Membrane Filtration Microbiolog



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Our Advantage

ardy Diagnostics manufactures over 3,500 prepared culture media products and provides a complete selection of over 13,000 microbiology supply items. Founded in 1980, Hardy Diagnostics has grown to service over 9,000 microbiology laboratories within the United States and throughout the world.

In addition to manufacturing culture media, Hardy Diagnostics is also an authorized distributor for over 80 other fine diagnostic manufacturers. Among them are Sartorius, Denka Seiken, Hygiena, Copan, Puritan, Medical Chemical, and Microbiologics.

USP Compliant Quality Control

For items designated USP, Hardy Diagnostics quality control testing is performed in accordance with the requirements set forth in USP/NF, Microbiological Examination of Nonsterile Products: Microbial Enumeration Tests <61>, Microbiological Examination of Nonsterile Products: Constant and Sterility Tests <71>. Rockville, MD: US Pharmacopeial Convention.

Quality Control Program

All of the products manufactured by Hardy Diagnostics are tested to the highest standards for quality and performance. To assist our industrial customers with ISO and cGMP requirements, a "Certificate of Analysis" is available online.

ISO Certified

The Quality management system of the Hardy Diagnostics' California and Ohio manufacturing facilities has been certified to ISO 13485, a quality standard specifically for medical device manufacturers.

Online Catalog and Ordering

To save time, you can quickly locate any of

our products, including current pricing, at our website www.HardyDiagnostics.com. Ordering online is easy and allows you to save a list of your "favorite" products, view past orders, and receive order status email notifications.

Custom Product Manufacturing

Hardy Diagnostics is willing and able to manufacture products specific to your needs. Special container and formula requests are welcome. Simply contact our Director of Sales for details at (800) 266-2222 ext. 5696.

Two Manufacturing Plants

Hardy Diagnostics is the only culture media company with bi-coastal manufacturing plants that provide our customers with the additional security of product availability.







Sterility Testing <USP 71> Sterisart[®] Universal Pump Sterility Testing System

USP requires the complete sterility of pharmaceutical products, such as parenterals, that are injected into the blood stream or that otherwise enter the body below the skin surface.

The preferred method for sterility testing is the membrane filter method using a closed sterility test system. The Sterisart[®] Universal Pump is a peristaltic pump made of stainless steel and is equipped with appropriate features for attaching a Sterisart[®] sterility test canister (Closed System).

After the Sterisart[®] canisters have been positioned and the sterility test system spike has been inserted into the sample container, the pump is started. The pump draws liquid from the sample container into the specially designed double tubing, distributing the liquid equally to both Sterisart[®] canisters. Similarly, the pump then flushes the Sterisart[®] canisters with rinse liquid such as Fluid A (Cat. no. U109). Finally, the pump fills the two Sterisart[®] canisters with culture media, such as Tryptic Soy Broth 100ml (Cat. no. U84). The Sterisart[®] canisters are then sealed and incubated.





Sterisart[®] NF Canisters for Sterility Testing

Disposable Sample Canisters and Adapters for use with Sterisart[®] Universal Pump

tubina

For sterility testing in isolators. Individually sterile, double-packaged, gamma irradiated, needles made of stainless steel.



Sterisart[®] NF Canisters can be ordered with or without a needle port septum for sub-culturing of positive results.



Pre-installed color-coded tube clamps to distinguish between TSB and FTM.



Vent filter

Septum



VHP resistant packaging.

Stainless steel septum needle. Other attachments are available.

Disposable Sample Canisters and Adapter descriptions on pages 5-9



phone: (800) 266-2222 fax: (805) 346-2760



Sterisart[®] NF Canisters are available with a variety of needles, depending on your sample type!

Sterisart[®] NF Canister for Closed Sample Containers with Septum

The 16466 is equipped with a stainless steel dualneedle spike (built in venting), which is designed for closed sample containers. The flamable spike allows changing sample containers while minimizing the risk of contamination. Unlike plastic needles, metal needles do not snap off when tilted under pressure. Additionally, the large protective plate on the spike makes it easy to pierce the stoppers. The plate construction also helps prevent injury to fingers. The 4cm length dual-needle allows the spike to be used for a variety of closures.





Sterisart® NF Canister for Open Containers

The 16467 is designed for use with open containers, such as ampoules or collapsible plastic bags that do not require venting when samples are removed. The thickness and length of the individual needle enables samples to be drawn evenly from exceptionally small ampoules with narrow openings. In addition, the length of the needle makes it easy to remove samples from plastic bags without piercing the bag itself. The stainless steel needle can be briefly flamed, minimizing the risk of contamination when changing sample containers. **Application:** LVPs* or SVPs** in open containers, i.e. glass ampoules, glass vials, collapsible bags.

10/pk	16467GBD
10/pk (septum version)	16467GSD

*Large Volume Parenterals ** Small Volume Parenterals



Sterisart[®] NF Canister for Collapsible Medical Devices with Luer or Luer Lock Connectors

The 16468 is equipped with a male luer connector onto which a detachable double female luer lock adapter is fitted. With this system, it is possible to draw samples from collapsible medical devices/bags fitted with either female luer lock or male luer lock connectors. After the sample is removed from the collapsible bag, the double luer lock adapter is disconnected and replaced by the supplied 6cm needle for drawing rinsing solution and culture media. A venting needle is included.

