

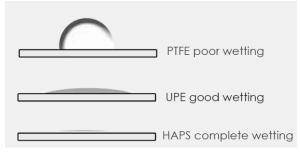
Microchem[™]-D DEV/DI Disposable Filters for Developer and DI Water Filtration

Proprietary high purity hydrophilic Highly Asymmetric PolySulfone (HAPS) membrane with high purity supports materials for small to medium volume point-of-use Developer, DI Water or dilute acids applications.

- ✓ Highly retentive Minano[™] HAPS is proprietary highly asymmetric polysulfone membrane designed for excellent removal of particles and small particles in Developer and DI water filtration to ensure minimal number of particles added on the wafer for advanced processing.
- Excellent chemical compatibility to make these filters ideal for both TMAH Developer and DI water filtration application. Easy inventory management.
- Easy to incorporate into process equipment to improve contamination control. "Plug-andplay" replacement for use with TEL*, DNS* photochemical spin coating and other equipment.

Eliminates pre-wetting and micro-bubbles to reduce downtime

MicrochemTM-D DI/DEV's HAPS membrane has superior wetting properties compared with ultrahigh molecular weight polyethylene. It spontaneously wet, remains fully wet and eliminates micro-bubble generation which is critical for advanced node processing.



Ultra clean filter design

✓ Filter design, materials selection and manufacturing process are optimized to eliminate flexing and shedding to ensure reliable downstream cleanliness. Certificate of Quality is shipped with every filter.

Available in pore sizes of 0.05 μm , 0.1 μm , 0.2 μm and 1.0 μm

Available in pore sizes to match the specific configuration and flow needs of your system. Excellent small particle retention ensures minimal particles on wafer.

Product Specifications

Pore size rating: 0.2, 0.1, 0.05 micron (μm)

Membrane Area:

S (Short)	: 1100-1300 cm ² (279 in ²)
L (Long)	: 2200-2600 cm ² (558 in ²)

Applications:

- Point-of-use DI water filtration
- ☑ Point-of-use CMP critical chemical
- ☑ Point-of-use positive photoresist Developer filtration such as TMAH 2.38%
- Dilute acids (DHF, Citric acids) and alkaline (Ammonia Hydroxides etc) chemical filtration

External Certification:



CERTIFICATE OF QUALITY

Microchem-D™ Series

Filter

MYCROPORE



Available in Short and Long Capsule Design

Available in sizes and fitting types to fit most systems and production equipment configurations.

Materials of construction

Filter media: Highly Asymmetric PolySulfone (HAPS) hydrophilic membrane

Support: MCDDD: High purity polypropylene MCDDE: High density polyethylene

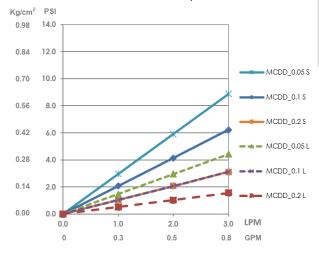
Shell, end caps, core, cage: Polypropylene

Maximum differential pressure:

3.40 bard (3.47 kg/cm2d, 49 psid) @25°C (77°F) Maximum operating temperature: 60°C (140°F)

Table 2 Ordering Information

Table 1 Flow Rate and Pressure Drop



Product Name	Pore Ratings	Sizes	Connections	Pkg Qty				
Example: Microchem™-D DEV/DI Long Dispo 100nm, Flaretek 3/8″, 1/PK								
MCDDD	- V	- L	- F64	- 1				
MCDDD	Z = 0.05um	S = Short	S44 = 1/4" Compression I/O	1 = 1 / PK				
Microchem-Dispo	V = 0.1um	L = Long	1/4 Compression V/D*					
DEV / DI w PP Support	G = 0.2um		N42 = 1/4" NPT Male I/O	1 = Std class 100				
	H = 0.45um		1/8" NPT Male V/D*	cleanroom pkg				
			N82 = 1/2" NPT Male I/O					
	SHELL ⁺ =without filter		1/8" NPT Male V/D*	P = UPW preclean				
			P44 = 1/4" Super Pillar I/O	TOC < 100 ppb [#]				
			1/4" Super Pillar V/D					
			PM64 = 6mm Super Pillar I/O	UH = UHP Ultra-High				
			4mm Super Pillar V/D	Purity grade				
			\$64 = 3/8" Compression I/O	Metal [#] < 40ppb				
			1/4" Compression V/D*					
			\$84 = 1/2" Compression I/O					
			1/4 Compression V/D*					
			P64 = 3/8" Super Pillar I/O					
			1/4" Super Pillar V/D					
			P84 = 1/2" Super Pillar I/O					
			1/4" Super Pillar V/D					
			PM84 = 8mm Super Pillar I/O					
			4mm Super Pillar V/D					
			F64 = 3/8" Flare I/O					
			1/4" Flare V/D					

* SWG & NPT VD caps provided. Flare, Super Pillar VD caps not provided.

-P preclean routinely achieves TOC <50ppb TOC, specified at <100ppb. UHP grade ICP-MS 13 elements cleanliness.

⁺ Hold up Volume of SHELL-Short: 220cm³, SHELL-Long: 430cm³.



Table 3 shows the dimensions:

Length Code	Fitting	Dia (Shell) (mm/inch) +/- 0.5mm	Dia (Max) (mm/inch) +/- 0.5mm	Length (mm/inch) +/-1mm
Short	S44	67.5 / 2.66"	71.0 / 2.79"	114.0 / 4.49"
Short	S84	67.5 / 2.66"	71.0 / 2.79"	122.0 / 4.80"
Short	N42	67.5 / 2.66"	71.0 / 2.79"	116.0 / 4.57"
Short	N62	67.5 / 2.66"	71.0 / 2.79"	124.0 / 4.88"
Short	N82	67.5 / 2.66"	71.0 / 2.79"	127.0 / 5.00"
Short	P44	67.5 / 2.66"	71.0 / 2.79"	121.7 / 4.79"
Short	PM 64	67.5 / 2.66"	71.0 / 2.79"	121.7 / 4.79"
Long	S64	67.5 / 2.66"	71.0 / 2.79"	179.0 / 7.05"
Long	S84	67.5 / 2.66"	71.0 / 2.79"	179.0 / 7.05"
Long	P64	67.5 / 2.66"	71.0 / 2.79"	193.2 / 7.61"
Long	P84	67.5 / 2.66"	71.0 / 2.79"	193.2 / 7.61"
Long	PM84	67.5 / 2.66"	71.0 / 2.79"	193.2 / 7.61"
Long	F64	67.5 / 2.66"	71.0 / 2.79"	214.0 / 8.42"
Long	N82	67.5 / 2.66"	71.0 / 2.79"	186.0 / 7.32"

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Datasheet PC-203513-MCDDD-2211B