

New Carbon Disk Extraction Instructions

Extraction Method with Carbon Disk

Sample Preparation

- Microbial growth can be retarded by adjusting sample pH to 2
- 3M Filter Aid 400 and/or prefiltration may be helpful if the sample contains a large amount of suspended solids

Extraction Disk Conditioning

Disk conditioning enhances to flow rate of the water sample through the disk. Condition the disk as follows:

1. Center the extraction disk on the base of the filtration apparatus and clamp the reservoir on top of the disk.
2. Add 5 mL of methanol to the disk (15 mL methanol for a 90mm disk)
3. Apply vacuum to the disk until the methanol begins to drip through the disk
4. Allow the disk to soak for one or two minutes, then draw most of the MeOH through the disk
5. Add 100 mL of DI water to the disk to completely remove any residual methanol **Note 1**
6. Apply vacuum and draw the water completely through the disk.

Sample Extraction

1. While the disk is still wet, add the water sample to the conditioned disk and apply vacuum
2. After the water sample has been extracted, the disk may be dried using vacuum

Sample Extraction

1. Release the clamp from the funnel and remove the carbon disk from the support base
2. Replace the disk on the support base so that the top side of the disk is now facing down **Note 2 and 3**
3. Clamp the funnel to the disk and support base
4. Elute the analyte from the disk using the appropriate solvent

Note 1 Although more water can be used, at no time should the volume of water be less than 100 mL

Note 2 Turning the disk upside down can be performed only if the water sample is clean and does not contain suspended solids

Note 3 If the carbon disk has collected suspended solids from the water sample use a filter disk (Whatman GNF Multigrade 1841-047 47mm (Fisher 09-874-82)) directly on the base support before turning the disk upside down and prior to elution to prevent the SS from transferring to the eluate. .