

# D/E Neutralizing Agar



Medium used for the isolation 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
Agar	15.0 g
Tween 80	5.0 g
Lecithin, from soy bean	7.0 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. Dispense in petri dishes.

## • INTERPRETATION

D/E Neutralizing Agar is used for the isolation 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 an indicator.

## • TECHNIC

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

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: yellowish-green.

### Prepared medium

Appearance: opaque.

Color: purple

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

Microorganism	ATCC	Inoculum CFU	Growth	Characteristic
<i>Bacillus subtilis</i>	11778	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 or until signs of deterioration or contamination are evident. 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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