

# LIQUID BASED MICROBIOLOGY

Simplify Specimen  
Collection, Transport,  
and Processing



# BETTER SPECIMEN COLLECTION BETTER DIAGNOSTICS




**PATENTED ORIGINAL  
TECHNOLOGY FOR OPTIMAL  
SAMPLE COLLECTION  
AND DIAGNOSTICS**



**A FLOQSWAB™ IS A MOLDED PLASTIC APPLICATOR SHAFT** with a tip that can vary in size and shape and coated with Nylon® fibers, creating a thin absorbent layer which allows for quick sample **uptake and elution of more than 90% of the sample.**

## THE HISTORY OF SWAB COLLECTION AND TRANSPORT

 While bacteriology transport systems date back to 1940, with the invention of Stuart transport medium, 60 years would pass before the first international published standards for Microbiological transport systems was established.

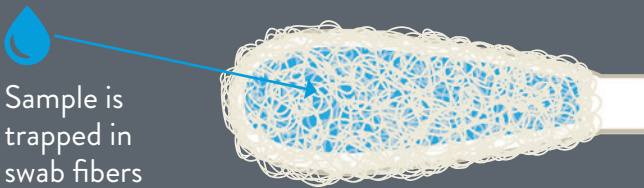
The CLSI (NCCLS) M40-A created a new performance challenge for manufacturers and end users of transport devices and ignited COPAN's devotion to quality and pre-analytical innovation. In 2003 flocked swabs (branded FLOQSwabs™) were invented by COPAN paving the way for Liquid Based Microbiology (LBM) and a new era of specimen collection, transport and processing in Clinical Microbiology.



## WHY FLOCKED?

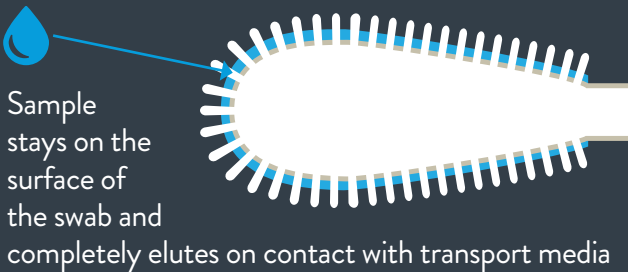
### TRADITIONAL FIBER SWABS

Yards of fiber are wrapped around an applicator



### NYLON® FLOQSWABS™

Nylon® fibers applied to applicator using COPAN's proprietary flocking process



one swab for one test

How many tests from one sample?

up to ten aliquots for multiple tests

less than **10%**

Sample available for testing

up to **90%**

US Patents # 8,114,027, #8,317,728, #8,979,784, #9,011,358, #9,173,779, European Patent #1608268, Canadian Patent #2515205, Japanese Patent # 2007-523663, Australian Patent #2004226798, New Zealand Patent #541560, Chinese Patent #ZL200610099310.9


# A LIQUID SOLUTION FOR MICROBIOLOGY SAMPLES

**DEVELOPED BY COPAN 2006**, Liquid Based Microbiology (LBM) combines state-of-the-art flocked swabs with media – transforming challenging samples into easy-to-process, multi-purpose liquid samples.


The LBM line includes collection, transport and processing systems for the most common Clinical Microbiology samples.




## BETTER DIAGNOSTICS

 FLOQSwabs™ paired with a liquid based system give way to quantitative, measurable and consistent sample transfer. Evidence based research shows that samples collected using FLOQSwabs™ improve test sensitivity, eluting more than 90% of the specimen.


## PATIENT COMFORT

 Clinicians report better patient comfort due to ergonomic, anatomic swab design and softer texture. Additionally, because one sample can be used for multiple tests, fewer samples are collected from the patient.

## REDUCE COSTS

 Broad range of testing applications eliminating costs associated with stocking numerous collection devices.

## AUTOMATION READY

 Liquid based system is easily processed on automated specimen processors and liquid handling pipetting systems, minimizing manual handling.