Application: Medical devices, i.e. tubing systems and bags with luer or luer lock connectors.

10/pk......16468GBD





Sterisart® NF Canister for Pre-filled Syringes

The 16469 is designed for sterility testing liquids in pre-filled syringes of various sizes (versions with and without needles). The system allows the exterior of needles attached to syringes to be sterility tested. The special retainer on the double tubing system is used as an adapter for attaching pre-filled syringes. The contents of these syringes are drained into the Sterisart[®] system and simultaneously mixed with rinsing solution drawn through a dual-needle metal spike. The mixed liquid is pumped in equal volumes into the two Sterisart[®] containers and filtered. **Application:** Pre-filled syringes with or without

needles.

10/pk	16469GBD
10/pk (septum version)	16469GSD



Sterisart[®] NF Canister for Easy-To-Dissolve Powders in Closed Glass Vials with Septum



Sterisart[®] NF Canister for Closed, Unvented Sample Containers

The 16476 is designed for sterility testing of closed, unvented sample containers. The 2.4cm long doublemetal needle (built in venting) considerably reduces the dead volume, which can remain in the sample container during sampling. The resulting sample is pumped in equal volumes into the two Sterisart® containers and filtered. Unlike plastic needles, metal needles do not snap off when tilted under pressure. This benefit, together with the large protective plate on the spike, makes for easy stopper piercing and helps prevent injury to fingers by preventing breakage or slippage. **Application:** SVPs** in closed glass vials with septum.

10/pk164	176GBD
10/pk (septum version)164	176GSD





Sterisart® NF Canister for Plastic Containers

The 16477 is designed for sterility testing of liquids in plastic containers. The unvented, non-coring needle with solid pointed tip and side opening minimizes clogging by particles when piercing the plastic container. The sample is pumped in equal volumes into the two Sterisart® containers and filtered. The enclosed venting needle guarantees venting of the container during sample transfers, rinsing procedures, and media transfers.



*Large Volume Parenterals ** Small Volume Parenterals



Sterisart[®] NF Canister for Containers with Male Luer Lock Connectors

The 16478 is equipped with a dual-needle metal spike with a vent filter connected to the Sterisart® NF system by a single hose and Y-distributor. A second shorter hose is attached to the other end of the Y-distributor fitted with a female luer lock connector. Using this connector, it is possible to draw samples from collapsible medical devices like bags fitted with male luer lock connectors. The dual-needle metal spike with vent filter is used to transfer rinsing solutions and/or nutrient media from closed vials.

Application: Medical devices, i.e. containers/bags with male luer lock connectors.

10/pk......16478GBD



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Sterisart® NF Gamma Tubing System

The 16470 is designed for dissolving and diluting powders with exceptionally low solubility. When used in combination with Sterisart® systems 16466 and 16467, the 16470 allows sterility testing of these powders in closed, unvented vials. The tubing system consists of a 3.6cm dual-needle metal spike (yellow color-coded) and a 2.3cm metal dual-needle spike, which are connected with each other by double tubing. Half the length of the double tubing is separated into single tubes identified by plastic ring sheaths.

Application: Difficult-to-dissolve powders in closed glass vials with septum (non- expanded).

10/pk.....16470GBD





Sterisart[®] Venting Needle

Combisart® Filter Station Membrane Filtration Manifolds

Vented, Individual and Multi-Branch Systems

The Combisart® system enables you to select the optimal hardware and consumables for your needs in microbiological analysis and guality assurance. At the heart of the Combisart® system is a high-grade stainless steel manifold designed to accommodate most types of filter holders and funnels.



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16843



2-branch manifold

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6-branch manifold

Features and Benefits

- Each filter station can be individually vented, ruling out secondary contamination of the underside of the filter.
- Easy for left or right-handed users, as funnels can be positioned to suit the individual user.
- Switch from reusable filter holders to disposable units without requiring new equipment.
- Base can be easily unscrewed, exposing all areas of the manifold to sterilization.



Microsart[®] Combi.jet 2-Branch Manifold



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e.jet Transfer Pump

biotech

torius stedim

Sterile venting

3 way valve

Features and Benefits

- Compact design, small footprint, ideal for pharmaceutical applications.
- Sterile venting with two stainless steel threeway valves.
- Vacuum can be individually controlled for each filter holder.
- Each filter station can be vented separately.

- Easy to clean and sanitize.
- Smooth and reliable filtration functionality.
- No need for suction flasks or water traps.
- Made of high quality stainless steel.
- Accommodates various funnel types.

Rubber footing

Combisart® Stainless Steel Reusable Funnels

For use with Combisart® Filter Station Manifolds



Stainless Steel Lid for 100ml Funnel



Stainless Steel Lid for 500ml Funnel Fach 6981001



Lid Seal for 100ml Stainless Steel Funnel



Lid Seal for 500ml Stainless Steel Funnel



100ml Stainless Steel Funnel with Closure Clamp Each.....

