

eSwab®

Multipurpose collection and transport system





Copan Liquid Amies Elution Swab (eSwab®) Collection and Transport System is our multipurpose media intended for the collection and transport of clinical specimens containing aerobes, anaerobes, fastidious bacteria, viruses and Chlamydia. In the laboratory, eSwab® specimens can be processed using standard clinical laboratory operating procedures for:

- Bacterial culture of anaerobes, aerobes and fastidious organisms
- Antigens and nucleic acids detection of bacteria, viruses and Chlamydia



FLOQSwabs®

Ensure a quick, capillarity-driven sample uptake and a superior elution of the biological specimen, expanding downstream diagnostic testing capabilities.



CLSI M40-A2 standard

eSwab® is compliant with CLSI M40-A2 Quality Control for Microbiological Transport System standards.



Multiple testing capabilities

eSwab® is compatible with a broad range of downstream testing applications. Thanks to its liquid formulation, it could be used to run multiple tests from a single specimen, reducing the costs of multiple sampling and stocking.



Versatile

eSwab® is available in different tube sizes and medium fill volumes, in combination with a swab or in bulk packs to meet different laboratories needs.



FLOQSwabs®

Cut out for everyone

FLOQSwabs® offer **variable sizes, diameters, breaking points and tip shapes to be used in plenty of applications.** This made FLOQSwabs® a well-tolerated alternative to invasive, painful, and costly collection procedures^{7,8}

Do you have a specific application in mind?

Choose the right FLOQSwabs®!



Fields of application

Prenalytics made different



*Respiratory Diseases*¹⁻¹²

Regular, minitip and flexible minitip



*Gastrointestinal Diseases*¹³⁻¹⁹

Regular



STI & HPV^{3,16,17,20,21,22,23}

Regular and minitip



Cutaneous Infections^{24,25,26}

Regular



*Genetics & Microbiome*²⁷⁻³¹

Regular

Preservation

eSwab® performance

eSwab® preserves the viability of all the organisms tested for 48 hours at both controlled room and refrigerated temperature, except for *Neisseria gonorrhoeae* cultures which should be processed within 24 hours. eSwab® is also able to preserve DNA, RNA and antigens of bacteria, viruses and Chlamydia for five days when stored at room temperature (20° – 25°C), 7 days if stored at 4°C and up to 6 months when stored at -20° C.



Preservation

How it has been used

According to the vast scientific literature, eSwab® has been successfully used for:

- Preservation of selected microorganisms up to 30 days at -80°C¹³
- Preservation of viral HSV DNA up to 28 days at 4°C and RT²³
- Preservation of viral SARS-CoV-2 RNA up to 7 days at RT³²

Laboratory

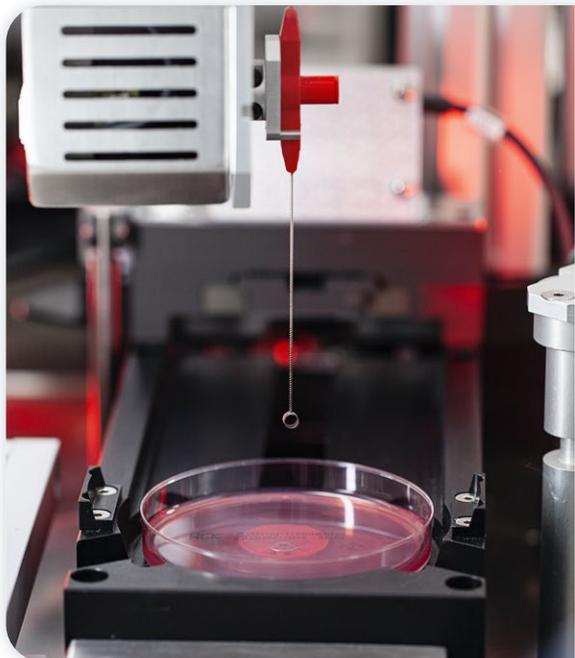
Handling and Processing

In the laboratory, sample processing can be executed manually or automatically with Copan WASP®.