## Change Management

Ready to make the switch to better Microbiology, improved patient care and laboratory cost savings? COPAN provides hands-on expertise to facilitate new product implementation. We are available to assist with training, verification guidance, and more!





EVIDENCE BASED, IMPROVED  
PATHOGEN RECOVERY, EXPANDED  
TESTING CAPABILITIES, AND BETTER  
PATIENT CARE

## Patented Liquid Based Collection and Transport System for Microbiology Swab Samples

ESwab™ is a collection and transport system which is FDA cleared for aerobic, anaerobic and fastidious bacteria, maintaining viability for up to 48 hours at room or refrigerator temperature (*Neisseria gonorrhoeae* survival at 24 hours per CLSI standard).



Improved pathogen  
recovery for traditional  
bacteriology culture



Homogeneous sample for  
more consistent and precise  
Gram Stains



Swab samples are easily  
processed on automated  
specimen processors, and  
automatic pipettors minimizing  
manual handling and maximizing  
investment in automation



Validated for molecular  
and rapid antigen testing  
on an increasing number of  
manufacturers' platforms\*

\* Always read the manufacturer's package insert for specific instructions regarding specimen collection and transport for the type of test kit being used.

INNOVATIVE ESWAB™ SYSTEM ELUTES OVER  
90% OF PATIENT SPECIMEN into the Liquid  
Amies transport medium. Multiple investigations  
can be performed from the same sample:



Multiple  
culture plates



Rapid antigen  
tests



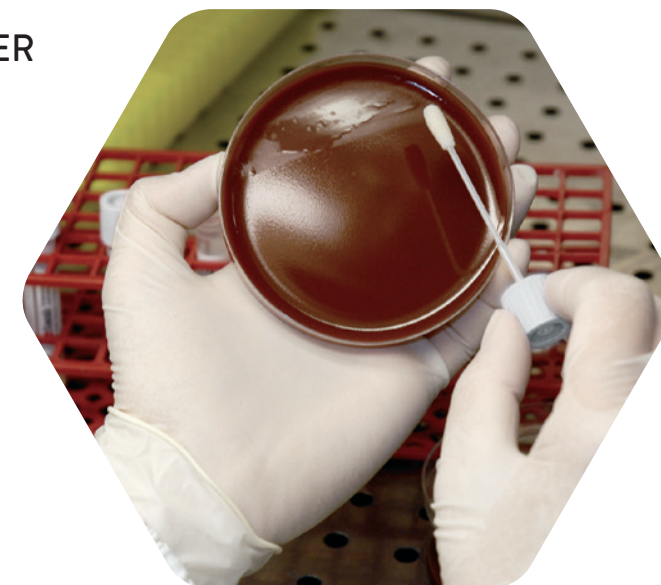
Automation



Gram stains



Molecular  
testing



### PATIENT CARE

Fewer samples need to be  
collected offering a more  
comfortable experience.



### LABORATORY EFFICIENCY

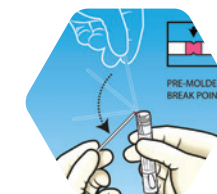
Broad range of testing applications,  
eliminating costs associated with  
stocking numerous swab types.

## ESwab™ Collection - Quick Guide



### COLLECT

- Collect the patient sample using the swab. Avoid touching the swab applicator below the pink molded breakpoint.



### SNAP

- Remove cap from the tube and insert the swab to the bottom of the tube.
- Holding the tube away from face, grasp the end of swab shaft and bend at a 180 degree angle to break at the pink breakpoint. If needed, gently rotate the swab shaft to complete the breakage.
- Screw the cap on tightly to prevent leakage.



### SEND

- Identify tube with patient information and send to laboratory.

Specimen collection should be performed by health care personnel who have completed training and demonstrated competency. Always read the manufacturer's package insert for specific instruction regarding specimen collection and transport for the type of test kit being used.



SIMPLIFY AND STANDARDIZE  
FECAL SAMPLE COLLECTION,  
TRANSPORT AND PROCESSING,  
CONVERTING SEMI-SOLID FECAL  
MATTER INTO LIQUID SAMPLES

## Patented Sample Collection and Preservation System for Enteric Bacteria

FecalSwab™ is a collection and transport system which is FDA cleared for rectal swab and fecal specimens for enteric pathogen recovery using traditional bacteriology culture.