500ml Stainless Steel Funnel with Closure Clamp

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Microsart[®] @ Disposable Funnel System

For use with Combisart® Filter Station Manifolds

The Microsart® @ Funnel/Filter System combines a sterile, ready-touse funnel and a built-in gridded membrane filter in one unit. The optimized design of Microsart® @ filter permits thorough rinsing of the system subsequent to filtration with no liquid retained in the filter funnel. Specifically developed for the detection and enumeration of microorganisms from pharmaceutical products.

Features and Benefits

- Ready-to-use.
- Sterile packed in bags.
- Built-in membrane filter to reduce accidental contamination.
- Funnel and a gridded membrane filter in one unit.
- Marked graduations for accurate sample volumes.
- Funnel made of polypropylene.

100ml volume, 47mm filter diameter, 0.45µm pore size, filter color: white with black grid.
60/pk16D0110H6BL
100ml volume, 47mm filter diameter, 0.45μm pore size, filter color: green with dark green grid. 60/pk
250ml volume, 47mm filter diameter, 0.45μm pore size, filter color: white with black grid.
48/pk16D0125H6BK
250ml volume, 47mm filter diameter, 0.45µm pore size, filter color: green with dark green grid.

48/pk......16D022506BK

Lid for Microsart® Funnels



Built-in membrane filter -Twist lock base easily attaches to manifold 250ml Built-in membrane filter Twist lock base easily attaches to manifold 100ml Microsart[®] Funnel Dispenser For reliable removal of sterile Microsart[®] and Microsart[®] @ 100ml and 250ml funnels.

A Culture of Service™

Microsart[®] Disposable Funnels

For use with Combisart® Filter Station Manifolds

Microsart[®] Funnels are sterile plastic funnels that allow quick performance of filtrations required for routine testing.

Features and Benefits

- Reliable results use a new, sterile funnel for each test, avoiding possible cross contamination.
- Time-saving just change the funnel rather than spending time sanitizing it.
- Simple handling no more holding hot funnels.
- Sterile-packed.
- Funnel made of polypropylene.
- Packaged in sleeves.

100ml volume, 100/pk	16A0710N
250ml volume, 96/pk	16A0725N

Lid for Microsart® Funnels

For use with Microsart [®] and Microsart [®] @ Funnel/Filter
100ml and 250ml.
100/bx

250ml

100ml

Microsart[®] Funnel Dispenser



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Microsart[®] e.jet Transfer Pump with Quick Connection

The Microsart[®] e.jet is a laboratory vacuum pump able to create sufficient vacuum filtration for transferring the filtered liquid directly to waste. This second generation of Microsart[®] e.jet achieves a better trans-membrane pressure and a higher flow rate. Provides constant flow rates and smooth and reliable filtration.

Microsart®	° e.jet Pump	
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Quick Connect Silicone Tubing

for connecting manifold with e.jet pump 1ZA0006



Quick Connect Silicone Tubing for connecting e.jet pump with receptacle flask.......1ZAS0007

200

150

100



Enough suction for 1-3 stage manifolds only. Call (800) 266-2222 for a selection of more powerful pumps.

250ml Glass Receptacle Flask Heavy wall, graduated

Flask features heavy-duty rim to reduce chipping, white, permanent graduations, and large marking squares. Made from high-quality borosilicate. Borosilicate glass provides uniform wall thickness resulting in the optimum balance between thermal shock resistance and mechanical strength.

- · Capacity 250ml
- Graduation Range 75 to 250ml
- Graduation Interval 25ml
- Approximate Height 86 x 160mm

6/pk	20074250

Gridded Membrane Filters

Cellulose nitrate (cellulose ester) membrane filters are offered in a choice of four different color/grid combinations to suit your specific test application and provide a high-contrast background. For simple evaluation of the results, the grid divides the filtration area into 130 squares, each measuring 3.1mm x 3.1mm. The membrane filters are individually packaged and sterilized and undergo stringent quality assurance testing. The certificate included in every package documents the quality

assurance tests as well as the compliance of the 0.45µm membrane filter with ISO 7704. The special pore structure of the new 0.45µm high-flow membrane filters allow shorter filtration times due to higher flow rates and throughputs.

Cellulose Nitrate (CN) Membrane Filter

Individually wrapped on single sheet, sterile packed, 47mm

Filter Color / Grid	Pore Size	Pack Size	Cat. no.
White/black	0.45µm	100	1140647ACN
White/black	0.45µm High-Flow	100	114H647ACN
Gray/white	0.45µm	100	1300647ACN
Green/dark green	0.45µm	100	1380647ACN
White/green	0.45µm	100	1390647ACN
White/green	0.45µm High-Flow	100	139H647ACN







Microsart® e.motion Membrane Filters

- For use with Microsart[®] e.motion, motion activated filter dispenser.
- Filters are individually sterile-sealed on a band.
- Special pleating and shape of sealing band around membrane filters ensures perfectly flat and uniform dispensing of individual filters.

