

Also known as

Antibiotic Medium 19, Medium 19.

Specification

Antibiotic Medium F is used in the titration of antifungal antibiotics by the agar diffusion method.

Formula * in g/L

Peptone	9,4
Yeast extract.....	4,7
Meat extract.....	2,4
Sodium chloride.....	10,0
Dextrose.....	10,0
Agar.....	23,5

Final pH 6,1 ±0,1 at 25 °C

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

Directions

Add 60 g of powder to 1 L of distilled water. Bring to the boil and distribute into suitable containers. Autoclave at 121°C for 15 minutes.

Description

Antibiotic Medium F is recommended both for the maintenance of yeast strains used in titration assays of antifungal activity, (particularly amphotericin B and nystatin), as well as for the test itself, whether single-layer or double layer.

Technique

The antibiotic sensitivity assay agar diffusion method is performed according to the methodology described in the appropriate pharmacopoeia in each country. Antibiotic Medium F(or Medium 19) can be used whether using impregnated paper discs, penicylinders or cut wells as the hardness of the gel is especially adjusted for any of these methodologies.

Quality control
Incubation temperature: 30-32 °C **Incubation time:** 24-48 h

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

Microorganism	Growth	Remarks
<i>Saccharomyces cerevisiae</i> ATCC® 9763	Productivity > 0.70	-
<i>Saccharomyces cerevisiae</i> ATCC® 2601	Productivity > 0.70	-

References

- ARRET, B.D., P.JOHNSON & A. KIRSHBAUM (1971) Outline details for Microbiological Assays of Antibiotics: Second revision. J. Pharm. Sci. 60(11):1689-1694.
- EUROPEAN PHARMACOPOEIA 11.0 (2023) 11th ed. §. 2.7.2 Microbiological Assay of Antibiotics. EDMH. Council of Europe. Strasbourg.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- 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).