Product :
ANTIBIOTIC MEDIUM E (Eur. Pharm.)

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(*1)
Agar..... 10,00

Final pH 7,9 ±0,1 at 25 ºC

(*1) 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 121ºC 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 cuurrent 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: 30-37ºC **Incubation time:** 24 ± 3h

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

Microorganism	Growth	Remarks
Bacillus subtilis ATCC® 6633	Productivity > 0.70	-
Bacillus pumillus 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 ºC to 30 ºC).