Individually wrapped on pleated rolls, sterile packed, 47mm

Filter Color / Grid	Pore Size	Pack Size	Cat. no.
White/black	0.45µm	300	11406Z47SCM
White/black	0.45µm High-Flow	300	114H6Z47SCM
White/black	0.45µm High-Flow	450	114H6Z47SFM
Gray/white	0.45µm	300	13006Z47SCM
Green/dark green	0.45µm	300	13806Z47SCM
White/green	0.45µm	300	13906Z47SCM
White/green	0.45µm High-Flow	300	139H6Z47SCM







Now with 9 Distribution Centers and 2 Manufacturing Plants to serve you better!



Same Day Shipping

Olympia, WA

Orders placed before 1:30 p.m. for all time zones (except Hawaii and Alaska) are processed and shipped out the same day. Most orders are received the next morning.



Prepared Culture Media (60mm Plates)

A8 Agar

Barney Miller Agar

For the cultivation of microorganisms significant in the
brewing industry. 10/pk

Corn Meal Agar with Tween®

For the cultivation of fungi. Induces chlamydospore formation by *Candida* spp. 10/pkG101

KF Streptococcus Agar

Lactobacilli MRS Agar with Cyclohexamide

For the selective isolation and cultivation of Lactobacillus spp. 10/pk......G179

m-El Agar

For the selective chromogenic detection and enumeration of Enterococci in water. 10/pk......G124

m-Endo LES Agar

For the enumeration of coliforms from water.
10/pkG128

m-FC Agar with 1% Rosolic Acid

For the isolation and enumeration of fecal coliforms.
10/pkG126

m-HPC (Heterotrophic Plate Count) Agar

For the enumeration of heterotrophic organisms in	
water. 10/pk	ō

m-PA Agar

For the cultivation and enumeration of <i>Pseudomonas</i>
aeruginosa in water. 10/pkG133

m-PA-C Agar

20

For the selective recovery and enumeration of
Pseudomonas aeruginosa in water. 10/pkG150

m-TEC Agar, Modified

For selective chromogenic differentiation and enumeration of *E. coli* in water. 10/pk......G106



Nutrient Agar with MUG

For the detection and enumeration of <i>E. coli</i> in water.
10/pkG114

Orange Serum Agar

Potato Dextrose Agar with TA (Tartaric Acid)

For the cultivation and enumeration of fungi.	
10/pk	4

PPLO Selective Agar

PPLO Selective Agar, TAAP

PPLO Selective Agar plus thallium acetate,
amphotericin B, and penicillin G to prevent bacterial
overgrowth. 10/pkG248

Pseudomonas Isolation Agar

For the selective isolation of <i>Pseudomonas aeruginosa</i> .	
10/pkG145	

R2A Agar

For the detection of heterotrophic bacteria in water	
10/pk	.GØ3

Sabdex Agar with Gentamicin and Chloramphenicol

For	the selective	cultivation	of fungi and	dermatophytes.
10/	pk			G159

Skim Milk Agar

SP4 Agar with Arginine

SP4 Agar with Glucose

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Tryptic Soy Agar

For use as a general growth medium for the isolation and cultivation of microorganisms. 10/pk......G151

Universal Beer Agar with Cycloheximide

For the selective isolation and cultivation of microorganisms significant in the brewing industry. 10/pk......G182

XLT-4 Agar

Prepared Culture Media (100mm Plates)

Cetrimide Selective Agar, USP

For the selective isolation of *Pseudomonas aeruginosa*. 15x100mm plate, 18ml fill, 10/pk......G18

Columbia Agar, USP

For the isolation and cultivation of non-fastidious and
fastidious microorganisms.
15x100mm plate, 18ml fill, 10/pkG250

MacConkey Agar, USP

Mannitol Salt Agar (MSA), USP

Pseudomonas Agar F

For the identification of *Pseudomonas aeruginosa* and the detection of fluorescein. 15x100mm plate, 18ml fill, 10/pk......G198

Pseudomonas Agar P

For the identification of <i>Pseudomonas aeruginosa</i> and
the detection of pyocyanin.
15x100mm plate, 18ml fill, 10/pkG201

R2A Agar

R2A Agar, Irradiated, Triple Bagged

WL Differential Medium

For the isolation of bacteria in brewing and fermentation processes. 10/pk......G163

WL Nutrient Agar with Gentamicin and Streptomycin

For the cultivation of yeast and mold in the
fermentation process. 10/pkG191

Reinforced Clostridial Medium with Na Lactate

For the cultivation and enumeration of clostridia and other anaerobic and facultative bacteria. 15x100mm plate, 18ml fill, 10 /pk......G351

Sabouraud Dextrose Agar, Irradiated, Triple Bagged

Tryptic Soy Agar (TSA), USP

Tryptic Soy Agar, Irradiated, Triple Bagged, USP

Tryptic Soy Agar with Lecithin and Tween[®] 80

Violet Red Bile with Glucose Agar, USP

For the detection of coliforms. 15x100mm plate, 18ml fill, 10/pkG178

Xylose Lysine Deoxycholate (XLD) Agar, USP

Septum **Bottle Size** Comparison

Bottled Media with Septum

For Sterility Testing<USP 71> by **Direct Innoculation or Closed** System Testing

- (A) 20ml glass bottle with flip seal
- B 100ml glass bottle with flip seal
- C 125ml polycarbonate bottle
- D 200ml glass bottle with flip seal
- 16x125mm glass tube
- 600ml glass bottle
- G 500ml polycarbonate bottle
- 1L polypropylene bottle







Septum cover available by special request













email: Sales@HardyDiagnostics.com website: www.HardyDiagnostics.com

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Fluid A, USP

A rinsing and diluting fluid.

