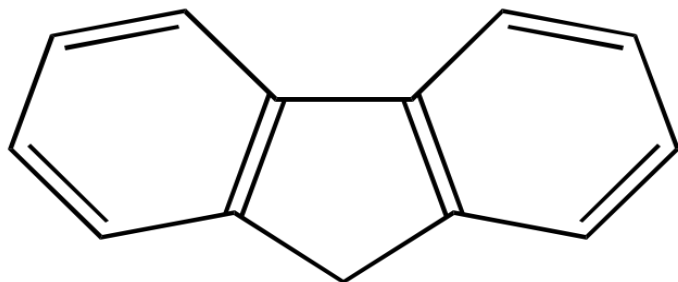


Polycyclic Aromatic Hydrocarbons from a Water Matrix



UCT Part Numbers

ECUNIPAH

Enviro-Clean® Universal PAH/DRO
2000mg 83mL Cartridge

ECSS25K

Sodium Sulfate, anhydrous,
ACS grade, granular, 60 mesh

Procedure:

1. Condition Cartridge

- Add 10 mL of methylene chloride to the cartridge and let it soak for 1 minute. Draw through to waste.
- Add 10 mL of acetone to the cartridge and let it soak for 1 minute. Draw through to waste.
- Add 10 mL of methanol to the cartridge and let it soak for 1 minute.
- Pull most of the methanol to waste but do not allow the sorbent to dry.
- Add 10 mL of deionized water to the cartridge and let it soak for 1 minute.
- Draw most of the water to waste but do not allow the sorbent to dry.

2. Sample Addition

- Add 5 mL of methanol (optional) and any surrogates to the sample. Mix.
- Add the sample to the cartridge under vacuum.
- Ideally, the sample should pass through the cartridge in approximately 15 – 20 minutes. Allow the cartridge to dry under vacuum for 10 minutes.***

3. Extract Elution

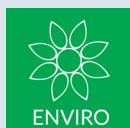
- Place a collection tube or vial under the cartridge.
- Add 5 mL of acetone to the sample bottle to remove any sample residue. Add the acetone to the cartridge.
- Allow to soak for 1 minute and draw the solvent into the collection device.
- Repeat this procedure three more times using 10 mL aliquots of methylene chloride.
- Dry the extract by passing it through anhydrous sodium sulfate.
- Thoroughly rinse the collection device with methylene chloride and add this solvent to the sodium sulfate.

4. Concentration and Analysis

- Carefully concentrate the extract to a final volume.

Note: Most extraction errors are caused by poor concentration technique. Do not concentrate below 0.5 mL or low recoveries will result.

The Enviro-Clean® Universal PAH cartridge can be used on standard vacuum manifolds (#VMFF016GL), standard disk manifolds (#ECUCTVAC6) (with adapter part #ECUCTADP). The cartridge is specifically designed to fit the Horizon SPE DEX 4790® made by Horizon Technologies, Inc.



** Acetonitrile may be substituted for acetone and methylene chloride.

*** Faster drying results can be obtained by removing the cartridge during drying and shaking or tapping the excess moisture from the bottom of the cartridge. Drying times are approximate. Do not over dry. Low recoveries could result.

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