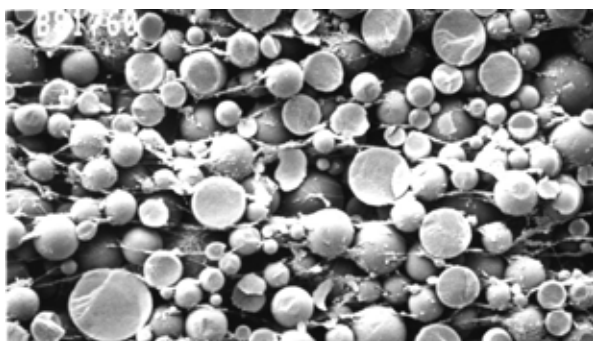


Empore[®] Solid Phase Extraction (SPE) Products

Empore membrane SPE technology comprises of SPE particles tightly enmeshed within a network of inert PTFE fibrils. The SPE-membrane fabrication process results in a highly dense and uniform extraction medium that offers distinct advantages over traditional sorbent/packed-bed SPE products. Empore SPE technology provides a denser, more uniform extraction bed than traditional packed bed products allowing for smaller bed weights, shorter analyte to pore diffusion paths, and more efficient extractions.



Microscopic View of Empore SPE Disks comprised of 90% SPE particles: 10% PTFE, by weight

Save Time & Money with Empore SPE

Reduced SPE bed mass = Reduced SPE solvent & elution volumes

- Minimizes SPE eluate evaporation time
- Potentially allows for direct injection of the SPE eluate

Dense & uniform extraction medium = NO SPE channeling/voiding

- Efficient mass-transfer kinetics allow for faster flow rates
- Eliminate SPE fines improving column and instrument life

Cartridge Dimension	Bed Vol.	Conditioning ¹	Elution ²
Empore 7 mm (12 mg)/3 mL cartridge	50 μ L	200-250 μ L	100-150 μ L
Traditional 500 mg/6 mL packed bed	60 μ L	2400-3000 μ L	1200-1800 μ L
Traditional 100 mg/1 mL packed bed	120 μ L	480-600 μ L	240-360 μ L

¹ Conditioning typically requires 4-5 x bed volumes.

² Elution typically requires 2-3 x bed volumes

Available Formats:



E001070

The Empore 96-well line is ideal for high throughput SPE allowing users to process up to 96 samples in parallel. The unique Empore technology comprises of a series of polypropylene (PP) pre-filters that are layered on top of the SPE disk. The PP pre-filter acts as a depth filter that provides faster flow rates and reduces the risk of clogging.

- Reduced elution volume (< 100 μ L) allows for direct injection or reduced eluate evaporation
- Faster flow rates without risk of recovery and reproducibility loss
- Proprietary pre-filter reduces risk of clogging
- Patented luer tip collar eliminates potential cross-contamination



E001069

The Empore SPE disk line comprises of the most complete line of SPE disks for extracting large volumes of aqueous samples. The product line ranges from time-tested C18 to unique phase chemistries such as carbon and the highly polar oil & grease disk. The disks are ideal for environmental analysis where 1 L sample volumes are not uncommon and provide an efficient alternative to liquid-liquid extraction (LLE).

- Amenable to dozens of EPA and related environmental methods
- Developed for the highly efficient extraction of pollutants in large volume water samples



E001068

The Empore SPE cartridge line is packed with a PTFE membrane enmeshed with SPE particles. Layered above the SPE membrane is a polypropylene pre-filter to prevent particulates from reaching the underlying membrane. The dense particle packing and uniform distribution within the Empore membrane offers outstanding extraction efficiency and reproducibility.

Ordering Information:

Description	Dimension	Pkg. Qty.	Cat. No.
Cartridges			
Empore C18-SD (Standard Density)	4 mm/1 mL	100	66871-U
Empore C18-SD (Standard Density)	7 mm/3 mL	50	66872-U
Empore C18-SD (Standard Density)	10 mm/6 mL	30	66873-U
Empore UR-SD (Universal Resin)	7 mm/3 mL	50	66874-U
96-well			
Empore C18	5.5 mm/1.2 mL well	1	66875-U
Empore UR (Universal Resin)	5.5 mm/1.2 mL well	1	66877-U
Empore MPC (Mixed Phase Cation)	5.5 mm/1.2 mL well	1	66876-U
Empore Filter Plate	5.5 mm/1.2 mL well	1	66878-U
Disks			
Empore C18 Octadecyl	47 mm	20	66883-U
Empore C8 Octyl	47 mm	20	66882-U
Empore Oil and Grease	47 mm	20	66887-U
Empore Oil and Grease	90 mm	10	66898-U
Empore Styrene Divinyl Benzene (SDB-RPS)	47 mm	20	66886-U
Empore Styrene Divinyl Benzene (SDB-XC)	47 mm	20	66884-U
Empore Cation	47 mm	20	66889-U
Empore Anion-SR	47 mm	20	66888-U
Empore Chelating	47 mm	20	66894-U
Empore Carbon	47 mm	20	66896-U
Accessories			
Empore 96-well Vacuum Manifold		1	66879-U
Empore Filter Aid 400		1	66897-U
Empore Sealing Tape for 96-well		10 pads (25 sheets/pad)	66881-U

For more information, visit sigma-aldrich.com/empore

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