

# A FREE GUIDE

## HOW TO CHOOSE A COLLECTION BROTH/BUFFER

Choosing the right collection broth/buffer for an environmental sampling sponge or swab is critical to ensuring accurate and reliable microbiological testing results. Here are some key factors to consider when selecting a collection broth/buffer:

### 1 Microorganism Recovery

Will it recover the full range of microorganisms present on the surface being sampled?

### 2 Neutralization

Can it neutralize any antimicrobial agents or sanitizers that may be present on the surface being sampled?

### 3 Preservation

Does it preserve the viability and integrity of the microorganisms being collected?

### 4 Applicability

Is it compatible with the specific testing methods being used?



## FREE Guides collect them all

### Food Safety Series

**HOW TO CHOOSE A:**  
COLLECTION  
BROTH/BUFFER

**HOW TO CHOOSE A:**  
SAMPLING DEVICE  
SPONGE VS SWAB

**A CRITICAL CHOICE:**  
SAMPLING MATERIAL  
POLYURETHANE VS CELLULOSE

# Check List

## Ask these questions



### How long can samples be held?

While it's ideal to test samples within 24 hours of collection, there are times when that's not possible. The ability to preserve microbial populations and maintain organism viability for an extended time can counteract any delays in delivering samples to laboratory.



### Which sanitizers does it neutralize?

Make sure the collection solution can neutralize a comprehensive array of different types of sanitizers at low to high concentrations, including: quats, free chlorine, and peroxyacetic acid. It should also sufficiently buffer low pH (high acid) sanitizers.



### How well preserved are microorganisms?

Microorganisms found in environmental samples are often stressed or injured. The collection broth/buffer must provide an environment that allows these organisms to recover to prevent false negative results.



### Which tests are compatible?

Components in some collection solutions may not be compatible with certain rapid pathogen detection systems and/or enumeration methods, causing false positive or failed/inconclusive test results.



### Was it made for Food Safety?

All ingredients in a collection broth/buffer should be safe for use in a food production environment. Special considerations may include allergenic content as well as Kosher and Halal processor requirements.



1) Technical data are available upon request. 2) Technical data are available upon request. 3) 3M and Petrifilm are trademarks of 3M, St. Paul, MN. 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) Lethen 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 lethen broth specify refrigerated storage. 11) D/E shows pH instability with ambient storage.

# HICAP™

## NEUTRALIZING BROTH

### The 1st Collection Broth Made for Food Safety

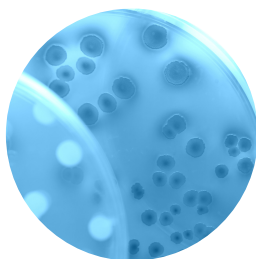
HiCap™ (High Capacity) Neutralizing Broth is the first collection broth developed *specifically* for use in food production facilities. All HiCap ingredients are acceptable for use in food. It is non-allergenic and contains no components of animal origin. HiCap has been proven to help recover and maintain the viability of injured microorganisms for up to 72 hours, providing the time necessary to deliver samples to the lab for testing. It has also demonstrated the ability to effectively neutralize a broad array of different sanitizers across a wide range of concentrations, helping to ensure accurate detection of the microorganisms present in the manufacturing environment.



#### White Paper

Collection Broths for  
Environmental Monitoring

[DOWNLOAD](#)



#### Comparison Study

Collection broth's/buffer's  
ability to recover and  
maintain viability of  
Salmonella and Listeria

[DOWNLOAD](#)



#### FDA Study

HiCap Neutralizing Broth:  
neutralization of sanitizers  
and recovery of Listeria

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