Samples collected with eSwab® are suitable for bacterial culture of anaerobes, aerobes and fastidious organisms as well as antigens and nucleic acids detection of bacteria, viruses and Chlamydia.

Scientific literature reports sample collection and transport with eSwab® prior to many downstream diagnostic assays:

- Bacterial culture^{1,5,6,13,25,33,34}
- Molecular-based assays^{3,5,9,10,16,21,24,27,30}



WASP®

Walk-Away Specimen Processor™

Copan WASP® is a truly revolutionary instrument of specimen processing for Microbiology. WASP® provides a comprehensive system encompassing all aspects of automated specimen processing, planting and streaking, Gram slide preparation, and enrichment broth inoculation.

Ordering information

Choose between different tube sizes and medium fill volumes, in bulk packs or in combination with either FLOQSwabs® or polyester fiber swabs.

<i>Cat N.</i>	<i>Description</i>	<i>Pack size</i>	<i>Sample*</i>
480CE	Screw-cap tube filled with 1 ml of Liquid Amies Medium + 1 regular FLOQSwabs® with molded breaking point  	500 pieces 10 vipaks of 50 pieces	Nose, throat, vagina, rectum and wound
481CE	Screw-cap tube filled with 1 ml of Liquid Amies Medium + 1 minitip FLOQSwabs® with molded breaking point  	500 pieces 10 vipaks of 50 pieces	Eye, ear, throat, nasal passages and urogenital tracts
482CE	Screw-cap tube filled with 1 ml of Liquid Amies Medium + 1 flexible FLOQSwabs® with molded breaking point  	500 pieces 10 vipaks of 50 pieces	Nasopharynx and pediatric
483CE	Screw-cap tube filled with 1 ml of Liquid Amies Medium + 1 ultra-thin minitip FLOQSwabs® with molded breaking point  	500 pieces 10 vipaks of 50 pieces	Urogenital tract
484CE	Screw-cap tube filled with 1 ml of Liquid Amies Medium + 1 mini flexible FLOQSwabs® with molded breaking point  	500 pieces 10 vipaks of 50 pieces	Pediatric
480CESR	Screw-cap tube filled with 1 ml of Liquid Amies Medium + 1 regular FLOQSwabs® with molded breaking point  	300 pieces 6 vipaks of 50 pieces	Nose, throat, vagina, rectum and wound

Cat N.	Description	Pack size	Sample*
492CE03	<p>Screw cap tube filled with 1 ml of Liquid Amies Medium + 1 white regular FLOQSwabs® + 1 purple ultra-thin minitip FLOQSwabs® + 1 light green flexible FLOQSwabs®</p> 	<p>500 pieces 10 vipaks of 50 pieces</p>	<p>Refer to the additional Instruction for Use available with the product.</p>
493CE02	<p>Screw-cap tube filled with 1 ml of Liquid Amies Medium + 2 regular FLOQSwabs® with molded breaking point</p> 	<p>500 pieces 10 vipaks of 50 pieces</p>	<p>MRSA sample collection (nose, throat, perineum)</p>
493CE03	<p>Screw-cap tube filled with 1 ml of Liquid Amies Medium + 3 regular FLOQSwabs® with molded breaking point</p> 	<p>500 pieces 10 vipaks of 50 pieces</p>	<p>MRSA sample collection (nose, throat, perineum)</p>
4E011S.A	<p>Screw-cap tube with rounded bottom filled with 1 ml of Liquid Amies Medium + 1 regular FLOQSwabs® with molded breaking point</p> 	<p>500 pieces 10 vipaks of 50 pieces</p>	<p>Nose, throat, vagina, rectum and wounds</p>
4E014S.A	<p>Screw-cap tube with rounded bottom filled with 1 ml of Liquid Amies Medium + 1 minitip FLOQSwabs® with molded breaking point</p> 	<p>500 pieces 10 vipaks of 50 pieces</p>	<p>Eye, ear, nasal passages, throat, and urogenital tracts</p>

*Suggested table. Please refer to your GLP procedures to choose the most appropriate device for the specific sampling site

Scientific references

All the independent studies we cited in this product focus are listed here.

