



## HiEnviro-Sponge™ Stick Hydrated w/ 10ml Dey-Engley Neutralizing Broth, Sterile

EST003

### Intended use

Recommended for microbiological sample collection from food processing equipment and other environmental surfaces where neutralization of residues of disinfectants is required which have antimicrobial activity.

### Composition

Ingredients	g / L
Tryptone	5.000
Yeast extract	2.500
Dextrose (Glucose)	10.000
Sodium thioglycollate	1.000
Sodium thiosulphate	6.000
Sodium bisulphite	2.500
Lecithin	7.000
Polysorbate 80 (Tween 80)	5.000
Bromocresol purple	0.020
Final pH ( at 25°C)	7.6±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

1. To label write on the white print area of the sampling bag.
2. Tear off the top of the bag along the tear line and pull the tabs to open the bag.
3. Guide the sponge stick with handle towards the top and remove the sponge stick by grasping the handle without touching the internal surfaces of the bag.
4. Sample the area by ensuring the entire sponge makes full contact with the surface.
5. Transfer the sponge stick inside the bag halfway and hold sponge in place inside bag. Snapoff the sponge from the sponge stick, discard the handle while the sponge stays inside the bag.
6. By holding the taped wires roll the bag appropriately and close the bag by folding the taped wires.
7. Incubate the sampled bag at 30 -35°C for 18-24hours.

### Principle

Dey-Engley Neutralizing media is formulated as per the procedure described by Engley and Dey (1). The medium neutralizes a broad spectrum of antiseptics and disinfectants including quaternary ammonium compounds, phenolics, iodine and chlorine preparations, mercurials, formaldehyde and glutaraldehyde.

Tryptone provides nitrogen and carbon source, long chain amino acids, vitamins and other essential nutrients. Dextrose is an energy source. Yeast extract is also a rich source of vitamin B-complex. Bromocresol purple is the indicator dye. Sodium thioglycollate neutralizes mercurials, sodium thiosulphate neutralizes iodine and chlorine, sodium bisulphite neutralizes aldehydes, Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 a non-ionic surface-active agent, neutralizes substituted phenolics. Sterile sponge allow absorption of specimen material while polystyrene shaft allows semi-flexibility to the swab stick, aiding in collection.

### Type of specimen

Environmental samples, food industry samples

### Specimen Collection and Handling

For environmental samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (2,3). After use, contaminated materials must be sterilized by autoclaving before discarding.

## Warning and Precautions

Read the label before opening the container. Wear protective gloves / protective clothing / eye protection / face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

## Limitations

1. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement or observation.
2. Individual strain of a microorganism may have unique growth requirements with respect to nutrients and physical conditions. Based on which the growth pattern of each varies on a medium and some even may display significant delay.

## Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Quality control

### Appearance

Sterile HiEnviro-Sponge™ Stick Hydrated w/10ml Dey-Engley Neutralizing Broth, sterile in wired sampling bag

### Dose of Irradiation (kGy)

> 25 kGy

### Sterility Check

Passes release criteria

### Cultural Response

Check for recovery of low CFU Organisms (~10 CFU/ml), inoculated on hydrated sponge w/ 10ml Dey-Engley Neutralizing Broth with hold time of 1 hr ± 15 mins at 20-25°C. Further enrichment in Tryptone Soya Broth is carried out with incubation at 30-35°C for 18-24 hrs, followed by recovery on Selective media.

### Organism

### Growth

<i>Escherichia coli</i> ATCC 25922 (00013*)	good-luxuriant (Recovery on MacConkey Agar, MP081)
<i>Salmonella</i> Typhimurium ATCC 14028 (00031*)	good-luxuriant (Recovery on XLD Agar, MP031I)
<i>Listeria monocytogenes</i> ATCC 19111 (00020*)	good-luxuriant (Recovery on HiCrome™ <i>Listeria</i> Ottaviani-Agosti Agar Base, M1540I)

Key : (\*) Corresponding WDCM numbers.

## Storage and Shelf life

Store between 2-8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

## Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

## Reference

1. Engley and Dey, 1970, CSMA Proceedings.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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### Disclaimer :

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