



Technical Data

HiEnviro-Sponge™ Hydrated w/ 10ml Dey Engley Neutralizing Broth w/o BCP w/ gloves, Sterile

ESM005A

Intended use

Recommended for microbiological sample collection from food processing equipments and environmental surfaces where neutralization of residues of disinfectant 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 |

**Formula adjusted, standardized to suit performance parameters

Directions

1. A white printed area has been provided to label the sample.
2. Tear the bag along the tear-line and pull the tabs to open the bag.
3. Guide the sponge out of the bag without touching the bag's internal surface (wearing sterile hand gloves is mandatory while getting the sponge out).
4. Swab the surface ensuring that the entire sponge is in contact with the surface of the collection site.
5. Place the sponge back in the bag.
6. Roll the top opening of the sampling bag by holding the tapped wires. Seal the bag by folding the tapped wires at both ends.
7. Incubate the sampled bag at 35 -37°C for 18-24hours.

Principle And Interpretation

Dey-Engley (D/E) Neutralizing Broth (without Bromo cresol purple) is formulated as per United States Pharmacopoeia (1). It neutralizes a broad spectrum of antiseptics and disinfectants including quaternary ammonium compounds, phenolics, iodine and chlorine preparations, mercurials, formaldehyde and glutaraldehyde. Sodium thioglycollate, sodium thiosulphate, sodium bisulphite, soya lecithin and polysorbate 80 act as neutralizing components.

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 (4,5). 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™ (Cellulose sponge) Hydrated w/ 10ml Dey Engley Neutralizing Broth w/o BCP w/ gloves in wired sampling bag

Dose of Irradiation (kGy)

13 -20 kGy

Sterility check

Aseptically open the sampling bag containing the sponge. Add 100ml Sterile Soyabean Casein Digest Medium (LQ027) in bag and incubate at 30-35°C for 7 days. Check the bag for turbidity.

Biocide activity of sponge

Not detected

Cultural Response

Check for recovery of low CFU Organisms (~10 CFU/ml), inoculated on hydrated sponge w/ 10ml Dey Engley Neutralizing Broth w/o BCP with hold time of 1 hr ± 15 mins at 20-25°C. Further enrichment in Soyabean Casein Digest Medium (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, MP1540I) |

Key : (*) Corresponding WDCM numbers.

Storage and Shelf life

Store between 15-30°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. The United States Pharmacopoeia-National Formulary (USP-NF), 2022.
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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