mwe
medical wire

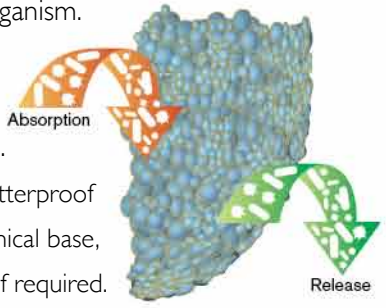
The new generation of preanalyticals

Σ-Transwab®

liquid transport for automated & conventional processing.

Transwab® was the first commercially produced gel transport swab, and for many years has led the field for reliable microbiological specimen collection and transport. A programme of continous development has kept Transwab® ahead of changes in laboratory science and regulatory requirements, so that it remains a trusted partner in the diagnosis of infectious disease[1-8]. Sigma-Transwab® combines all of this experience in an all-new format and technology for the new era of liquid preanalytical microbiology, while remaining completely suitable for conventional methodologies.

The specimen is collected by swab into the tube containing 1 ml of Liquid Amies Transport Medium. The microorganisms from the initial specimen are dispersed throughout the medium, producing a uniform suspension ready for use, whether for direct inoculation onto plates or into broth, or with an automatic sampling and inoculation system, or with any of the rapid molecular tests currently available. The process is enhanced by the incorporation of an open-celled foam-tipped swab which allows complete flow through of the liquid medium, reagents, and microorganism. This increases the sensitivity of any diagnostic procedures.



The vial, made from shatterproof polypropylene, has a conical base, and can be centrifuged if required. The base is skirted, so the tube is free standing for convenience of use at the bench, while the new screw cap ensures secure containment of liquids. The cap also incorporates an ingenious swab capture mechanism. Thus when the swab is placed in the tube, snapped at its break point and broken, and the cap screwed home, the swab is "captured" securely, so that when the cap is removed, whether manually or mechanically, the swab is automatically removed with the cap.

Sigma-Transwab® is also available in two further formats with colour coded caps.

Dual & triple formats for swabbing at multiple sites.

Format features one standard white shaft Sigma swab, and one or two standard Sigma swabs with red shafts. The white shaft swab is "captured" by the cap.

Sigma-Transwab® (mini-tip format) uses a narrow fine-tip shaft, also with a foam tip, and is particularly suited for nasopharyngeal and urethral specimens. This does not use the swab capture mechanism.

M40-A2 COMPLIANT

All variants of Sigma-Transwab® are M40-A compliant, suitable for aerobic, anaerobic and fastidious microorganisms, and can be transported at ambient or refrigerator temperatures. The liquid medium is based on the original formulation of Amies, but without charcoal. It can be used immediately for Gram stains at the time of collecting the specimen, and transported securely whether by external courier or internal pneumatic system. All Sigma-Transwabs® are CE-marked, and conform to the requirements of the European Medical Devices Directive and In Vitro Medical Devices Directives[31,32].

New collection vial

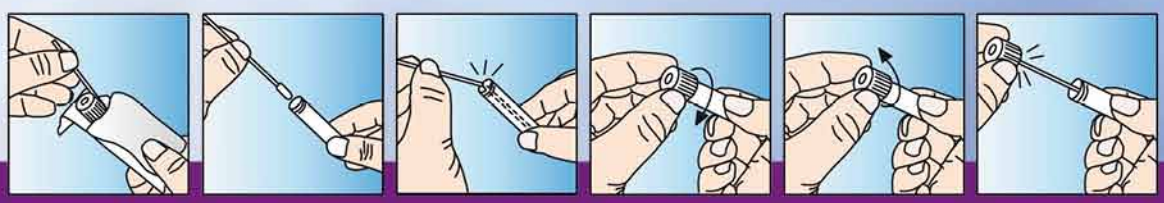
- Screw cap – for sample integrity and security
- Compatible with most automatic decapping systems
- Integral swab capture – no further manual handling of swab shaft required
- Colour coded caps according to format and application
- Self-standing for convenience
- Inner conical base – can be centrifuged
- Shatterproof polypropylene

