. Effect of storage of Mueller Hinton Agar plates on zone sizes for antimicrobial testing. Appl. Microbiol.; 30:203.

National Committee for Clinical Laboratory Standards. Approved Standard. Performance standards for antimicrobial disc susceptibility tests, 5<sup>th</sup> ed. National Committee for Laboratory Standards, Villanova, Pa. (1993).

NCCLS Approved Standard: ASM-2, 1979, Performance Standards for Antimicrobic disc Susceptibility Tests, 2nd Ed., National Committee for Clin. Lab. Standards.

Ryan, K.J., et al. 1970. Disk sensitivity testing. Hosp. Prac.; 5:91-100.

# **Ordering Information**

| Product                          | Cat. No.     | Pack size |
|----------------------------------|--------------|-----------|
| MUELLER-HINTON agar acc. to CLSI | 1.05435.0500 | 500 g     |

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