

LiquiPro™ MX

UPE 10nm-1nm Cartridge Filters



LiquiPro™ MX series of UPE liquid filters deliver superior cleanliness and high retention capabilities for photochemical manufacturing and for chemical systems. Photoresist and photochemical solvents would spontaneously wet LiquiPro™ MX UPE membrane filter and provide high flow, excellent particle removal and low extractables chemical filtration applications.

Features and Benefits

- For advanced photo chemical and ultra-high-purity chemicals, LiquiPro™ MX is an effective and economical filtration solution for bulk photochemical, solvent, or aqueous chemical applications. UPE membrane's uniform pore structure is effective for soft gel and hard particle removals, and it offers better particle retention performance compared to PTFE membrane. The high purity treatment ensures low metallic contaminants. A high purity performance and reliable filtration is assured.
- Eliminates microbubble generation. LiquiPro™ MX series has a critical surface energy similar to many photo-chemicals. When used with photoresists, common photochemical solvent is conveniently used without prewetting to maximise process up-time, it reduces the potential for microbubble generation to prevent particle formation and other related defect.
- All UPE/PE construction provides lower metallic and ionic contamination compared to those that can be leached from PP and PFA materials. Pre-cleaned with photo-chemicals such as PGME, PGMEA. LiquiPro MX < 2.0 ng/L (PPT), competitor A < 5.0, competitor B < 10.0.

- Ultra-high-purity processing to produce typical values of ICP-MS for 31 elements after the filter is soaked for 72 hours at 30°C, with 1.5 liters of PGMEA.
- Excellent particle retention. Benchmarking test with gold nano particles yielded excellent and comparable particle retention performance vs industry leading competitors.

Typical Applications

- Advanced photochemical filtration.
- Photochemical solvent filtration, e.g. OK73, IPA, MeOH, PGMEA etc.
- Formulated cleaner or post CMP clean solution with DIW and polymer.
- Dilute acid and base filtration (without H2O2 or ozone) at or below 40°C (104°F)

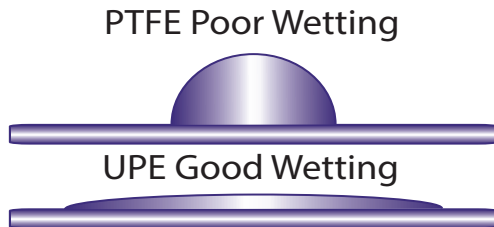
Performance Specifications

Materials of construction

Filter media: UPE membrane
End caps, core, cage, support: HDPE
Gaskets/O-rings: EPDM, FKM, E-FKM.

External Certification

Non-dewet when used with dilute and weak acids and bases filtration. Customer must follow an IPA-pretreatment procedure. In the near future, pretreatment packaged LiquiPro™ MX will be offered to provide customer quick start-up without the need to carry out on-site IPA wetting procedure.



Certificate of quality enclosed with each lot of products for quality assurance that ensures filter-to-filter, lot-to-lot and performance.

Fast rinse up as filters have been pre-flushed with Ultrapore DI water.

Specifications**Materials of Construction:**

All HDPE support structure

Membrane:

Hydrophobic UPE

High flow hydrophobic UPE on 1nm only

Surface Area:

15,500 cm² (16.1ft²)

Pore size rating:

1,2,3,5,10 nanometer (nm)

Maximum differential pressure:

3.4 bard (3.4kg/cm²d, 50 psid) @25°C (77°F)

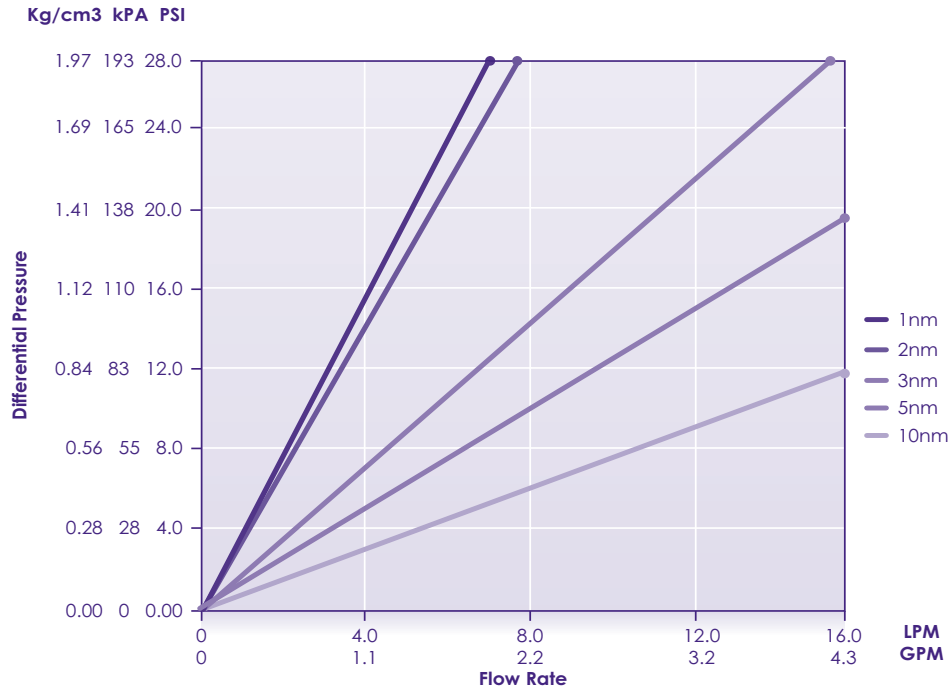
1.7 bard (1.7kg/cm²d, 24 psid) @60°C (176°F)

Operating Temperature:

Recommended at 40°C (104°F), maximum 60°C

Compatibility and purity:

Filters do not use any binders, surfactants, or adhesives for broad usage compatibilities.



* Flow rate is for a 25°C and a 25.4cm (10 in) cartridge. For liquids other than water, multiply differential pressure by fluid viscosity (cP).

Ordering Information

Product Name	Micro Rating	Adaptor Code	Seals	Cleanliness	Length	Packaging Option
Example: MX	10	A	T	U	10	W
MX: Liquipro MX UPE	01 = 1nm 02 = 2nm 03 = 3nm 05 = 5nm 10 = 10nm	A = 2-222/Flat	T = E-FKM E = EPDM	U = UHP Grade	10 = 10inch 20 = 20inch	Blank = Dry W = IPWET Prewet-Autoclave (NSR)