1. Xie X et al (2018) Molecular epidemiology and virulence characteristics of *Staphylococcus aureus* nasal colonization in medical laboratory staff: comparison between microbiological and non-microbiological laboratories. *BMC Infect Dis* 18:122.
2. Kanwar N et al (2019) Multicenter Clinical Evaluation of the Automated Aries Group A Strep PCR Assay from Throat Swabs. *J Clin Microbiol* 57:e01482-18
3. Jonckheere S et al (2015) How is the Xpert MRSA Gen 3 assay (Cepheid) performing on pooled eSwab medium? *Diagn Microbiol Infect Dis* 83:219-21
4. Silbert S et al (2015) Evaluation of BD Max StaphSR and BD Max MRSAXT Assays Using ESwab-Collected Specimens. *J Clin Microbiol* 53:2525-9
5. Donà V et al (2018) Mismatch Amplification Mutation Assay-Based Real-Time PCR for Rapid Detection of *Neisseria gonorrhoeae* and Antimicrobial Resistance Determinants in Clinical Specimens. *J Clin Microbiol* 56:e00365-18
6. Roloff K et al (2018) Prevalence of oropharyngeal group B *Streptococcus* colonization in mothers, family, and health care providers. *PLoS One* 13:e0204617
7. Oma VS et al (2018) Temporary carriage of bovine coronavirus and bovine respiratory syncytial virus by fomites and human nasal mucosa after exposure to infected calves. *BMC Vet Res* 14:22
8. Deiana M et al (2020) Assessment of the direct quantitation of SARS-CoV-2 by droplet digital PCR. *Sci Rep* 18764
9. Federman DG et al (2020) SARS-CoV-2 detection in setting of viral swabs scarcity: Are MRSA swabs and viral swabs equivalent? *PLoS One* 15:e0237127
10. Zurl C et al (2021) Low Rate of SARS-CoV-2 Infections in Symptomatic Patients Attending a Pediatric Emergency Department. *Front Pediatr* 9:637167
11. Ricci S et al (2021) How home anterior self-collected nasal swab simplifies SARS-CoV-2 testing: new surveillance horizons in public health and beyond. *Virology* 18:59
12. Marcolungo L et al (2021) ACoRE: Accurate SARS-CoV-2 genome reconstruction for the characterization of intra-host and inter-host viral diversity in clinical samples and for the evaluation of re-infections. *Genomics* 113:1628-1638
13. Tops SCM et al (2020) Recovery of aerobic gram-negative bacteria from the Copan Eswab transport system after long-term storage. *Diagn Microbiol Infect Dis* 115100
14. Foschi C et al (2020) Rectal screening for carbapenemase-producing Enterobacteriaceae: a proposed workflow. *Journal of Global Antimicrobial Resistance* 86:90
15. Saliba R et al (2020) Impact of freeze/thaw cycles and single freezing at -80 °C on the viability of aerobic bacteria from rectal swabs performed with the ESwab™ system. *Diagn Microbiol Infect Dis* 96:114895
16. Shin JH et al (2019) Comparison of Three Nucleic Acid Amplification Tests and Culture for Detection of Group B *Streptococcus* from Enrichment Broth. *J Clin Microbiol* 57:e01958-18
17. Emery CL et al (2019) Multicenter Evaluation of NeuMoDx Group B *Streptococcus* Assay on the NeuMoDx 288 Molecular System. *J Clin Microbiol* 57:e01324-18
18. Forsell J et al (2021) Evaluation of factors affecting real-time PCR performance for diagnosis of *Entamoeba histolytica* and *Entamoeba dispar* in clinical stool samples. *J Med Microbiol* 64:1053-1062
19. Cherkaoui A et al (2019) Automated Incubation and Digital Image Analysis of Chromogenic Media Using Copan WASPLab Enables Rapid Detection of Vancomycin-Resistant *Enterococcus*. *Front Cell Infect Microbiol* 9:379
20. Wind CM et al (2015) Successful Combination of Nucleic Acid Amplification Test Diagnostics and Targeted Deferred *Neisseria gonorrhoeae* Culture. *J Clin Microbiol* 53:1884-90