The system is also compatible with enteric molecular assays for bacteria, viruses and parasites where package inserts indicate Cary-Blair systems for sample collection.\*



Smaller sample quantity, eliminating the need to vent the container, preventing messy accidents during processing



Compact alternative for space efficient transportation compared with traditional bulky fecal containers



Stool samples are easily processed on automated specimen processors, and automatic pipettors minimizing manual handling and mess and maximizing investment in automation

\* Always read the manufacturer's package insert for specific instructions regarding specimen collection and transport for the type of test kit being used.

## FECALSWAB™ SYSTEM CAN ALSO BE USED FOR RECTAL COLLECTION



Speed time to treatment by collecting a sample immediately, without having to wait for the patient to submit a fecal specimen



Pediatric sample collection is simplified using the rectal swab rather than feces taken from diapers, which contain material that may cause interference in some tests

Available with intuitive stopper anatomically designed to ensure the swab tip reaches the transition zone of the rectum for standardized rectal swab sample collection



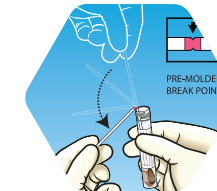
## FecalSwab™ Collection - Quick Guide



### COLLECT

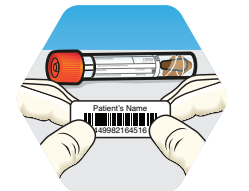
- Collect a small amount of sample by rotating swab tip to cover it with feces. Avoid touching the swab applicator below the pink molded breakpoint.

*Sample can also be obtained by taking a rectal swab (refer to package insert and institution standard operation procedures for instructions).*



### SNAP

- Remove cap from the tube and insert the swab to the bottom of the tube.
- Mash and mix stool specimen against the side of the tube to disperse.
- Holding the tube away from face, grasp the end of swab shaft and bend at a 180 degree angle to break at the pink breakpoint. If needed, gently rotate the swab shaft to complete the breakage.
- Screw the cap on tightly to prevent leakage.



### SEND

- Identify tube with patient information and send to laboratory.

*Specimen collection should be performed by health care personnel who have completed training and demonstrated competency. Always read the manufacturer's package insert for specific instruction regarding specimen collection and transport for the type of test kit being used.*



SAVE COST AND AVOID  
WASTE OF MAKING  
REAGENTS FOR  
LIQUIFYING SPUTUM

## Sputum Liquefying System

Easily transfer sputum samples using COPAN invented Sputum Dipper™, a unique drill shaped tool for managing challenging sputum samples.

SnotBuster™ is a mucolytic agent that has been tested and validated for liquefying sputum samples prior to culturing for the isolation of bacteria and fungi without affecting the morphology, growth or microscopic staining and appearance of pathogens.



Sputum samples are easily processed on automated specimen processors, minimizing manual handling and maximizing investment in automation



Easier, more consistent and reproducible specimen planting and streaking



Tubes of reagent are provided ready to mix with sputum sample so there is no need for re-hydration of powder or dilution of liquid concentrate

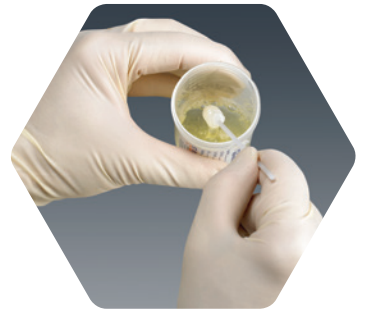


Minimize reagent waste and save cost by avoiding large batch mixing

## Unique Sputum Dipper For Simplified Sample Processing



Simplify handling of challenging sputum specimens using the efficient Sputum Dipper™ tool which handles all types from liquid to viscous samples



## SnotBuster™ Processing - Quick Guide



### TRANSFER

- Transfer specimen from patient container by rotating the dipper to cover with sputum.



