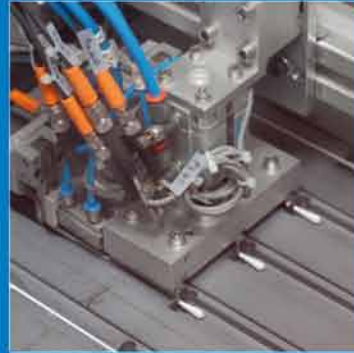




# Dryswab™ - Better specimens for better science

Medical Wire has been making “dry swabs” for over 60 years. These are the basic tools used to collect specimens or samples for analysis or simply to transfer materials during a diagnostic procedure. Although the essential design of a bud on the end of a shaft has not changed since swabs were introduced by WT Councilman in the late 19th century, the materials used have, and clinical swabs are now considered to be medical devices, requiring to conform to all the national and international standards for safety and performance.



Traditionally the bud on the swab has consisted of a spun fibre such as cotton, rayon, polyester or calcium alginate wound round the end of the stick which could be wood, rolled paper, plastic or wire. In recent years novel bud materials have been introduced, such as soft cellular polyurethane foam, or flocked fibres which can give improved uptake and release of specimens. Medical Wire has extensive ranges of swabs utilising either spun fibres, cellular foam, or multifilament flock fibres, with something suitable for practically every application.



## Clinical microbiology

Swabs for every type of specimen



## Veterinary

Specimen collection for creatures great and small



## Genetics

Swabs for DNA testing



## Environmental sampling

Surface sampling in food and pharmaceutical production



## Forensic

Accurate and effective evidence acquisition

## Swab Types

### Labelled Tube Dryswabs™

Each swab comes self-contained and ready to use with its own tube for easy transport to the laboratory. The swab is mounted in the tube plug which serves as a convenient holder so there is no need for direct handling of the swab. Each tube and cap assembly is sealed with a tamper evident label for assurance of sterility and which includes the batch details for traceability. The caps are colour coded according to the type of swab.



### Peel Pouch Dryswabs™

Individual or multiple swabs are packed sterile and ready to use within a easy open tamper evident peel pouch. These are especially suitable where the specimen is to be tested immediately or transferred to another transport container perhaps as part of a test kit. Each peel pouch has product and batch details printed for reference and traceability.

#### RAYON

Rayon is a processed form of cellulose and has been found to be particularly suitable for the recovery of microorganisms. The texture is close to that of cotton, but it has none of the fatty acids or other substances that can be inhibitory to fastidious bacteria. It has also been shown to be compatible with many molecular based diagnostic tests. Rayon buds are used on most of our transport swabs.



#### POLYESTER

Polyester (often called Dacron) is a completely synthetic material, and is often specified for use in particular molecular tests, as the non-biological nature ensures no interference in any reactions.



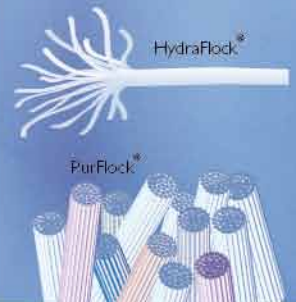
#### FOAM

This soft sponge like material has a regular cellular lattice. It will readily acquire microorganisms and other sample materials from test sites, and the structure allows microorganisms and test reagents to flow through without restriction, leading to improved sensitivity in many diagnostic tests.



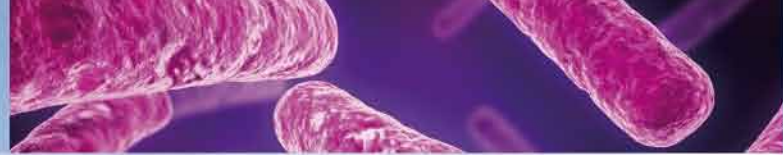
#### FLOCK

On Medical Wire's PurFlock® and HydraFlock® swabs the bud is formed by a layer of tiny multifilamented polyester fibres of varying lengths, increasing the effective surface layer. The absorbance and release capabilities of these buds are superior to those of conventional spun fibres.







