



Reference : 01-009

Scharlau Microbiology - Technical data sheet

Product :
ANTIBIOTIC MEDIUM A at pH 6.6 (Eur. Pharm.)

Also known as

Seed Agar; Medium A; Penassay Seed Agar; Penicillin Assay Speed Agar; Medium 1; AM1 ; Antibiotic Medium 1.

Specification

Antibiotic Medium A at pH 6,6 is used in microbiological antibiotic assays using agar diffusion technique.

Formula * in g/L

Peptone..... 6.00
Casein peptone..... 4.00
Yeast extract..... 3.00
Meat extract..... 1.50
Dextrose..... 1.00
Agar..... 15.00

Final pH 6,6 ±0,1 at 25 °C

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

Directions

Suspend 30.5 g of powder in 1 L of distilled water and bring to the boil stirring constantly. Distribute in suitable containers and sterilize in the autoclave at 121°C for 15 minutes.

Description

Antibiotic Medium A at pH 6,6 is used as a maintenance culture media for the bacterial strains used in antibiotic assay. It is also used as a seed layer in the assay of bacitracin, framycetin, josamycin and rifampicin among others.

Technique

The agar diffusion technique for antibiotic assays is performed according to the methodology recommended in the pharmacopoeia used in each country. Antibiotic Medium A à pH 6,6 is suitable for use with paper discs, punched-holes or cylinder methodology because its Force du Gel is specially adjusted for all the techniques.

Quality control

Incubation temperature: 35-37°C

Incubation time: 24 ± 3h

Inoculum: Practical range 50-100 CFU (Productivity). Spiral Plate Method.

Microorganism

Growth

Remarks

Bacillus subtilis ATCC® 6633

Productivity > 0.70

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Micrococcus luteus ATCC® 9341

Productivity > 0.70

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References

- ARRET, B.D., P. JOHNSON & A. KIRSCHBAUM (1971) Outline details for Microbiological Assays of Antibiotics: Second revision. J. Pharm. Sci. 60(11):1689-1694.
- EUROPEAN PHARMACOPOEIA 8.0 (2016) §. 2.7.2 Microbiological Assay of Antibiotics. EDMH. Council of Europe. Strasbourg.
- SANCHO, J.; J.GUINEA & R. PARÉS (1980) Microbiología Analítica Básica. Ed. JIMS. Barcelona.
- USP 33 - NF 28 (2011) <81> Antibiotics - Microbial Assays. USP Corp. Inc. Rockville. MD. USA.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).