### SNAP

- Remove cap from the tube and insert the dipper to the bottom of the tube.
- Holding the tube away from face, grasp the dipper shaft and bend at a 180 degree angle to break at the breakpoint.
- Screw the cap on tightly to prevent leakage.



### PROCESS

- Immediately vortex for 30 seconds and leave at ambient temperature for a minimum of 15 minutes (not to exceed 6 hours).
- Mix by vortexing for an additional 3 seconds

*Specimen collection should be performed by health care personnel who have completed training and demonstrated competency. Always read the manufacturer's package insert for specific instruction regarding specimen collection and transport for the type of test kit being used.*





# UriSponge™

## URINE SPECIMEN COLLECTION, PRESERVATION AND TRANSPORT SYSTEM

### Safe and Cost Effective System for the Most Common Laboratory Sample

UriSponge™ is FDA cleared as a urine collection and transport system which maintains viability of bacteria at refrigerated and room temperature for up to 48 hours.

UriSponge™ allows safe collection and preservation of urine specimens without the added expense and hazard of hypodermic urine transfer straws.



Automatically processed on WASP®DT using its built-in spinner, which easily elutes urine from the sponges prior to planting and streaking



No hypodermic needle urine transfer straw needed, eliminating potential injury and sharps disposal costs



If processed manually, simply centrifuge the tube to release urine from the sponge



Reduce repeat collections from patient due to inaccurate filling of boric acid tubes

### NO NEED FOR A PRECISE FILL LINE



The unique sponge system does not require users to fill to a precise line, eliminating the risk of bacterial inhibition from overexposure to preservatives or overgrowth associated with inaccurate fill volumes that can occur with traditional vacuum boric acid tube systems.

Preservatives are evenly dispersed within the sponge applicator and are only activated upon contact with urine



## UriSponge™ Collection - Quick Guide



### COLLECT

- Have the patient obtain a clean-catch urine sample from the midstream portion into a sterile container.
- Dip the sponge applicator into the urine sample. Submerge the sponges for 5 seconds.
- Screw the cap on tightly to prevent leakage.



### SEND

- Identify tube with patient information and send to laboratory.



### PROCESS

- If processed manually, simply centrifuge the tube to release urine from the sponge.
- If processed on WASP®DT built-in spinner, easily elutes urine from the sponges prior to planting and streaking.

*Specimen collection should be performed by health care personnel who have completed training and demonstrated competency. Always read the manufacturer's package insert for specific instruction regarding specimen collection and transport for the type of test kit being used.*

Ordering Information



ESwab™ combines a COPAN invented flocked swab with 1 mL of Liquid Amies in a plastic, screw cap tube. The innovative system elutes over 90% of patient specimen into the liquid medium

CAT. NO.	PRODUCT DESCRIPTION
480C	Single Regular Size Nylon® Flocked Swab with 80mm Breakpoint packaged with 1 mL Liquid Amies Medium in Self-Standing Tube with Plastic White Capture Cap - Individually Packaged, Sterile
481C	Single Minitip Size Nylon® Flocked Swab with 80mm Breakpoint packaged with 1 mL Liquid Amies Medium in Self-Standing Tube with Plastic Green Cap - Individually Packaged, Sterile
482C	Single Flexible Minitip Size Nylon® Flocked Swab with 100mm Breakpoint packaged with 1 mL Liquid Amies Medium in Self-Standing Tube with Plastic Blue Cap - Individually Packaged, Sterile
486C	Double Swab; One White Regular Size Nylon® Flocked Swab with 80mm Breakpoint and One Blue Regular Size Rayon Swab without Breakpoint in tube packaged with 1 mL Liquid Amies Medium in Self-Standing Tube - Individually Packaged, Sterile
493C02	Double Swab; One White Regular Size Nylon® Flocked Swab with 80mm Breakpoint and One Pink Regular Size Nylon® Flocked Swab without Breakpoint packaged with 1 mL Liquid Amies Medium Self-Standing Tube with Plastic Pink Capture Cap - Individually Packaged, Sterile
493C03	Triple Swab; One White Regular Size Nylon® Flocked Swab with 80mm Breakpoint and Two Pink Regular Size Nylon® Flocked Swabs without Breakpoint packaged with 1 mL Liquid Amies Medium Self-Standing Tube with Plastic Pink Capture Cap - Individually Packaged, Sterile
480CFA	Single Regular Size Nylon® Flocked Swab with 80mm Breakpoint packaged with 1 mL Liquid Amies Medium in Self-Standing Tube with Plastic Purple Cap - Individually Packaged, Sterile