New Σ-swab®

- Soft polyurethane foam bud preferred by patients
- High absorbency for optimum sample uptake
- Open cell for complete flow through of medium and reagents [24-28]
- Maximum release of microorganism
- Entire specimen is released into liquid phase
- Breakpoint for easy handling, ensures exact fit of swab in tube and swab capture
- Fine-tip option available for urethral and nasopharyngeal specimens

New transport medium

- Liquid Amies for automated and conventional processing
- Liquid Amies provides suspension for quick Gram stain and multiple cultures
- Liquid Amies maintains viability of Aerobes, Anaerobes, and Fastidious bacteria for up to 48 hours at ambient and refrigerated temperatures (as required for M40 compliance) [1,3,29]
- Rapid elution of specimen allows accurate and quantitative dilutions
- Stable at room temperature for 24 months



Swab Capture
As cap is replaced, swab is 'captured' and becomes attached to cap.

Σ-VCM®

Universal Transport for Viruses, Chlamydia, Mycoplasma & Ureaplasmas

Included in Medical Wire's new range of preanalyticals is Sigma-VCM® for the collection and transportation of key pathogens, including novel H1N1 influenza virus (swine flu).

Retaining the well documented qualities of Viroculț® medium, VCM has been developed to make it suitable not only for viruses, but also for chlamydia, mycoplasma, ureaplasmas, and even certain important fastidious bacteria such as *Neisseria gonorrhoeae*[10,11]. The base medium allows survival and recovery of the target organisms, while a new cocktail of antimicrobials prevents the growth of most contaminating bacteria and fungi in the specimen. Target organisms can be identified by culture or molecular techniques.

Σ-VCM®, the truly universal transport device

Both independent and internal studies show that Sigma-VCM® will recover viruses, chlamydia, mycoplasmas and ureaplasmas so that they can be identified, either by gold standard cell culture methods, or by the new molecular techniques such as RT-PCR that are now routine in many laboratories.

Σ-VCM® is available in a range of formats,

reflecting the many applications for which it can be used. It is supplied as a sterile device comprising a self-standing conical based vial with 1ml or 3ml of VCM medium, and a choice of 1 or 2 Sigma-swabs®, 1 or 2 mini-tip Sigma-swabs®, or one of each.

- All standard versions come with glass beads in the Medium, but it is also possible to have Sigma-VCM® without beads, or to have tubes containing 1ml or 3ml of VCM medium (with beads).
- Sigma-VCM® is supplied with Sigma-swabs®, the open cell foam tipped swabs which allow optimum uptake and release of target microorganisms, and complete flow-through of reagents for optimum sensitivity for molecular test protocols. Standard Sigma-swab® is suitable for general swab applications such as skin lesions, nose and throat. Mini-tip Sigma-swabs® are suitable for nasopharyngeal and urethral sampling.
- Sigma-VCM® is compliant with CLSI's M40-A standard for the recovery of viruses, and has been tested in the same way* for chlamydia and mycoplasmas (including ureaplasmas). Sigma-VCM® will also meets the requirements of M40-A for the recovery of *Neisseria gonorrhoeae*, making it the complete swab device for STD clinics.

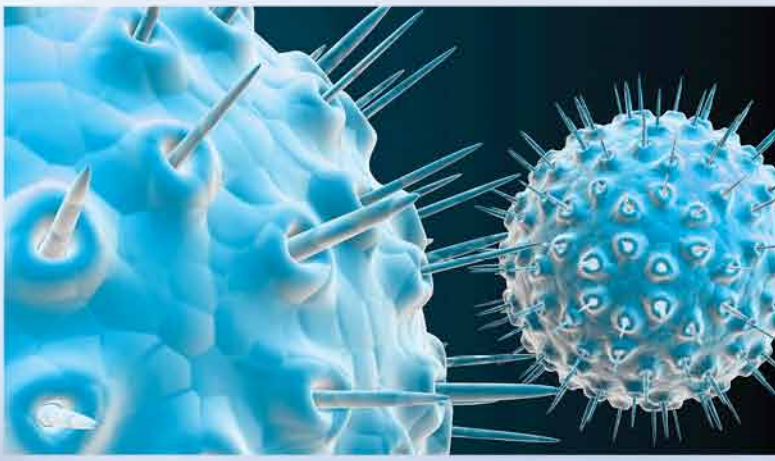
* M40-A does not specify requirements for chlamydia or mycoplasma live recoveries, but the criteria for bacteria and viruses were adapted to show better than acceptable performance for chlamydia and mycoplasma.

