

# Empore™

## Solid Phase Extraction Disk Accessories

### Filter Aid

#### General Information

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

#### Product Information

**Size:** 1.5 kg/bottle with dispensing scoop.

**Use:** Approximately 40 grams will cover a 90 mm disk 1 cm deep. Approximately 15 grams will cover a 47 mm disk 1 cm deep.

**Material:** Glass beads; average diameter 40 microns.

**Empore Catalog #:** FA-400

#### 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 mL 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 mL 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.

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

- 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 mL 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. **NOTE: When using solvents or other chemicals, be sure to read and follow the manufacturer's precautions and directions for use.**

#### General Information

##### Filter Aid 400 Disposal

When elution is complete, dispose of beads as appropriate:

- If materials extracted were non-hazardous, dispose of 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.



**Note:** Empore Solid Phase Extraction Products are intended for solid phase extraction during scientific research only. These products are not intended for use in medical devices or in assessment and treatment of clinical patients.

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3130 Lexington Ave. S.  
Eagan, MN 55121  
Toll Free: +1 888 509 5330

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