



Empore™ Extraction Disks

3M™ Empore™ Filter Aid 400

Directions for Use

Empore Filter Aid 400 is a high density glass bead product intended for use as a filtration aid when extracting samples with high particulate content using Empore extraction disks.

Preparation

- Assemble 90 mm glassware.
- Pour beads uniformly on disk surface to about 1.0 cm depth (approximately 40 gms*).

Pre-Wash

- Add about 20 mls of elution solvent to the bed. **NOTE: All solvent volumes should be sufficient to submerge the bead bed.**
- Draw a small amount of solvent through the disk and release vacuum. Allow to soak for approximately one minute.
- Turn on vacuum and draw remaining solvent through the disk and let vacuum continue to draw until disk has dried.

Condition

- Add about 20 mls methanol to the reservoir.
- Draw a small amount through the disk with the vacuum. Release the vacuum and allow the disk and bead bed to soak for about one minute.
- Draw the methanol down with vacuum to just above the level of the bed. **It is critical that a layer of methanol remain above the disk.** With bed in place, it is difficult to observe the fluid level; therefore, the level should be maintained just above the surface of the bead bed.
- Add 20 mls reagent water to the reservoir. With vacuum on, draw level of water/methanol down, to just above the level of the bed. **Again, it is critical that a layer of fluid remain on the surface of the disk.**
- Turn off vacuum.

Extraction

- Prepare the particulate-containing water sample according to the conditions prescribed in the method to be used.
- Decant the sample slowly down the wall of the reservoir to minimize disruption of the bed. Turn on the vacuum and proceed with the extraction and elution as described in the method.

*When using 47 mm disks, a 1.0 cm depth is approximately 12 grams.

Filter Aid 400 Disposal

When elution is complete, dispose of beads as appropriate:

- If materials extracted were non-hazardous, dispose in a manner appropriate for laboratory glassware.
- If materials extracted contained hazardous materials, dispose of as outlined by federal, state, and local regulations governing the disposal of those hazardous materials.

IMPORTANT NOTICE TO PURCHASER:

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Printed in U.S.A.
78-6900-3726-8(113.05)R1