B 100ml glass bottle, 100ml fill, 20/pk	.U109
D 200ml glass bottle, 200ml fill, 10/pk	U209
G 500ml polycarbonate bottle, 300ml fill, 10/pk	U349
600ml glass bottle, 300ml fill, 10/pk	U342
600ml glass bottle, 600ml fill, 10/pk	U249

Fluid D, USP

A rinsing and diluting fluid.		
100mal alass hattle 100mal fill	20/12/	11110

100ml glass bottle,	, 100ml fill, 20/pkU110
600ml glass bottle	, 300ml fill, 10/pkU346

Fluid K, USP

To ensure sterility of pharmaceuticals and medical devices.

Fluid Thioglycollate Broth with Indicator, USP

For the cultivation of microorganisms and USP sterility procedures.

(16x125mm glass tube, 10ml fill, 20/pkK282
(A) 20ml glass bottle, 15ml fill, 50/pk
(A) 20ml glass bottle, 20ml fill 50/pk
B 100ml glass bottle, 100ml fill, 20/pk
C 125ml polycarbonate bottle, 100ml fill, 20/pkU121
D 200ml glass bottle, 150ml fill, 10/pkU207
D 200ml glass bottle, 150ml fill, 21/pkU426
600ml glass bottle, 300ml fill, 10/pkU427
600ml glass bottle, 500ml fill, 10/pkU273

Fluid Thioglycollate with Lecithin and Tween[®] 80

For use in detecting microorganisms in normally sterile materials.

D 200ml glass bottle, 150ml fill, 21/pk......U430

Phosphate Buffered Saline with Tween (0.02M)

For use in the determination of total bioburden levels in unsterilized product.

1L polypropylene bottle, 300ml fill, 10/pkU323
1L polypropylene bottle, 600ml fill, 10/pkU326

Reinforced Clostridial Medium, USP

For the cultivation of *Clostridium* spp. and other anaerobic and facultative bacteria.

C 125ml polycarbonate bottle, 100ml fill, 16/pk......U172

Tryptic Soy Broth, USP

For use as a general purpose medium for the isolation and cultivation of bacteria and fungi.

5
G 16x125mm glass tube, 7ml fill, 20/pkK283
G 16x125mm glass tube, 10ml fill, 20/pk K82
(A) 20ml glass bottle, 10ml fill, 50/pk
(2) 20ml glass bottle, 15ml fill, 50/pk
(2) 20ml glass bottle, 20ml fill, 50/pk
B 100ml glass bottle, 50ml fill, 20/pkU267
B 100ml glass bottle, 70ml fill, 20/pk
3 100ml glass bottle, 100ml fill, 20/pk U46
(B) 100ml glass bottle, unlabeled, 100ml fill, 20/pk U56
D 200ml glass bottle, 150ml fill, 12/pkU420
C 125ml polycarbonate bottle, 100ml fill, 16/pkU141
600ml glass bottle, 300ml fill, 10/pkU421
600ml glass bottle, 400ml fill, 12/pkU271
600ml glass bottle, 500ml fill, 10/pkU274

Tryptic Soy Broth with 10% Glycerol

For the preservation of microorganisms by freezing. 100ml glass bottle, 100ml fill, 20/pk......U127

Tryptic Soy Broth with Lecithin and Tween[®] 80

For the cultivation of microorganisms.	
A 20ml glass bottle, 10ml fill, 50/pk	
200ml glass bottle, 150ml fill, 21/pk	
🕞 600ml glass bottle, 300ml fill, 10/pk	U425

Sabouraud Dextrose Broth, USP

For the cultivation of fungi.

C 125ml polycarbonate bottle, 100ml fill, 16/pk....... U73

Saline, 0.85% with 0.05% Tween® 80

For preparing dilutions and suspensions of microorganisms. **1**00ml glass bottle, 100ml fill, 20/pkU330

Quality Control Organisms for Water Testing from O Microbiologics®

KWIK-STIK[™], KWIK-STIK[™] Plus and LYFO DISK[®]

KWIK-STIK[™] is well-known for its clever design and accurate, repeatable results. Each KWIK-STIK[™] device features a single QC microorganism strain in a lyophilized pellet, a reservoir of hydrating fluid, and an inoculating swab. For added convenience, a peel-off identification label is included for easy documentation. The KWIK-STIK[™] is available in packs of 2 or 6.

KWIK-STIK™ Plus microorganisms have the same characteristics as the KWIK-STIK™ but contains an organism that has had only two passages from ATCC origin. Five swabs a single strain per package. Rehydrating fluid is built into the KWIK-STIK™ unit.

