

**Also known as**

MEDIUM E

**Specification**

Antibiotic Medium E is used in the microbiological assays of Framycetin and Neomycin using the Agar Diffusion method.

**Formula \* in g/L**

Peptone .....	5,00
Meat extract.....	3,00
Disodium phosphate (anhydrous).....	10,5 <sup>(*)</sup>
Agar.....	10,00

Final pH 7,9 ±0,1 at 25 °C

(\*) Equivalent to 26,9 g of disodium hydrogen phosphate dodecahydrate.

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

**Directions**

Add 28,5 g of powder to 1 L of water. Boil and distribute in suitable containers. Sterilise in an autoclave at 121°C for 15 minutes.

**Description**

Antibiotic Medium E is recommended by the European Pharmacopoeia and the USP for determining antibiotic potency by microbiological assay technique, specifically for framycetin and neomycin, in a single layer or double layer. For these assays seed cultures ATCC 6633 *Bacillus subtilis* as well as NCTC 8241 *Bacillus pumilus* are recommended.

**Technique**

The diffusion method for the assay of antibiotics is carried out in accordance with the methodology in the current pharmacopoeias of each country. Antibiotic Medium E can be used equally with impregnated paper discs, penicylinders and cut wells as the consistency of the gel is specifically adjusted to suit all of these methodologies.

**Quality control**
**Incubation temperature:** 30-37°C                      **Incubation time:** 24 ± 3h

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

Microorganism	Growth	Remarks
<i>Bacillus subtilis</i> ATCC® 6633	Productivity > 0.70	-
<i>Bacillus pumilus</i> ATCC® 14884	Productivity > 0.70	-

**References**

· EUROPEAN PHARMACOPOEIA 10.0 (2020) 7th ed. §. 2.7.2 Microbiological Assay of Antibiotics. EDMH. Council of Europe. Strasbourg.

**Storage**

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