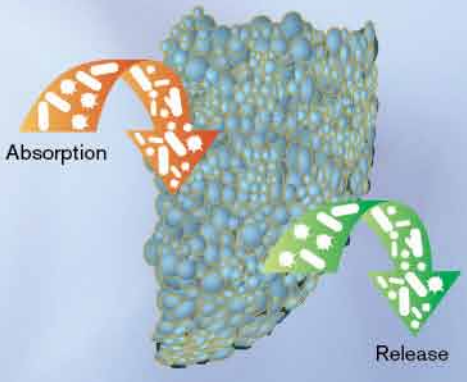
Σ-Swab®

- Open-celled foam bud
- Optimum absorption and release
- Optimum performance with molecular test systems

VCM medium

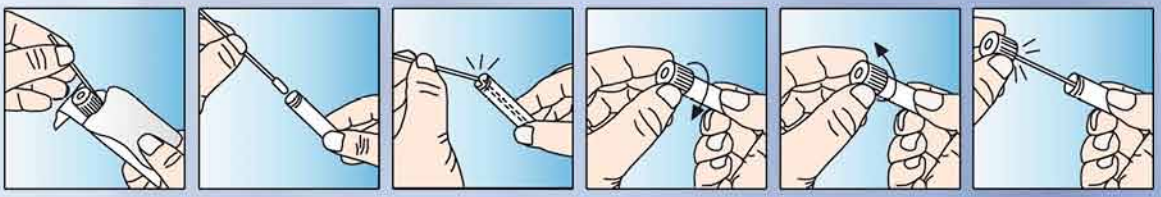
- Optimum recovery of target organisms
- Optimum compatibility with molecular test systems
- Antibiotics inhibit contaminating bacteria and fungi
- Choice of fill volume





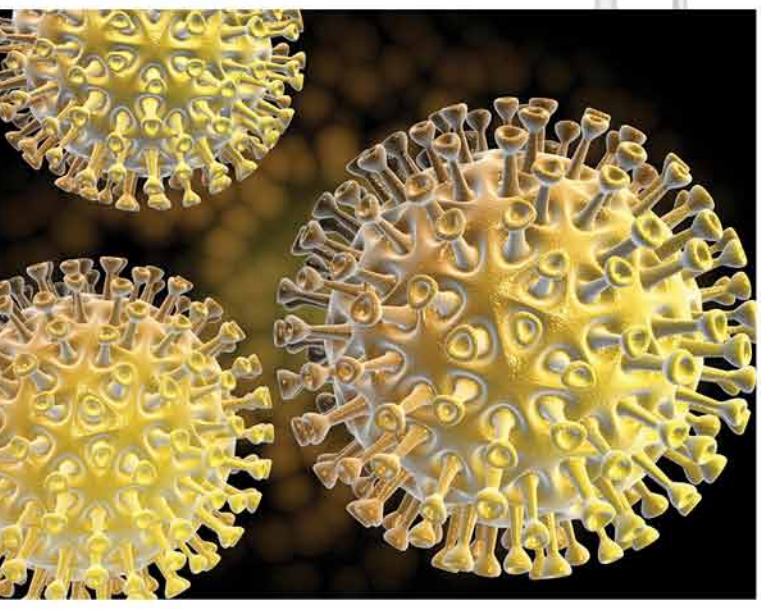
Σ-Swab® features unique open cell structure for optimum absorbance and release of microorganisms and reagents.