LYFO DISK® is a lyophilized pellet containing a single strain of a QC microorganism and is the most economical reference stock culture option. LYFO DISK® is known for its ease-of-use; simply re-hydrate the pellet and inoculate. LYFO DISK® is available in a re-sealable vial containing 6 pellets of a single QC microorganism strain.

Aeromonas hydrophila ATCC[®] 35654[™]

KWIK- STIK [™] , 2/pk	.0910P
6/pk	
LYFO DISK [®] , 6 pellet vial	.0910L

Aspergillus brasiliensis ATCC[®] 16404[™]

KWIK- STIK™, 2/pk	0392P
6/pk	
KWIK- STIK [™] Plus, 5/pk	0392X
LYFO DISK [®] , 6 pellet vial	0392L

Bacillus spizizenii ATCC[®] 6633^{™*}

KWIK- STIK™, 2/pk	0486P
6/pk	
KWIK- STIK™ Plus, 5/pk	0486X
LYFO DISK [®] , 6 pellet vial	0486L



Candida albicans ATCC[®] 10231[™]

KWIK- STIK [™] , 2/pk	0443P
6/pk	
KWIK- STIK™ Plus, 5/pk	0443X
LYFO DISK [®] , 6 pellet vial	0443L

Enterobacter aerogenes ATCC[®] 13048™

KWIK- STIK [™] , 2/pk	0306P
6/pk	
KWIK- STIK™ Plus, 5/pk	0306X
LYFO DISK [®] , 6 pellet vial	0306L

Enterobacter cloacae ATCC[®] 23355™

KWIK- STIK [™] , 2/pk	0313P
6/pk	
LYFO DISK [®] , 6 pellet vial	0313L

Enterococcus faecalis ATCC[®] 19433™

KWIK- STIK™, 2/pk	.0367P
6/pk	
LYFO DISK [®] , 6 pellet vial	.0367L

Enterococcus faecalis ATCC[®] 29212™

KWIK- STIK™, 2/pk	0366P
6/pk	
KWIK- STIK™ Plus, 5/pk	0366X
LYFO DISK [®] , 6 pellet vial	0366L

Escherichia coli ATCC® 8739™

KWIK- STIK [™] , 2/pk	0483P
6/pk	0483K
KWIK- STIK™ Plus, 5/pk	0483X
LYFO DISK [®] , 6 pellet vial	0483L

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Escherichia coli ATCC[®] 25922™

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6/pk	
KWIK- STIK [™] Plus, 5/pk	0335X
LYFO DISK [®] , 6 pellet vial	0335L

Klebsiella pneumoniae ATCC[®] 13883[™]*

KWIK- STIK [™] , 2/pk	0351P
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KWIK- STIK™ Plus, 5/pk	0351X
LYFO DISK [®] , 6 pellet vial	0351L

Proteus hauseri ATCC[®] 13315[™]

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LYFO DISK [®] , 6 pellet vial	0355L

Proteus mirabilis ATCC[®] 12453[™]

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Pseudomonas aeruginosa ATCC[®] 9027™

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KWIK- STIK™ Plus, 5/pk	0484X
LYFO DISK [®] , 6 pellet vial	0484L

Pseudomonas aeruginosa ATCC[®] 27853[™]

KWIK- STIK™, 2/pk	0353P
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KWIK- STIK [™] Plus, 5/pk	0353X
LYFO DISK [®] , 6 pellet vial	0353L

Salmonella Typhimurium ATCC[®] 14028^{™*}

KWIK- STIK [™] , 2/pk	0363P
6/pk	
KWIK- STIK [™] Plus, 5/pk	0363X
LYFO DISK [®] , 6 pellet vial	0363L

Serratia marcescens ATCC[®] 8100[™]

KWIK- STIK™ ,2/pk	0354P
6/pk	0354K
LYFO DISK [®] , 6 pellet vial	0354L

Staphylococcus aureus ATCC[®] 6538™

KWIK- STIK [™] , 2/pk	0485P
6/pk	0485K
KWIK- STIK™ Plus, 5/pk	0485X
LYFO DISK [®] , 6 pellet vial	0485L

Staphylococcus aureus ATCC[®] 25923^{™*}

KWIK- STIK™, 2/pk	0360P
6/pk	
KWIK- STIK™ Plus, 5/pk	.0360X
LYFO DISK [®] , 6 pellet vial	.0360L

Staphylococcus epidermidis ATCC[®] 12228™

KWIK- STIK™, 2/pk	0371P
6/pk	
KWIK- STIK™ Plus, 5/pk	0371X
LYFO DISK [®] , 6 pellet vial	0371L

Streptococcus gallolyticus ATCC[®] 9809™

KWIK- STIK™, 2/pk)391P
6/pk	
LYFO DISK [®] , 6 pellet vial)391L

Streptococcus pyogenes ATCC[®] 19615[™]

KWIK- STIK [™] , 2/pk	0385P
6/pk	
KWIK- STIK [™] Plus, 5/pk	0385X
LYFO DISK [®] , 6 pellet vial	0385L

Trichophyton mentagrophytes ATCC[®] 9533[™]

KWIK- STIK [™] , 2/pk	0442P
6/pk	
LYFO DISK [®] , 6 pellet vial	0442L



A Culture of Service™

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The Epower[™] lyophilized and assayed control microorganism pellets add convenience to special projects and internal proficiency plans. Offers microorganism preparations manufactured at a predetermined concentration for versatile laboratory testing requirements. Process controls from one hundred to over a billion CFU/ preparation. Shelf life of 10-20 months.