**Molecular Methods** All of Medical Wire's transport devices are compatible with most molecular testing methods. It is essential, however, to check with the molecular kit or system manufacturer to determine if they have any special requirements or methods for validation of collection devices. If additional validation is required, and in the absence of specific guidance use an appropriate procedure such as Cumitech 31A to confirm the collection devices are suitable.

Clark, R. B. et al, 2009, Cumitech 31A, Verification and Validation of Procedures in the Clinical Microbiology Laboratory, ASM Press, Washington DC



Labelled Tube		Bud	Shaft	Flexible	Break Point	Length	Pack Size		
Rayon	MW100	Dryswab™, Fine Tip	Rayon	Plastic	Yes	No	Standard	100	
	MW1021	Dryswab™, Standard Tip	Rayon	Plastic	No	No	Standard	100	
	MW1028	Dryswab™, Standard Tip	Rayon	Plastic	No	No	Standard	800	
	MW140	Dryswab™ ENT	Rayon	Twisted wire	Yes	No	Standard	100	
	MW142	Dryswab™ ENT	Rayon	Straight wire	No	No	Standard	100	
	MW160	Dryswab™ Pernalal	Rayon	Ultrafine twisted wire	Yes	No	Standard	100	
Poly	MW1021D	Dryswab™, Standard Tip	Polyester	Plastic	No	No	Standard	100	
	MW1028D	Dryswab™, Standard Tip	Polyester	Plastic	No	No	Standard	800	
Foam	MW941	Sigma Swab®, Standard Tip	PurFoam	Plastic	No	No	Standard	100	
	MW942	Sigma Swab®, Duo, Standard Tips	PurFoam	Plastic	No	No	Standard	100	
	MW946	Sigma Swab®, Mini tip	PurFoam	Plastic	Yes	85mm	Standard	100	
Flock	MW830	PurFlock® Ultra, Standard Tip, Tapered Shaft	PurFlock®	Plastic	No	80mm	Standard	100	
	MW831	PurFlock® Ultra, Standard Tip, Flexible Shaft	PurFlock®	Plastic	Yes	80mm	Standard	100	
	MW832	PurFlock® Ultra, Mini Tip, Flexible Shaft	PurFlock®	Plastic	Yes	No	Standard	100	
	MW833	PurFlock® Ultra, Ultrafine Tip, Flexible Shaft	PurFlock®	Plastic	Yes	100mm	Standard	100	
	MW834	PurFlock® Ultra, Micro Ultrafine Tip, Flexible Shaft	PurFlock®	Plastic	Yes	100mm	Standard	100	
	MW836	HydraFlock®, Standard Tip, Tapered Shaft	HydraFlock®	Plastic	No	80mm	Standard	100	
	MW837	HydraFlock®, Standard Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	80mm	Standard	100	
	MW838	HydraFlock®, Mini Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	No	Standard	100	
	MW839	HydraFlock®, Ultrafine Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	100mm	Standard	100	
	MW840	HydraFlock®, Micro Ultrafine Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	100mm	Standard	100	
Alb	MW130	Hospiswab™, Albumin coated tip	Albumin coated	Wood	No	No	Standard	800	
Cotton	MW1041	Dryswab™, Wood Stick	Cotton	Wood	No	No	Standard	100	
	MW1048	Dryswab™, Wood Stick	Cotton	Wood	No	No	Standard	800	
	MW104J	Dryswab™, Wood Stick, Jumbo Bud	Cotton	Wood	No	No	Standard	800	

Applicator Swabs		Bud	Shaft	Flexible	Break Point	Length	Pack Size		
Applicator	Applicator swabs are used in many routine diagnostic and clinical procedures. Medical Wire offers a choice of standard length applicators, either hardwood shaft with cotton buds, or plastic shaft with rayon buds. These are packed loose in autoclavable paper bags of 100. They are supplied sterile, ready to use, or non-sterile for autoclaving when required.								
	MW116	Dryswab™, Wood stick, Non-sterile	Cotton	Wood	No	No	Standard	5000	
	MW116S	Dryswab™, Wood stick, Sterile	Cotton	Wood	No	No	Standard	5000	
	MW118	Dryswab™, Plastic stick, Non-Sterile	Rayon	Plastic	No	No	Standard	5000	
	MW118S	Dryswab™, Plastic stick, Sterile	Rayon	Plastic	No	No	Standard	5000	










