

# **Technical Information**

# Dey-Engley (D/E) Neutralizing Broth (Without Bromo Cresol Purple) (Twine Pack)

## Product Code: DM2062 U

**Application:-** Dey-Engley (D/E)(without Bromo cresol purple) is used in disinfectant testing where neutralization of antiseptics and disinfectants is important for determining its bactericidal activity in accordance with United States Pharmacopoeia

Composition**	
Ingredients	Gms / Litre
Part A	
Tryptone	5.000
Yeast extract	2.500
Dextrose	10.000
Sodium thioglycollate	1.000
Sodium thiosulphate	6.000
Sodium bisulphite	2.500
Lecithin	7.000
Part B	
Polysorbate 80	5.000
** Formula adjusted, standardized to suit performance parameters.	

## Principle & Interpretation

Dey-Engley (D/E) Neutralizing Broth (without Bromo cresol purple) is formulated as per United States Pharmacopoeia (1). It neutralizes a broad spectrum of antiseptics and disinfectants including quaternary ammonium compounds, phenolics, iodine and chlorine preparations, mercurials, formaldehyde and glutaraldehyde. Sodium thioglycollate, sodium thiosulphate, sodium bisulphite, soya lecithin and polysorbate 80 act as neutralizing components. For testing disinfectants, prepare two sets of test tubes, one containing 9 ml Dey-Engley Neutralizing Broth (DM2062U) and other with 9 ml Dey-Engley Neutralizing Broth Base. Add 1 ml of disinfectant under test. Mix well and allow it to stand for 15 minutes. Inoculate 0.1 ml of 1:100,000 dilution of overnight broth cultures and incubate at 30-35°C for 48 hours Growth in Neutralizing Broth and no growth in Neutralizing Broth Base indicates neutralization of disinfectant. To check bactericidal activity, both broth tubes are inoculated on D/E Neutralizing Agar (M186). Positive growth from negative tubes of Neutralizing Broth Base indicates bacteriostatic substance while negative growth indicates a bactericidal disinfectant. All positive tubes should show growth on Dey-Engley Neutralizing Agar. The control disinfectants used in test procedure are 2% chlorine, 2% formaldehyde, 1% glutaraldehyde, 2% iodine, 2% phenol, 1/750 quaternary ammonium compounds, 1/1000 mercurials

## Methodology

Suspend of Part A 34 grams and 5 grams of Part B in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

# **Quality Control**

#### Appearance

Cream to yellow homogeneous free flowing powder

#### Colour and Clarity of prepared medium

Light yellow coloured opalescent solution





#### **Growth Promotion Test**

As per United States Pharmacopoeia

#### **Cultural Response**

DM2062: Cultural characteristics observed after an incubation at i) For bacteria at 30-35°C for <=3 days i)For fungi at 20-25°C for <=5days

Organisms (ATCC)	Inoculum (CFU)	Growth
Bacillus subtilis ATCC 6633	50-100	luxuriant
Pseudomonas aeruginosa ATCC 27853	50-100	luxuriant
Salmonella Typhimurium ATCC 14028	8 50-100	luxuriant
Escherichia coli ATCC 8739	50-100	luxuriant
Staphylococcus aureus ATCC 6538	50-100	luxuriant
*Aspergillus brasiliensis ATCC 16404	50-100	luxuriant
Candida albicans ATCC 10231	50-100	luxuriant

## Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

## Disclaimer:

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development
- work carried at CDH is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
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- diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for in fingement of any patents. Do not use the products if it fails to meet specifications for identity and performens parameters.