Features and Benefits:

- Quantitative
- Refrigerated storage
- Peel-off Certificate of Assay
- Online Certificate of Analysis
- Traceable to reference culture
- Product warranty
- Saves time and reduces labor by delivering a specific number of colony forming units (CFU)
- · Easily manipulated to deliver desired CFU levels

Aspergillus brasiliensis ATCC® 16404™

Bacillus spizizenii ATCC® 6633™

Candida albicans ATCC[®] 10231[™]

1.0 to 9.9 x 10³ CFU per pellet, 10 pellet vial0443E3

Enterobacter aerogenes ATCC[®] 13048[™]

Enterococcus faecalis ATCC[®] 29212™

1.0 to 9.9 x 103 CFU per pellet,	10 pellet vial0366E3
1.0 to 9.9×10^7 CFU per pellet,	10 pellet vial0366E7

Escherichia coli ATCC[®] 8739™

Escherichia coli ATCC[®] 25922[™]

ATCC Licensed

• Easy storage & no dry ice required; reduces shipping costs

() Liurahiologi

- Cost effective & economical
- Complete and convenient documentation

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- Documentation of phenotypic, macroscopic and microscopic test results
- Assured quality, meets USP guidelines
- Increased customer confidence

Pseudomonas aeruginosa ATCC[®] 9027™

Pseudomonas aeruginosa ATCC[®] 27853™

Salmonella Typhimurium ATCC[®] 14028™

Staphylococcus aureus subsp. aureus ATCC[®] 6538™

1.0 to 9.9×10^3 CFU per pellet, 10 pellet vial0485E3 1.0 to 9.9×10^7 CFU per pellet, 10 pellet vial0485E7

Staphylococcus aureus subsp. aureus ATCC[®] 25923™

Staphylococcus epidermidis ATCC[®] 12228™

1.0 to 9.9 x 10 ³ CFU per pellet, 10 pellet vial0371E3
1.0 to 9.9 x 10 ⁴ CFU per pellet, 10 pellet vial0371E4
1.0 to 9.9 x 10 ⁸ CFU per pellet, 10 pellet vial0371E8

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Epower[™] CRM lyophilized microorganisms are available in concentrations ranging from 10² to 10⁸ CFU per pellet. For added convenience, a peel-off Certificate of Assay is included for quality control documentation. Epower[™] CRM is packaged in a vial containing 10 pellets of a single microorganism strain.

For Enumeration Test Methods such as:

- Membrane Filtration
- Heterotrophic Plate Count
- Most Probable Number
- Multiple Tube Fermentation

Bacillus spizizenii ATCC[®] 6633™

1.0 to 9.9×10^3 CFU per pellet, 10 pellet vial 0486E3CRM 1.0 to 9.9×10^4 CFU per pellet, 10 pellet vial 0486E4CRM 1.0 to 9.9×10^6 CFU per pellet, 10 pellet vial 0486E6CRM



Candida albicans ATCC[®] 10231[™]

1.0 to 9.9 x 10³ CFU per pellet, 10 pellet vial 0443E3CRM

ez accu shot

EZ-Accu Shot[™] is designed to deliver less than 100 CFU per 0.1 ml of hydrated suspension. Each 1.2 ml vial of hydrated suspension offers 10 inocula. For added convenience, a peel-off Certificate of Assay is included for quality control documentation.

EZ-Accu Shot™ kits include:

- 5 vials of a single enumerated QC microorganism (1 lyophilized pellet per vial)
- 5 vials of hydrating fluid (1.2 ml in each vial)
- Peel-Off Certificate of Assay

Aspergillus brasiliensis ATCC [®] 16404 [™]	0392A
Bacillus spizizenii ATCC® 6633™	0486A
Candida albicans ATCC [®] 10231 [™]	0443A
Enterobacter aerogenes ATCC [®] 13048 [™]	0306A
Escherichia coli ATCC [®] 8739 [™]	0483A
Pseudomonas aeruginosa ATCC® 9027™	0484A
Salmonella Typhimurium ATCC [®] 14028 [™]	0363A
Staphylococcus aureus subsp. aureus	
ATCC [®] 6538 [™]	0485A

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 25923™ lococcus epidern	

A Culture of Service™

ATCC[®] 12228™

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Aspergillus brasiliensis ATCC [®] 16404 [™]	0
EZ-CFU [™]	0392C
EZ-CFU™ One Step	