Swab Capture



Σ-Virocult®

Virocult® medium for virus isolation and identification



Σ-Swab®

- Open-celled foam bud
- Optimum absorption and release
- Optimum performance with molecular test systems
- Standard shaft or ENT/urethral

Virocult® medium

- Optimum recovery of target organisms
- Optimum compatibility with molecular test systems
- Antibiotics inhibit bacteria and fungi
- Recovers wide range of respiratory, genital and enteric viruses
- Transport specimens at ambient temperatures
- Choice of fill volume

Sigma-Virocult® combines Medical Wire's open cell bud Sigma-Swab®[29-33] with Virocult® medium[12-28], for long the leading transport medium for virus specimens. Virocult® medium can be used with traditional cell culture techniques, or the many current molecular techniques.

Virocult® has long been recognised as one of the best transport devices for viruses, demonstrating survival of many types of virus at ambient temperatures, including Herpes Simplex Virus, Varicella-Zoster Virus, Influenza Type A (including Novel H1N1, H5N1, and H3N2) , Influenza Type B, respiratory syncytial virus, mumps virus, adenovirus, rhinovirus, and various enterovirus.

Virocult® medium stabilises the virus particles allowing long survival, and also contains antimicrobials to prevent the growth of any bacteria

Swab Capture

Σ-Swab®

The medium free transport system

and fungi present in the specimen. These features make it suitable for cell culture based analysis, but many studies in recent years have shown Virocult® to be completely compatible with many of the newer molecular techniques such as DFA, ELISA and PCR[18, 27-28].

Virocult® & Sigma-Virocult® have been validated according to CLSI's M40-A standard for viral culture transport devices, which requires survival of reference strains for at least 96 hours at ambient or refrigerated temperatures.

Sigma-Virocult® is supplied with Sigma-Swab®, the open cell foam tipped swabs which allows optimum uptake and release of target microorganisms, and complete flow-through of reagents for optimum sensitivity for molecular test protocols. Standard Sigma-Swab® is suitable for general swab applications such as skin lesions, nose and throat. Sigma-Swab® ENT /urethral is suitable for nasopharyngeal and urethral sampling.

Sigma-Virocult® is supplied as a sterile device comprising a self-standing conical based vial with either 1ml or 2ml of Virocult® medium, and a choice of 1 or 2 standard Sigma-Swab®, 1 fine-tip Sigma-Swab® ENT/urethral , or one of each. It is stored at room temperature, with a shelf life of 1 year.

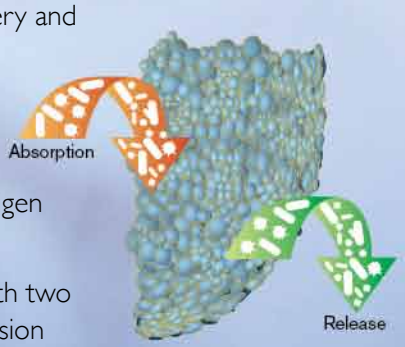
Specimens, once collected, can be transported under ambient or refrigerator temperature conditions. Sigma-Virocult® is CE-marked, and conforms to the requirements of the European Medical Devices Directive and In Vitro Medical Devices Directives.

- No dilution of sample
- No overgrowth
- No non-viables
- Suitable for bacteria, fungi, viruses
- Open-celled, inert structure allows free access to reagents for direct testing

Sigma-Swabs®.

Medical Wire's Sigma-Swab® features a special polyurethane foam tip (standard or ENT fine-tip). Studies have shown that a dry polyurethane foam-tipped swab can be used for the transport of many micro-organisms. The soft-foam bud is more comfortable for patients, and has significant advantages for both conventional and molecular methods[23-28].

In-house and published studies show that Sigma-Swab® maintains many classes of organisms in stable numbers, including bacteria[29-33], fungi, viruses[23], and mycoplasma. It is particularly useful for MRSA screening, with good recovery and no overgrowth. Absorbent foam-tipped swabs have been shown to be superior to flocked swabs when used with a rapid antigen test for influenza[29].



Sigma-Swab® is available with two bud types. The standard version has a normal sized bud suitable for general purpose swabbing such as wounds, including surgical wounds, skin, mouth, nose and throat. The fine-tip version (Mini Sigma-Swab®) has a narrow shaft and is especially suited for urethral and nasopharyngeal sampling.

