Record ID: FS-TSS-0275 Revision Number: 3.0 Effective Date: 2024-07-11 03:54 PM EDT

# D/E Neutralizing Broth without Tween
# SKU: 700003316,700003317,700003318
# (NCM0121)

**Intended Use**

D/E Neutralizing Broth is used to neutralize and determine the bactericidal activity of antiseptics and disinfectants. D/E Neutralizing Broth without Tween is not intended for use in the diagnosis of disease or other conditions in humans.

**Description**

D/E Neutralizing Broth was developed by Dey and Engley to neutralize a broad spectrum of disinfectants and preservative antimicrobial chemicals, including quaternary ammonium compounds, phenolics, iodine, chlorine preparations, mercurials, formaldehyde, and glutaraldehyde. D/E Neutralizing media neutralize higher concentrations of residual antimicrobials when compared with other standard neutralizing formulations, such as Letheen media, Thioglycollate media, and Neutralizing Buffer.

Total neutralization of disinfectants is critical. Disinfectant residues can result in a false-negative (no-growth) test. D/E Neutralizing Broth without Tween effectively neutralizes the inhibitor action of disinfectant carryover, allowing differentiation between bacteriostasis and the true bactericidal action of disinfectant chemicals. This is a critical characteristic to consider when evaluating a disinfectant. D/E Neutralizing Broth without Tween is recommended for use in disinfectant evaluations, environmental sampling (swab and contact plate methods), and testing of water-miscible cosmetics.

**Typical Formulation**

| | |
|---|---|
| Enzymatic Digest of Casein | 5.0 g/L |
| Yeast Extract | 2.5 g/L |
| Dextrose | 10.0 g/L |
| Sodium Thioglycollate | 1.0 g/L |
| Sodium Thiosulfate | 6.0 g/L |
| Sodium Bisulfite | 2.5 g/L |
| Lecithin | 7.0 g/L |
| Bromocresol Purple | 0.02 g/L |

Final pH: 7.6 ± 0.2 at 25°C

Formula is adjusted and/or supplemented as required to meet performance specifications.

**Supplement**

NCM4081 or 700004920 Tween 80

**Precaution**

Refer to SDS

**Preparation**

1. Dissolve 34 g of the medium and 5 grams of NCM4081 or 700004920 Tween 80 in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.

**Test Procedure**

D/E Neutralizing Broth without Tween is used in a variety of procedures. Consult appropriate references for complete information.

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**Quality Control Specifications**

**Dehydrated Appearance:** Powder is homogeneous, free-flowing, may form soft lumps, and beige to tan.

**Prepared Appearance:** Prepared medium is opaque, may appear flocculent upon sitting, and lavender to bluish-purple.

**Expected Cultural Response:** Cultural response in D/E Neutralizing Broth without Tween, incorporating NCM4081 or 700004920 Tween 80 incubated aerobically at 35 ± 2 °C and examined for growth after 18 - 48 hours.

| MICROORGANISM | ATCC | APPROX. INOCULUM (CFU) | EXPECTED RESULTS |
|---|---|---|---|
| *Pseudomonas aeruginosa* | 27853 | 10-100 | Growth |
| *Bacillus subtilis* | 9372 | 10-100 | Growth |
| *Escherichia coli* | 25922 | 10-100 | Growth |
| *Staphylococcus aureus* | 25923 | 10-100 | Growth |
| *Salmonella typhimurium* | 14028 | 10-100 | Growth |

The organisms listed are the minimum that should be used for quality control testing.

**Results**

Refer to appropriate references and procedures for results.

**Expiration**

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

**Limitation of the Procedure**

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

**Storage**

Store dehydrated culture media at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

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**References**


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7. Roberts D., Hooper, W. and Greenwood, M., (1995). Methods for the examination of food for micro-organisms of public health significance, 2nd edition, section 5.10, Practical Food Microbiology. Butler & Tanner. ISBN 0 901144 36 3.