

## D/E Neutralizing Broth - Instructions for Use

### *Intended Use*

BACGro™ D/E Neutralizing Broth, when prepared as directed, is intended for use in neutralizing and testing antimicrobial agents and disinfectants. D/E Neutralizing Broth is not intended for use in diagnosis, treatment, or prevention of disease in humans.

BACGro™ D/E Neutralizing Broth does not contain Polysorbate 80 and must be added during preparation for procedures requiring D/E Neutralizing Broth containing Polysorbate.

### *Product Summary*

D/E Neutralizing Broth is commonly used for environmental sampling in areas where antimicrobial compounds may be used. The composition of D/E Neutralizing Broth effectively neutralizes a broad spectrum of antimicrobial compounds, allowing organisms to grow in the presence of otherwise bacteriostatic agents. The inclusion of lecithin serves to neutralize quaternary ammonium compounds. Sodium thiosulfate neutralizes iodine and chlorine. Sodium Thioglycollate neutralizes mercurial while sodium bisulfite neutralizes aldehydes. Polysorbate 80, if added, neutralizes phenolic compounds.

Casein peptone and yeast extract provide a nitrogen source and essential vitamins for growth. Dextrose serves as the main energy source. The inclusion of Bromocresol Purple allows for the detection of glucose utilization, as the resulting pH shift will cause the medium to turn from purple to yellow.

### *Formulation\* (per 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 Bisulfate	2.5 g
Lecithin	7.0 g
Bromocresol Purple	0.02 g
<b>Total</b>	<b>34 g/L</b>

\*Formula may be supplemented and/or adjusted as required to meet performance criteria

## Directions

1. Add 34 g of DE Neutralizing Broth powder to 1L purified water.
2. Stir to dissolve completely. Add 5.0g of Polysorbate 80 (if desired).
3. Autoclave at 121° Celsius for 15 minutes.
4. Cool prior to use.

## Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

## Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BACGro™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Blue-gray, homogenous, free flowing powder, free of debris

Appearance (prepared): Purple, with fine dispersed precipitate, no debris

pH (prepared): 7.4 – 7.8 at 25°C

Organism Performance:

Strain ID			
	Time	Temp.	Result
<i>Bacillus subtilis</i> (ATCC® 6633)	18 – 48 hr.	35 – 37° C	Growth
<i>Escherichia coli</i> (ATCC® 25922)	18 – 48 hr.	35 – 37° C	Growth, yellow
<i>Pseudomonas aeruginosa</i> (ATCC® 9027)	18 – 48 hr.	35 – 37° C	Growth
<i>Salmonella typhimurium</i> (ATCC® 14028)	18 – 48 hr.	35 – 37° C	Growth, yellow
<i>Staphylococcus aureus</i> (ATCC® 6538)	18 – 48 hr.	35 – 37° C	Growth, yellow

### ***Limitations of the Procedure***

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some strains may be encountered that grow poorly in this medium.

High concentrations of residues of antiseptic agents may invoke a false-positive “no growth” result.

### ***Storage and Expiration***

BACGro™ D/E Neutralizing Broth w.o Tween should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

### ***Catalog Numbers***

DCM3001 – D/E Neutralizing Broth, 500g

DCM3010 – D/E Neutralizing Broth, 10kg

Revision History:

Revision	Description	Effective Date
04	Updating <i>Pseudomonas</i> strain from ATCC 27853 to ATCC 9027 to match industry standard.	13-MAR-2024
03	Periodic Review. No changes required.	07-MAR-2023
02	Substitute <i>S. aureus</i> strain 25923 with 6538 to better demonstrate the ability of the media.	10-JAN-2020
01	Document creation	26-NOV-2019