The Milliflex Oasis® system
for water & bioburden analysis in
pharmaceutical environments

Not only comfortable to use, the Milliflex Oasis® system is relaxing for your mind:

96 new features take care of all that matters in productivity—reliability of results and regulatory compliance.

We offer you a complete solution, including services, for a secured workflow with the highest throughput capability :

- All-in-one filtration equipment
- Ready-to-use sterilized filtration units
- Pharmacopeia compliant culture media

The life science business of Merck KGaA, Darmstadt,
Germany operates as MilliporeSigma in the U.S. and Canada.

MilliporeSigma

All-in-one filtration equipment

Using ergonomic principles, the Milliflex Microlite® feature makes the hardware intuitive to use and maintain.

The Milliflex Oasis® pump consists of a controlled vacuum source and filtration support. The system is design for biosafety cabinets/laminar flow hoods, with its small footprint, low weight and easy to decontaminate surfaces. This uniquely designed pump reduces the risk of cross-contamination and false results. Both ergonomics and scalability generate high throughput. No autoclave is required for hardware decontamination, only monthly sanitization, to dramatically reduce the workload in the lab.

Easy set-up: No calibration needed, plug in the quick connections for both the power and the drain tubing, wipe the smooth surface and you are ready to go.

Ergonomics: handling heavy sample containers can be an effort, the low height (2.8 in. or 70 mm) support for the filtration units makes the operation much more comfortable.

No cross-contamination: a check valve situated in the removable filtration head prevents potential contamination of the membrane from the fluidic path. Key parts of the head are accessible for cleaning.

High throughput: scale-up by connecting up to 3 pumps using just the default power supply and connecting cables. Start up to 6 simultaneous filtrations with a single action.

Filtration units

The Milliflex Oasis® funnel streamlines your workflow with standardized handling steps and reduced filtration time thanks to a new drainage design. The Milliflex Protact® feature protects your samples from secondary contamination and makes the membrane-to-agar contact optimal to ensure the most reliable results. The sealed membrane ensures easy read-out. Each filtration unit is 100% integrity tested to increase reliability, with our effortless new touch-free membrane transfer.

Reduced footprint: Funnels are packed by 8 into a protective bag, on a tray that can be separated and stacked for space conservation.
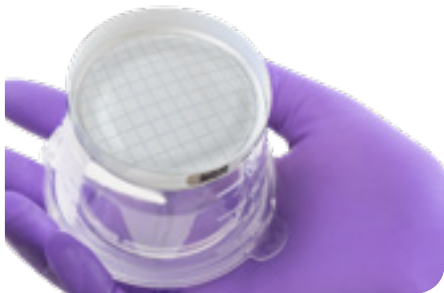
Simple funnel transfer to the pump: An integrated support protects the membrane from secondary contamination, no tweezers required.

Sample protection: the hinged lid on the funnel protects the sample and reduces the number of handling steps.

Accurate sample volume: clear funnel, visible level indicators and hydrophobic material, the Milliflex Azure® feature ensures that the right sample volume is filtered.

Optimal, touch-free membrane to culture media transfer: the touch-free design includes a sealed membrane that forms a convex shape to avoid bubbles or furled filters for any operator.

Effortless funnel separation: a simple pinch and the funnel is removed from the membrane: no forceful cracking of the plastic. The funnel lid closes the media plate which is then ready for incubation.

Culture Media Plates

The unique plate color coding offers the control of critical handling steps all along the workflow. The Milliflex Rack & Stack® feature also includes a locked lid for safe transportation and incubation. Together, these innovations help to reduce the risk of false results.

No media mismatch: the plate material is color-coded to enable easy control at each testing step.

Lockable assembly: the plates can be assembled and locked to ensure safe transportation. The empty funnel tray can also be used as an incubation rack.

No accidental opening: The cover is locked and secured when closed.

Long shelf life and reduced condensation: If left unopened, the plates remains sealed—unlike standard petri plates—which reduces condensation and dehydration for an extended storage time.

Traceability

Data integrity is a critical aspect for quality control laboratories. From the primary packaging to the single product, our Milliflex Trace® feature offers complete traceability by including detachable labels, a 2D barcode that can be scanned for direct access to documentation, and unique identification for each funnel and each media plate.

Traceability from A to Z: identification and 2D barcode on primary packaging, secondary packaging and on each single unit.

Color coding to avoid mistakes: on boxes and on each unit.

2D barcode to access documentation: following GS1 pharma standard, easy access to key documentation including products certificates of quality

Single ID: each funnel or media plate has a unique identification number that you can match with your sample.

Regulatory compliance

All these traceability features are compliant with USP <1117> for documentation and laboratory records. They help in reducing preparation time for both inspections and investigations.