21. Garrett N et al (2019) Diagnostic accuracy of the Xpert CT/NG and OSOM Trichomonas Rapid assays for point-of-care STI testing among young women in South Africa: a cross sectional study. *BMJ Open* 9:e026888
22. Andreasen T et al (2019) Comparison of BD MAX GBS and GenomEra GBS assays for rapid intrapartum PCR detection of vaginal carriage of group B streptococci. *PLoS One* 14:e0215314
23. Smit PW et al (2019) Comparison of collection methods for molecular detection of α -herpes viruses and *Treponema pallidum*, including evaluation of critical transportation conditions. *Heliyon* 5:e01522
24. Silbert S et al (2017) Evaluation of the BD Max StaphSR Assay for Detecting Methicillin-Resistant *Staphylococcus aureus* (MRSA) and Methicillin-Susceptible *S. aureus* (MSSA) in ESwab-Collected Wound Samples. *J Clin Microbiol* 55:2865-2867
25. Jneid J et al (2018) Exploring the Microbiota of Diabetic Foot Infections with Culturomics. *Front Cell Infect Microbiol* 8:282
26. Maurer SM et al (2021) *Cutibacterium avidum* resists surgical skin antisepsis in the groin—a potential risk factor for periprosthetic joint infection: a quality control study. *Antimicrob Resist Infect Control* 10:27
27. Mattei V et al (2019) Evaluation of Methods for the Extraction of Microbial DNA From Vaginal Swabs Used for Microbiome Studies. *Front Cell Infect Microbiol* 9:197
28. Dausset C et al (2018) Comparative phase I randomized open-label pilot clinical trial of Gynophilus® (Lcr regenerans®) immediate release capsules versus slow release muco-adhesive tablets. *Eur J Clin Microbiol Infect Dis* 37:1869-1880
29. Kumar M et al (2021) Vaginal Microbiota and Cytokine Levels Predict Preterm Delivery in Asian Women. *Front Cell Infect Microbiol* 11:639665
30. Hillel AT et al (2019) Laryngotracheal Microbiota in Adult Laryngotracheal Stenosis. *mSphere* 4:e00211-19
31. Jakobsen RR et al (2020) Characterization of the Vaginal DNA Virome in Health and Dysbiosis. *Viruses* 12(10): 1143
32. Rogers AA et al (2020) Evaluation of Transport Media and Specimen Transport Conditions for the Detection of SARS-CoV-2 by Use of Real-Time Reverse Transcription-PCR. *J Clin Microbiol* 58:e00708-20
33. Gandhi B et al (2018) Evaluation of the Copan ESwab Transport System for Viability of Pathogenic Fungi by Use of a Modification of Clinical and Laboratory Standards Institute Document M40-A2. *J Clin Microbiol* 56:e01481-17
34. Gandhi B et al (2019) Recovery of Nontuberculous Mycobacteria and Nocardiae Causing Skin/Soft Tissue Infections by Use of the Copan ESwab Collection and Transport System. *J Clin Microbiol* 58:e01302-19



This document may contain product information otherwise not accessible or valid in your country. Please be aware that Copan Italia S.p.A. does take any responsibility for accessing such information which may not comply with any valid legal process, regulation, registration or usage in the country of your origin. Product clearance and availability restrictions may apply in some Countries. Please refer to Copan website (www.copangroup.com) to view and/or download the most recent version of the brochure. This document is mainly intended for marketing purposes, always consult product insert for complete information. The use of this product in association with diagnostic kits or instrumentation should be internally validated by the user. ©2021 Copan Italia. All rights reserved. The trademarks mentioned herein are property of Copan Italia S.p.A.
Code: JMKPF001R00



@copangroup

Copan Italia s.p.a.
Via Francesco Perotti 10,
25125 Brescia, Italy

t | f +030 2687211
@ | info@copangroup.com
www.copangroup.com