

Neutralizing agents

Catalog : HB8639-2-500

Neutralizing agents is used for neutralizing the activity of antimicrobial agents in accordance with BP/EP.

Approximate Formula:

Ingredients	gm./liter
Peptone(meat or casein)	1.0
Sodium Chloride	4.3
Histidine hydrochloride	1.0
Potassium dihydrogen phosphate	3.6
Disodium hydrogen phosphate	7.2
Lecithin(egg)	3.0

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

Directions:

Suspend 20.1g of the medium and 30.0g of Tween-80 in 1000ml of deionized or distilled water. Mix well and heat with frequent agitation to completely dissolve the powder. Dispense into tubes or flasks. Sterilize in an autoclave at 121°C (15 lbs.) for 15 minutes.

Principle and Interpretation:

Peptone(meat or casein) provides carbon, nitrogen compounds, vitamins, minerals and other essential growth nutrients. Lecithin(egg) and Tween-80 act as neutralizing agents. Histidine hydrochloride is the source of amino acid. Sodium chloride maintains osmotic equilibrium. Potassium dihydrogen phosphate and Disodium hydrogen phosphate serve as buffering agents.

Appearance:

Dehydrated medium is a free-flowing milk white powder. The prepared medium is a kind of yellowish liquid.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Neutralizing agents must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 35°C for 18-24 hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth
<i>Escherichia coli</i>	ATCC 25922	10-100	luxuriant
<i>Staphylococcus aureus</i>	ATCC 6538	10-100	luxuriant
<i>Bacillus subtilis</i>	ATCC 6633	10-100	luxuriant
<i>Pseudomonas aeruginosa</i>	ATCC 9027	10-100	luxuriant

References:

1. The British Pharmacopoeia, 2022, Medicines and Healthcare products Regulatory Agency.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.