Reduced risk of secondary contamination is also recommended in USP <61> EP 2.6.12 JP 4.05 part 1. Our specific PVDF membrane used for samples containing antimicrobial agents is compliant to USP <1227>.

Our 250 mL funnel is designed for WFI samples as per EP 0169 and USP <1231>.

Discover our full service portfolio for bioburden testing and the Milliflex Oasis® system

In our long history of serving the pharmaceutical industry by pioneering and refining groundbreaking solutions, we have gained the regulatory and technological expertise to offer a comprehensive range of professional, best-in-class services.

For more information, don't hesitate to contact your local sales representative or visit our website for our Milliflex® services datasheet.

EMDMillipore.com/PharmaServices

Milliflex® Quantum Rapid Detection system

Interested in a rapid method?

The Milliflex® Quantum system can reduce your time to result by up to one third compared to traditional methods, enabling faster release or corrective actions. It works perfectly with the Milliflex Oasis® system.

Benefits

- Non-destructive method enables reliable identification using any ID technology
- Easy-to-use system and simple workflow requires minimal training

- Results comparable to the compendial method, enabling faster validation
- Economical, robust system
- Compact hardware fits on any laboratory bench

For more information visit
SigmaAldrich.com/Quantum

Specifications

Milliflex Oasis® pump	
Frame	Acrylonitrile styrene acrylate and polycarbonate, compatible with standard UV sterilization
Filtration heads	Two per pump, stainless steel, silicone, rubber gaskets Can be autoclaved at 121 °C for 15 minutes or at 134 °C for 5 minutes
Pump dimensions	
Height	90 mm (3,5 in.)
Width	230 mm (9,0 in.)
Depth	310 mm (12,2 in.)
Filtration support height	70 mm (2,8 in.)
Weight with filtration heads	3,4 kg (7,5 lb)
Power supply	100 - 240 V, 50/60 Hz - One set can be used for up to three pumps
Milliflex Oasis® filtration unit	
Filtration unit	
Funnel, support & lid material	Styrene butadiene copolymer (SBC)
Membrane ring material	Polyethylene (PE)
Height 100 mL funnel	57 mm (2,2 in.)
Height 250 mL funnel	113 mm (5,5 in.)
Maximal diameter	82 mm (3,2 in.)
2D code identification	Datamatrix, can be read with standard 2D reader
Sterilization	E-beam irradiation
Membrane	
Material	Mixed cellulose esters (MCE) or low binding PVDF Durapore®
Color	White or black
Pore size	0,45 µm or 0,22 µm
Diameter	49 mm (1,9 in.) - same as Milliflex® system
Milliflex Oasis® media plates	
Material	Polystyrene (PS)
R2A plate color	Blue
TSA plate color	Green
SDA plate color	Pink
Maximal diameter	66 mm (2,6 in.)
2D code identification	Datamatrix, can be read with standard 2D reader
Milliflex Oasis® pump: materials in contact with the liquid filtered	
Part	Material
Filtration head	Stainless steel ASI 316L
	Silicone (gaskets & check valve)
Inner tubing	Low-density polyethylene (LDPE)
Tubing fittings	Polyphenylsulfone (PPSU)
	Polypropylene (PP)
	Acetal
	Buna N rubber
Core pump module	Polypropylene (PP)
	FKM (Viton®)
	PTFE (Teflon®)
Drain tubing	Silicone

Ordering Information

Description	Qty/ pack	Article number
Filtration units		
Milliflex Oasis® 100 mL funnel, 0.45 µm white gridded, mixed cellulose esters (MCE) membrane	24	MMHAWG124
Milliflex Oasis® 250 mL funnel, 0.45 µm white gridded, mixed cellulose esters (MCE) membrane	24	MMHAWG224
Milliflex Oasis® 100 mL funnel, 0.45 µm black gridded, mixed cellulose esters (MCE) membrane	24	MMHABG124
Milliflex Oasis® 100 mL funnel, 0.22 µm white gridded, mixed cellulose esters (MCE) membrane	24	MMGSWG124
Milliflex Oasis® 100 mL funnel, 0.45 µm white plain PVDF Durapore® membrane	24	MMHVWP124
Milliflex Oasis® 250 mL funnel, 0.45 µm white plain, PVDF Durapore® membrane	24	MMHVWP224
Milliflex Oasis® rapid 100 mL funnel, 0.45 µm white plain, PVDF Durapore® membrane	24	MMHVMFX24
Milliflex Oasis® funnel without membrane, growth promotion accessory	24	MMRECVERY