Sigma-Swab® and Mini Sigma-Swab® are supplied sterile in peel pouch, tubed and tubed-duo formats.

Ordering information

Code	Vial	Fill	Swab Configuration*	Cap
Sigma Transwab®				
MW167S	Small	1.0ml	2 Sigma Swabs (1 white with breakpoint and 1 red without breakpoint)	White
MW176S	Small	1.0ml	1 Sigma Swab (white) with breakpoint	Purple
MW176S3	Small	1.0ml	3 Sigma Swabs (1 white with breakpoint and 2 red without breakpoint)	White
MW177S	Small	1.0ml	1 Mini-tip Sigma Swab with breakpoint	Orange
Fecal Transwab® with Cary Blair Medium				
MW168S	Small	1.0ml	1 Sigma Swab with red safety mark and with breakpoint	Blue
MW168T	Small	1.0ml	Medium only, no swab	Blue
MW268T	Small	3.0ml	Medium only, no swab	Blue
Details of these products are in a separate brochure.				
Sigma Virocult®				
MW950S	Large	2.0ml	1 Standard Sigma Swab with breakpoint	Green
MW950S2	Large	2.0ml	2 Standard Sigma Swabs with breakpoint	Green
MW950S3	Large	2.0ml	3 Standard Sigma Swabs with breakpoint	Green
MW950SENT	Large	2.0ml	1 Mini tip Sigma Swab with breakpoint	Green
MW950SE2	Large	2.0ml	1 Standard, 1 Mini tip Sigma Swab with breakpoint	Green
MW950T	Large	2.0ml	Medium only, no swab	Green
MW951S	Small	1.0ml	1 Standard Sigma Swab with breakpoint	Green
MW951S2ML	Small	2.0ml	1 Standard Sigma Swabs with breakpoint	Green
MW951S2	Small	1.0ml	2 Standard Sigma Swabs with breakpoint	Green
MW951SENT	Small	1.0ml	1 Mini tip Sigma Swab with breakpoint	Green
MW951SE2	Small	1.0ml	1 Standard, 1 Mini tip Sigma Swab with breakpoint	Green
MW951T	Small	1.0ml	Medium only, no swab	Green
Sigma VCM®				
MW910S	Small	1.0ml	1 Standard Sigma Swab with breakpoint	Red
MW911S	Small	1.0ml	1 Mini tip Sigma Swab with break point	Red
MW912S	Small	1.0ml	1 Standard, 1 Mini tip Sigma Swab with breakpoint	Red
MW915T	Small	1.0ml	Medium only, no swab	Red
MW916T	Small	3.0ml	Medium only, no swab	Red
MW918S	Large	3.0ml	1 Standard Sigma Swab with break oint	Red
MW919S	Large	3.0ml	1 Mini tip Sigma Swab with breakpoint	Red
MW920S	Large	3.0ml	1 Standard, 1 Mini tip Sigma Swab with breakpoint	Red
MW921S	Large	3.0ml	2 Standard Sigma Swabs with breakpoint	Red
MW924S	Large	1.5ml	2 Standard Sigma Swabs with breakpoint, no glass beads	Red
MW925	Large	3.0ml	1 Standard Rayon Swab with breakpoint	Red
MW926T	Large	3.0ml	Medium only, no swab	Red
Sigma Swab®				
MW940			Sigma Swab and Peel Pouch	
MW941			Sigma Swab Individually Tubed and Labelled	
MW942			Duo Sigma Swab in Single Tube and Labelled	
MW943			Mini tip Sigma Swab and Peel Pouch	
MW944			2 Sigma Swabs and Peel Pouch	
MW945			1 Standard , 1 Mini Sigma Swab and Peel Pouch	

* The position of the breakpoint varies according to product. For variants with swab capture, the breakpoint is set to ensure that after breaking, the swab fits into the cap. For variants without swab capture, the breakpoint is set to allow the swab to sit within the vial without contact with the cap.

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