## Peel Pouch

			Bud	Shaft	Flexible	Break Point	Length	Pack Size	
Rayon	MW112	Dryswab™, Plastic Stick	Rayon	Plastic	No	No	Standard	1250	
	MW113	Dryswab™, Fine Plastic Stick	Rayon	Plastic	Yes	No	Standard	125	
	MW151	Dryswab™ ENT straight wire	Rayon	Straight wire	No	No	Standard	1250	
	MW153	Dryswab™ ENT Twisted Wire	Rayon	Twisted wire	Yes	No	Standard	1250	
	MW155	Dryswab™ Pemasal, Ultrafine Twisted Wire	Rayon	Ultrafine twisted wire	Yes	No	Standard	1250	
Poly	MW112D	Dryswab™, Plastic Stick	Polyester	Plastic	No	No	Standard	1250	
	MW151D	Dryswab™ ENT straight wire	Polyester	Straight wire	No	No	Standard	1250	
Foam	MW940	Sigma Swab®, Individual	PurFoam	Plastic	No	No	Standard	125	
	MW940R	Sigma Swab®, Red Plastic shaft	PurFoam	Plastic	No	No	Standard	125	
	MW943	Sigma Swab®, Mini tip	PurFoam	Plastic	Yes	85mm	Standard	125	
	MW944	Sigma Swab®, Two standard Sigma swabs	PurFoam	Plastic	No	No	Standard	125	
	MW945	Sigma Swab®, One Standard & One Mini Tip Sigma	PurFoam	Plastic	No/Yes	No	Standard	125	
Flock	MW810	PurFlock® Ultra, Standard Tip, Tapered Shaft	PurFlock®	Plastic	No	80mm	Standard	125	
	MW811	PurFlock® Ultra, Standard Tip, Flexible Shaft	PurFlock®	Plastic	Yes	80mm	Standard	125	
	MW812	PurFlock® Ultra, Mini Tip, Flexible Shaft	PurFlock®	Plastic	Yes	No	Standard	125	
	MW813	PurFlock® Ultra, Ultrafine Tip, Flexible Shaft	PurFlock®	Plastic	Yes	100mm	Standard	125	
	MW814	PurFlock® Ultra, Micro Ultrafine Tip, Flexible Shaft	PurFlock®	Plastic	Yes	100mm	Standard	125	
	MW816	HydraFlock®, Standard Tip, Tapered Shaft	HydraFlock®	Plastic	No	80mm	Standard	125	
	MW817	HydraFlock®, Standard Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	80mm	Standard	125	
	MW818	HydraFlock®, Mini Tip, Moulded Shaft	HydraFlock®	Plastic	Yes	No	Standard	125	
	MW819	HydraFlock®, Ultrafine Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	100mm	Standard	125	
	MW820	HydraFlock®, Micro Ultrafine Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	100mm	Standard	125	
Cotton	MW108	Dryswab™, Standard Tip	Cotton	Wood	No	No	Standard	1250	
	MW108/10	Dryswab™, 10 per pouch	Cotton	Wood	No	No	Standard	300	
	MW108/2	Dryswab™, 2 per pouch	Cotton	Wood	No	No	Standard	600	
	MW108/20	Dryswab™, 20 per pouch	Cotton	Wood	No	No	Standard	100	
	MW108/5	Dryswab™, 5 per pouch	Cotton	Wood	No	No	Standard	500	
















