

## 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	
Yeast extract	3.00
Meat extract	1.50
Dextrose	1.00
Agar	

#### 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 at pH 6,6 is suitable for use with paper discs, punched-holes or cylinder methodology because its gel strength 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 <sup>®</sup> 6633	Productivity > 0.70	-
Micrococcus luteus ATCC <sup>®</sup> 9341	Productivity > 0.70	-

## 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).