Culture media		
Milliflex Oasis® R2A low nutrient media plates	48	MMSMCRA48
Milliflex Oasis® tryptic soy media plates for detection of aerobic and anaerobic flora	48	MMSMCTS48
Milliflex Oasis® sabouraud dextrose media plates for detection of yeast & molds	48	MMSMCSD48
Milliflex® cassette sabouraud dextrose agar (w/Chloramphenicol)	48	MXSMCSP48
Milliflex® cassette m-Endo agar for the detection of coliforms	48	MXSMEND48
Milliflex® cassette PCA agar for the detection of bacteria in water	48	MXSMPCA48
Milliflex® cassette cetrimide agar with naladixic acid for detection of P. aeruginosa	48	MXSMCET48
Milliflex® cassette TSA and lecithin agar for the detection of heterotrophic microorganisms	48	MXSMTLP48
Milliflex® cassette HPC agar media, for detection of stressed heterotrophic plate count bacteria	48	MXSMHPC48
Milliflex® cassette KF strep agar for the detection of fecal streptococci	48	MXSMKFS48
Milliflex® cassette PIA agar for the detection and recovery of P aeruginosa	48	MXSMPIA48
Mac Conkey Milliflex® agar for detection of lactose fermenting bacteria and coliforms	24	MXSMCMC24
Milliflex® empty cassette for agar media	120	MXSMC0120
Milliflex® empty cassette for liquid media	120	MXLMC0120
Hardware, accessories, spare parts and services		
Milliflex Oasis® filtration pump, one system with two filtration heads and no power supply	1	MMSYSTMM1
Milliflex Oasis® filtration pump without filtration head and no power supply	1	MMSYSTVAC
Milliflex Oasis® power supply for one to three filtration pumps - Australia	1	MMPWRSPAU
Milliflex Oasis® power supply for one to three filtration pumps - Brazil	1	MMPWRSPBR
Milliflex Oasis® power supply for one to three filtration pumps - China	1	MMPWRSPCN
Milliflex Oasis® power supply for one to three filtration pumps - Denmark	1	MMPWRSPDK
Milliflex Oasis® power supply for one to three filtration pumps - Europe	1	MMPWRSPEU
Milliflex Oasis® power supply for one to three filtration pumps - India	1	MMPWRSPIN
Milliflex Oasis® power supply for one to three filtration pumps - Japan	1	MMPWRSPJP
Milliflex Oasis® power supply for one to three filtration pumps - Switzerland	1	MMPWRSPSZ
Milliflex Oasis® power supply for one to three filtration pumps - United Kingdom	1	MMPWRSPUK
Milliflex Oasis® power supply for one to three filtration pumps - United States	1	MMPWRSPUS
Milliflex Oasis® power supply for one to three filtration pumps - South Africa	1	MMPWRSPZA
Milliflex Oasis® filtration head	1	MMHEADMM1
Milliflex Oasis® filtration head gaskets replacement kit, including gaskets removal tool	5	MMGASKTMM
Milliflex Oasis® filtration head cover set	1	MMHEADCV1
Milliflex Oasis® drain tubing	1	MMDRNTUBE
Milliflex Oasis® internal flow sanitization kit, including one vacuum gauge	1	MMSANKIT1
Milliflex Oasis® internal flow sanitization gasket kit	5	MMGASKTSK
Milliflex Oasis® consumables for internal flow sanitization kit	24	MMSANSYFU
Milliflex Oasis® vacuum gauge for pump performance testing	1	MMGAUGEMM
Milliflex Oasis® electrical cable for connecting two pumps	1	MMCABLEMM
Milliflex Oasis® T connectors for tubings for connecting two pumps	3	MMTCNNECT
Milliflex Oasis® guides for electrical cable and tubing	20	MMTUGUIDE
Milliflex Oasis® membrane support removal tool	1	MMSUPREMV
Stickers and filtration head rings for customizing the Milliflex Oasis® pump	4	MMCUSTKIT
Milliflex® Quantum membrane transfer tool for Milliflex Oasis® system	1	MMHEADQU1
Milliflex® Quantum membrane transfer tool for Milliflex Oasis® gaskets replacement kit	5	MMGASKTQU
Milliflex® Quantum membrane removal tool for all Milliflex® and Milliflex Oasis® devices and media types	1	REMRACKMM
Customer validation protocol format A4	1	MM2PA4VP1
Customer validation protocol format letter	1	MM2PLTVP1

*See our funnel decision aid for more information

** See our Milliflex Oasis® media plates selection guide for more information

SigmaAldrich.com/Milliflex-Oasis

To place an order or receive technical assistance

Order/Customer Service: **SigmaAldrich.com/order**
Technical Service: **SigmaAldrich.com/techservice**
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