FecalSwab™ combines a COPAN invented flocked swab with 2 mL of Cary-Blair medium in a plastic, screw cap tube

CAT. NO.	PRODUCT DESCRIPTION
4C024S	Single Regular Size Nylon® Flocked Swab with 80 mm Breakpoint packaged with 2 mL Cary-Blair Medium in Self-Standing Tube with Orange Capture Cap - Individually Packaged, Sterile
4C028S	Single Regular Size Nylon® Flocked Swab with 80 mm Breakpoint and Stopper packaged with 2 mL Cary-Blair Medium in Self-Standing Tube with Orange Capture Cap - Individually Packaged, Sterile



The SnotBuster™ (also known as SLSolution™) system combines the COPAN invented Sputum Dipper™ with a ready to use mucolytic agent in a vacuum sealed plastic tube

CAT. NO.	PRODUCT DESCRIPTION
2U063S01	Sputum Dipper™ Transfer Device, Individually Packaged, Sterile
0U020N.A	1 mL SnotBuster™ (SLSolution™) in PET Tube with Capture Cap packaged with Sputum Dipper™ Transfer Device
0U019N	1 mL SnotBuster™ (SLSolution™) in PET Tube



The UriSponge™ collection device combines a plastic tube and a screw cap with attached sponges impregnated with boric acid and sodium formate urine preservatives

CAT. NO.	PRODUCT DESCRIPTION
8C021S01.A	16x100 mm Screw-Cap Polyurethane Foam Sponge Urine Collection Device - Individually Packaged, Sterile
8C020S100.A	16x100 mm Screw-Cap Polyurethane Foam Sponge Urine Collection Device - Bulk Packaging
8C023S01.A	12x80 mm Screw-Cap Polyurethane Foam Sponge Urine Collection Device - Individually Packaged, Sterile
8C022S100.A	12x80 mm Screw-Cap Polyurethane Foam Sponge Urine Collection Device - Bulk Packaging

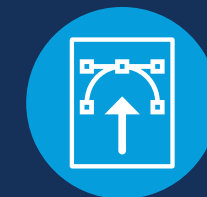
COPAN LIQUID BASED MICROBIOLOGY PRODUCTS ARE SOLD THROUGH OUR VALUED DISTRIBUTION PARTNERS. PLEASE CONTACT YOUR PREFERRED VENDOR FOR PRICING AND FURTHER ORDERING DETAILS.



# LIQUID BASED MICROBIOLOGY OPENS THE DOOR FOR AUTOMATED SPECIMEN PROCESSING



BY CONVERTING MICROBIOLOGY SAMPLES TO A LIQUID FORMAT IN STANDARDIZED TUBES, LABORATORIES ENJOY MAXIMUM UTILITY FROM WASP®DT AUTOMATED SPECIMEN PROCESSOR.



**COPAN'S FULL LABORATORY AUTOMATION LINE** is a modular, scalable, and customizable solution for automated specimen processing and full specimen management, automated incubation and Digital Microbiology



**CONTACT COPAN TODAY** to streamline and standardize your specimen collection and to learn more about automation in Clinical Microbiology.





Innovating Together™

🌐 [COPANUSA.com](http://COPANUSA.com)

☎ 800.216.4016

🐦 @COPANUSA

✉ [info@copanusa.net](mailto:info@copanusa.net)

f [facebook.com/COPAN.USA](https://facebook.com/COPAN.USA)

COPAN Diagnostics, Inc.  
26055 Jefferson Avenue ■ Murrieta, CA 92562 USA