## Special Application

			Bud	Shaft	Flexible	Break Point	Length	Pack Size	
Cytology		Brush swab for specimen collection in cytology. The growing importance of routine screening for cervical cancer has required the development of improved methods for cell collection. Cytotak™ is a swab-length cytology collection brush which will give excellent results in the collection of endocervical cells. The tapered spiral configuration assists access to narrow opening and gentle rotation creates a brushing action against skin surface for enhanced recovery of cellular material. The product is CE-marked, and is available in three convenient formats.							
	MW146	Cytotak™ cytology sampling brush, bulk, non-sterile	Brush	Plastic	No	No	Standard	100	
	MW147	Cytotak™ cytology sampling brush, in Peel Pouch	Brush	Plastic	No	No	Standard	125	
	MW148	Cytotak™ cytology sampling brush, in labelled tube	Brush	Plastic	No	No	Standard	100	
Podiatry	Taper-tipped swabs for under-nail sampling.								
	MW109	Dryswab, Taper tipped, in Peel Pouch	Cotton	Wood	No	No	Standard	1250	

Veterinary		The range of Dry Swabs includes several longer swabs particularly suited to larger animals. In some of these the long shaft is enclosed in a silicone sheath into which the swab head can be with withdrawn as the swab is retrieved from the sampling site.							
	MW123	Equine Flu Swab, 40cm, in Pouch	Rayon	Plastic	Yes	No	40cm	100	
	MW123/32	Equine Flu Swab, 32cm, in Pouch	Rayon	Plastic	Yes	No	32cm	100	
	MW124	Nasopharyngeal Swab with bud for large animal	Rayon	Plastic	Yes	No	27cm	100	
	MW126	Nasopharyngeal Swab with brush for large animal	Brush	Twisted wire	Yes	No	27cm	100	
	MW128	Laryngeal Swab	Rayon	Straight wire	Yes	No	27cm	100	
	MW100	Dryswab™, Fine Tip	Rayon	Plastic	Yes	No	Standard	125	
	MW113	Dryswab™, Fine Plastic Stick	Rayon	Plastic	Yes	No	Standard	125	
	MW142	Dryswab™ ENT, Straight Wire	Rayon	Straight wire	No	No	Standard	100	

## Bulk Packed

			Bud	Shaft	Flexible	Break Point	Length	Pack Size	
PurFlock	MW810B	PurFlock® Ultra, Standard Tip, Tapered Shaft	PurFlock®	Plastic	No	80mm	Standard	1000	
	MW811B	PurFlock® Ultra, Standard Tip, Flexible Shaft	PurFlock®	Plastic	Yes	80mm	Standard	1000	
	MW812B	PurFlock® Ultra, Mini Tip, Flexible Shaft	PurFlock®	Plastic	Yes	No	Standard	1000	
	MW813B	PurFlock® Ultra, Ultrafine Tip, Flexible Shaft	PurFlock®	Plastic	Yes	100mm	Standard	1000	
	MW814B	PurFlock® Ultra, Micro Ultrafine Tip, Flexible Shaft	PurFlock®	Plastic	Yes	100mm	Standard	1000	
HydraFlock	MW816B	HydraFlock®, Standard Tip, Tapered Shaft	HydraFlock®	Plastic	No	80mm	Standard	1000	
	MW817B	HydraFlock®, Standard Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	80mm	Standard	1000	
	MW818B	HydraFlock®, Mini Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	No	Standard	1000	
	MW819B	HydraFlock®, Ultrafine Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	100mm	Standard	1000	
	MW820B	HydraFlock®, Micro Ultrafine Tip, Flexible Shaft	HydraFlock®	Plastic	Yes	100mm	Standard	1000	
Speciality	MW121	Dryswab™, Fine Plastic Stick	Rayon	Plastic	No	No	Standard	1000	
	MW131	Dryswab™ ENT, Straight wire	Rayon	Straight wire	No	No	Standard	1000	
	MWSTICKS	Wooden applicator sticks, Non-Sterile	No bud	Wood	No	No	Standard	5000	



## Food and Pharmaceutical

Bud Shaft Flexible Break Point Length Pack Size



All our swabs for the food and pharmaceutical industries are blue for visibility and easy retrieval. Flexiswab™ has a longer, strong blue shaft for accessing awkward corners and pipes. Steriswab™ has a bud premoistened with sterile phosphate buffer for enhanced sampling. Dry versions are also available.

