

D/E Neutralizing Agar



Medium used for the cultivation and identification of microorganisms from sanitized environmental surfaces.

• CONTENTS (Liter)

Casein Peptone	5.0 g
Yeast Extract	2.5 g
Dextrose	10.0 g
Sodium Thioglycollate	1.0 g
Sodium Thiosulfate	6.0 g
Sodium Bisulfite	2.5 g
Bromcresol Purple	0.02 g
Tween 80	5.0 g
Lecithin, from soy bean	7.0 g
Agar	15.0 g
Final pH = 7.6 ± 0.2 at 25°C	

• PROCEDURE

Suspend 54.02 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

D/E Neutralizing Agar is medium used for the cultivation and identification of microorganisms from sanitized environmental surfaces. This medium is recommended for use in disinfectant evaluations, environmental sampling, and testing of water miscible cosmetics. Casein peptone and yeast extract provide nitrogen, carbon, vitamins and minerals. Dextrose provides fermentable carbohydrate. Sodium thioglycollate neutralizes mercurials. Sodium thiosulfate neutralizes iodine and chlorine. Sodium bisulfite neutralizes aldehydes. Bromocresol purple is a pH indicator. Tween 80 and lecithin are used to neutralize disinfectants and quaternary ammonium compounds. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 ± 2°C for 40 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: moist appearance, with a tendency to clump

Color: purple

Prepared medium

Appearance: opaque

Color: purple

Incubation conditions: 35 ± 2°C / 40 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristic
<i>Bacillus subtilis</i>	9466	50-100	good	colorless colonies
<i>Escherichia coli</i>	25922	50-100	good	yellow colonies
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	colorless colonies
<i>Salmonella typhimurium</i>	14028	50-100	good	yellow colonies

• STORE

The powder is very hygroscopic. Store the powder at 2 - 8°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Engley, F. B., Jr. and B. P. Dey. 1970. A universal neutralizing medium for antimicrobial chemicals. Presented at the Chemical Specialties Manufacturing Association (CSMA) Proceedings. 56th Mid-Year Meeting.
2. Dey, B. P. and F. B. Engley, Jr. 1983. Methodology for recovery of chemically treated *Staphylococcus aureus* with neutralizing medium. *Appl. Environ. Microbiol.* 45:1533-1537.
3. Dey, B. P., and F. B. Engley, Jr. 1978. Environmental sampling devices for neutralization of disinfectants, presented at the 4th International Symposium on Contamination Control.
4. Dey, B. P., and F. B. Engley, Jr. 1994. Neutralization of antimicrobial chemicals by recovery media. *J. Microbiol. Methods.* 19:51-58.
5. Dey, B. P., and F. B. Engley, Jr. 1995. Comparison of Dey and Engley (D/E) Neutralizing Medium to Letheen M

• PACKAGE

Cat. No : MB-D0861 D/E Neutralizing Agar	500 G
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