Bacillus spizizenii ATCC® 6633™

EZ-CFU [™] 048	36C
EZ-CFU [™] One Step	36Z

Candida albicans ATCC[®] 10231™

EZ-CFU [™] 04	43C
EZ-CFU [™] One Step04	43Z

Enterobacter aerogenes ATCC[®] 13048[™]

EZ-CFU [™]	.0306C
EZ-CFU™ One Step	.0306Z

Enterococcus faecalis ATCC[®] 29212™

EZ-CFU [™]	0366C
EZ-CFU [™] One Step	0366Z

Escherichia coli ATCC® 8739™

Derivative

EZ-CFU™		0483C
EZ-CFU [™] One Step		0483Z
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EZ CFU[™] and EZ CFU[™] One Step

EZ-CFU™ is used to perform Growth Promotion Tests of culture media with ease. EZ-CFU™ lyophilized QC microorganism preparations deliver 10-100 CFU per 0.1 ml when processed as directed. A one log dilution in pH 7.2 phosphate buffer is required. Following the dilution step, EZ-CFU™ provides over 90 inocula using the same suspension. For added convenience, a peel-off Certificate of Assay is included for quality control documentation.

EZ-CFU[™] kits include:

- 20 lyophilized pellets of a single quantitative QC microorganism
- 10 vials of hydrating fluid (2 ml in each vial)
- Peel-Off Certificate of Assay

EZ-CFU™ One Step quantitative QC microorganism preparations are used to perform Growth Promotion Tests of culture media with ease. No dilutions are required. EZ-CFU™ One Step is designed to deliver 10-100 CFU with each 0.1 ml inoculum. Each 2 ml vial of hydrated suspension offers 19 inocula. EZ-CFU™ One Step can be used for up to eight hours after hydration if the suspension is refrigerated between uses**. For added convenience, a peel-off Certificate of Assay is included for quality control documentation.

**Catalog numbers 0318Z and 0320Z are an exception to the eight hour stability and must be used within 30 minutes of hydration.

EZ-CFU[™] One Step kits include:

- 20 lyophilized pellets of a single quantitative QC microorganism
- 10 vials of hydrating fluid (2 ml in each vial)
- Peel-Off Certificate of Assay

Escherichia coli ATCC[®] 25922[™]

EZ-	CF	U	тм	 033	50

Pseudomonas aeruginosa ATCC	.® 9027™
EZ-CFU [™]	0484C
EZ-CFU™ One Step	0484Z

Pseudomonas aeruginosa ATCC [®] 2	7853™
EZ-CFU™	0353C
EZ-CFU™ One Step	0353Z

EZ-CFU [™] One Step	0363Z

Staphylococcus aureus ATCC[®] 6538™

EZ-CFU™		0485C
EZ-CFU™	One Step	0485Z

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Staphylococcus aureus ATCC [®] 25923™	
EZ-CFU [™]	0360C
EZ-CFU™ One Step	0360Z

Staphylococcus epidermidis ATCC [®] 12228 [™]	
EZ-CFU [™]	0371C
EZ-CFU™ One Step	0371Z

Streptococcus pyogenes ATCC [®] 19615™	
EZ-CFU [™] One Step	5C
EZ-CFU™ One Step	



Lab-Elite[™] Certified Reference Material (CRM) helps ISO 17025 accredited laboratories meet the requirements of this standard. Lab-Elite[™] Certified Reference Material is delivered in an easy-to-use KWIK-STIK[™] format and includes a Certificate of Analysis inside the canister. Perfect for validation and verification of processes and instruments.

Kit Includes:

• One self-contained device including a lyophilized microorganism pellet, reservoir of hydrating fluid, and inoculating swab (KWIK-STIK™ format)

Certificate of Analysis in the canister

Features and Applications:

- Easy-to-use KWIK-STIK format
- Traceable to reference culture
- Highly characterized microorganisms
- Supported by the highest accreditations in the industry
- For use in ISO 17025 accredited labs
- Quality Control Research
- · For validation and verification of processes an instruments

Aspergillus brasiliensis ATCC [®] 16404 [™] 0392CRM
Bacillus spizizenii ATCC [®] 6633 [™] 0486CRM
Candida albicans ATCC [®] 10231 [™] 0443CRM
Enterobacter aerogenes ATCC [®] 13048 [™] 0306CRM
Enterococcus faecalis ATCC® 19433™0367CRM
Enterococcus faecalis ATCC [®] 29212 [™] 0366CRM
Escherichia coli ATCC [®] 8739 [™] 0483CRM
Escherichia coli ATCC [®] 25922 [™]
Klebsiella pneumoniae ATCC [®] 13883 [™] 0351CRM

Pseudomonas aeruginosa ATCC [®] 9027 [™] 0484CRM
Pseudomonas aeruginosa ATCC [®] 27853 [™] 0353CRM
Salmonella Typhimurium ATCC [®] 14028 [™]
Staphylococcus aureus ATCC [®] 6538 [™] 0485CRM
Staphylococcus aureus ATCC [®] 25923 [™] 0360CRM
Staphylococcus epidermidis ATCC [®] 12228 [™] 0371CRM
Streptococcus pyogenes ATCC® 19615™0385CRM

IDRUCTO

EZ CFU One Step