Food & Pharma

MW159	Flexiswab™ in Labelled Tube	Rayon	Plastic	Yes	No	20cm	100	
MW720	Steriswab™, Premoistened with buffer; in Labelled Tube	Rayon	Plastic	No	45mm	Standard	250	
MW730	Steriswab™ Dry in Labelled Tube	Rayon	Plastic	No	45mm	Standard	250	
MW735/1	Steriswab™ Dry in Peel Pouch	Rayon	Plastic	Yes	45mm	Standard	150	
MW799	NRSII Transwab®, Dry, screw cap vial	Rayon	Plastic	No	No	95mm	50	

## Forensic

Bud Shaft Flexible Break Point Length Pack Size

Medical Wire & Equipment is a leading manufacturer and innovator in the production of swab devices for the acquisition of critical specimen materials for the identification of key markers in the forensic investigation of scenes of crime. It has long recognised that the collection device is the critical component in any investigation, and that careful attention to materials and manufacturing techniques are essential to ensure the integrity of the sample. An example of this is our recent investment in the world's first completely automated dry swab assembly facility. This allows manufacture without handling, minimising the risk of any extraneous DNA on the swab.

Traditional swabs are still widely used by police services which from Medical Wire means white birch wood shafts (straight or tapered) with medical grade cotton. For many purposes these are ideal with a rigidity which is often required for teasing out dried or embedded substances.

Synthetic materials (sticks and buds) offer advantages for the pick up of biological markers, particularly trace DNA. Rayon (semi-synthetic) and polyester (completely synthetic) on polystyrene shafts are particularly suitable for such samples, while our new swabs with PurFlock® or HydraFlock buds offer a significantly increased surface area for sample acquisition, while being particularly good at releasing acquired substances into the test medium.

Double ended swabs are taper tipped scene of crime swabs with a removable plug at the bottom of the tube which allows the sample to breathe and dry out without deterioration during long term or archival storage. The taper-tipped swabs are robust and ideal for teasing out dried in stains or embedded substances.

Forensic

MW102FS	Forensic Swab, Standard Tip	Rayon	Plastic	No	No	Standard	800	
MWDES	Double Ended Swab, Taper Tip	Cotton	Wood	No	No	125mm	800	
MWSCS	Scene of Crime Swab, Taper Tip	Cotton	Wood	No	No	Standard	800	

### CE-marking and Sterilisation

Unless otherwise stated, all Medical Wire's dry swab products are sterilised by irradiation. All dry swab products used for the collection of specimens from humans are CE-marked, and meet the requirements for Class IIa sterile medical devices as defined in the European Medical Devices Directive EC 93/42/EEC. All sterile swab devices are manufactured to ISO 13485:2003 and ISO 9001:2008

### PurFlock® & HydraFlock® Swabs

PurFlock® & HydraFlock® Swabs are covered and protected by the following patents.

PurFlock® Ultra: European Patent No. 2263549; US Patent No. 8420385

HydraFlock®: European Patent No 2263548; US Patent No 8334134; Canada Patent No 2744282



### **Clinical microbiology**

Swabs for every type of specimen



### **Veterinary**

Specimen collection for creatures great and small



### **Genetics**

Swabs for DNA testing



### **Environmental sampling**

Surface sampling in food and pharmaceutical production



### **Forensic**

Accurate and effective evidence acquisition



### **Fully Automated Production**

Not only have swab designs and materials moved forward. Medical Wire's Labelled Tube Dry Swabs are now manufactured in the only fully automated assembly facility of its kind. Swab AND tube AND cap are brought together and assembled into a complete device without any human handling, thus reducing the possibility of any microbial or nucleic acid contamination. All of our Labelled Tube Dry Swabs are sterilised by irradiation, but with the advent of molecular testing methods such as PCR, that is no longer enough. Left over dead microorganisms, or traces of human DNA acquired during manufacture can remain after sterilisation and interfere with molecular tests. So it is essential to prevent the presence of such contaminants in the first place, which is what our automated facility does par excellence.

