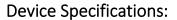


World Bioproducts Product Specifications

VeriSwab™ sampler

Intended for collection of environmental surface samples

- Dacron tip, ideal for sampling cracks and crevices, and surface areas of approximately 100 cm².
- Blue shaft for high visibility.
- Tube has flat base for stability and conical bottom for vortexing sample to facilitate release of cells from swab.
- White write-on area to clearly record sample identification
- Available pre-hydrated with various collection solutions.



- Qty: 100 / case
- Swab: polypropylene shaft with Dacron tip
- Tube: polypropylene (recyclable) 16 mm x 100 mm (with cap)
- Storage conditions: dependent upon collection solution
- Processing: Terminally gamma irradiated for sterility

Collection Solution Specifications:

Collection Solution ^A	Appearance	рН	Storage ^B	Shelf life ^c	Volume ^D
Buffered Peptone Water	Light yellow to tan or amber; clear to slightly hazy	7.0 – 7.4	2 – 30 °C	24 months	1-10 ml
HiCap™ Neutralizing Broth	Light amber; hazy opalescent with slight precipitate	6.8 – 7.2	2 – 30 °C	24 months	1-10 ml
Letheen Broth	Light amber; clear to slightly opalescent with slight precipitate	6.8 – 7.2	2 – 30 °C	12 months	1-10 ml
Neutralizing Buffer	Light amber; clear	6.9 – 7.5	2 – 30 °C	24 months	1-10 ml

^A Alternative collection solutions available upon request



^B All VeriSwab sampler products are designed to be shipped at ambient temperatures but should be stored as indicated upon receipt.

^c From date of manufacture.

^D Alternative volumes may be available for special applications.

Buffered Peptone Water:

- All components are listed in EAFUS^E, with the exception of casein peptone (sometimes generically referred to as peptone or digested milk peptone), although casein is present in this list.
- Casein peptone is sourced from countries considered to be BSE-free.

HiCap™ Neutralizing Broth:

- All components are listed in EAFUS.
- There are no animal-derived materials used in this broth medium.

Letheen Broth:

- All components are listed in EAFUS, with the exception of beef extract and Proteose Peptone #3 (sometimes generically referred to an enzymatic digest of animal protein).
- Beef extract and Proteose Peptone #3 are sourced from countries considered to be BSE free.

Neutralizing Buffer:

- All components are listed in EAFUS, with the exception of aryl sulfonate complex.
- Aryl sulfonate complex is considered by the supplier to conform to FDA 21CFR175.105 (Adhesives), 21CFR175.300 (Resinous and Polymeric Coatings), 21CFR175.170 (Components of Paper, Paperboard in Contact with Aqueous and Fatty Food), 21CFR175.180 (Components of Paper, Paperboard in Contact with Dry Food), 21CFR175.1210 (Closures with Sealing Gaskets for Food Containers)

Neutralizing Collection Solution Comparison Chart:

Attribute	HiCap™ Neutralizing	Neutralizing	Letheen	D/E Neutralizing Broth
Ability to neutralize quats ¹	Highest	Moderate	Weakest	Highest
Ability to neutralize free chlorine	Highest	Weakest	Moderate	Highest
Ability to neutralize high acid	Highest	Weakest	Moderate	Highest
Ability to neutralize peroxyacetic acid	Highest	Weakest	Weakest	Highest
Ability to buffer low pH (high acid) sanitizers ²	Yes	No	No	No
All components are compatible with 3M Petrifilm plates ³	Yes	No	Yes	No
Compatible with molecular detection assays	Yes	No ⁴	Yes	Yes
All components listed in EAFUS ⁵ as acceptable for use in food	Yes	No	Yes	No
All components are identified as non-allergenic	Yes	Unknown ⁶	Unknown ⁷	No ⁸
No meat peptones or extracts	Yes ⁹	Yes	No	No
Store at ambient temp 2-30°C	Yes	Yes	Yes ¹⁰	No ¹¹

1. Technical data available upon request. ~ 2. Technical data available upon request. ~ 3. 3M recommends avoiding solutions that contain bisulfite, citrate and thiosulfate when working with Petrifilm. ~ 4. Possibly due to the presence of aryl sulfonate complex in the neutralizing buffer. ~ 5. EAFUS - Everything Added to Food in the U.S. (U.S. FDA). ~ 6. Contains aryl sulfonate complex of unknown allergenicity. ~ 7. Letheen broth contains lecithin. Lecithin used in microbiological culture media is typically derived from soy or egg. ~ 8. Contains peptone from milk and lecithin, which is typically derived from soy or egg. ~ 9. Includes vegetable peptones (not digested with animal-derived enzymes) and yeast extract. ~ 10. Some suppliers of Letheen broth specify refrigerated storage. ~ 11. D/E shows pH instability with ambient storage.

^E EAFUS - Everything Added to Food in the U.S. list of substances contains ingredients added directly to food that FDA has either approved as food additives or listed or affirmed as Generally Recognized as SAFE (GRAS).

Recommended Best Practices:

Sanitizing surfaces after sample collection:

It is recommended that all surfaces sampled using the VeriSwab samplers be rinsed and sanitized after a sample is collected. This is especially important when a culture broth (such as D/E Neutralizing Broth, Letheen Broth, Buffered Peptone Water, or HiCap Neutralizing Broth) contains growth promoting materials, such as peptones, that if left on the surface may support the growth of microorganisms after the sample is collected.

Handling of samples after collection:

It is recommended that samples be analyzed as soon as possible after collection. If samples are sent to an off-site laboratory for analysis, they should be packed in accordance with local shipping regulations. Samples should be packed on ice to maintain refrigerated temperatures. Care should be taken to avoid freezing of samples. Samples collected using Buffered Peptone Water, D/E Neutralizing Broth, Letheen Broth or Neutralizing Buffer should be analyzed within 24 hours of collection. Samples collected using HiCap Neutralizing Broth may be held at refrigerated temperatures (2-8 ° C) for up to 72 hours prior to analysis. F

F Data on file at World Bioproducts and available upon request

