

Extraction of PAHs from Soil, Loam, or Clay

Procedure

- 1. Homogenize, mill, or cryomill the sample. The S1 Q-Disc is a preassembled sandwich of the G1 Q-Disc between two C9 Q-Discs. Place entire sandwich, excluding the blue separator, into the bottom of the Q-Cup, and assemble the Q-Cup.
- 2. Weigh the sample into the Q-Cup.
- 3. Add 2 g of Florisil on top of each sample.
- 4. Insert a Q-Screen into the Q-Cup using the Q-Screen tool without disturbing the Florisil layer.

Notes

If the sample is wet, add sodium sulfate to the sample before adding to the Q-Cup.

| Sorbents | Solvents |
|----------|----------------------------------|
| Florisil | Options: Hexane/Acetone (1:1) |
| | Dichloromethane |
| | Dichloromethane/Acetone (1:1) |

| Sample Weight | Equipment | Q-Disc |
|---------------|--|--------|
| ≤ 30 g | EDGE Q-Screen 60 mL collection vials | S1 |

Heating Program

| • • | | | | | |
|-------|--------------|-----------------|------------|-----------|--------------|
| Cycle | Top Add (mL) | Bottom Add (mL) | Rinse (mL) | Temp (°C) | Hold (mm:ss) |
| 1 | 15 | 0 | 0 | 70 | 0:30 |
| 2 | 15 | 0 | 0 | 70 | 0:30 |
| 3 | 15 | 0 | 0 | 100 | 0:30 |
| 4 | 15 | 0 | 0 | 100 | 0:30 |
| | | | | | |

Note: Temperature and hold times may vary depending on the sample and analytes of interest.

| CycleSolventVolume (mL)Temp (°C)Hold (m1Extraction Solvent301200:30 | |
|---|--------|
| 1 Extraction Solvent 30 120 0:30 | mm:ss) |
| | 30 |
| 2 Extraction Solvent 30 | : |

General Guidelines

a) This procedure is a reference point for sample extraction using a CEM system and may need to be modified or changed to obtain required results on your sample or analytes of interest.

b) Wear hand, eye, and body protection when handling organic solvents.

c) Any of CEM's collection vials/centrifuge tubes in the correct size for the rack owned may be used.

d) Verify needed solvents are loaded onto the system with sufficient volume. Load the rack containing sample(s) into the EDGE. Select the method and position to load method. Press play and add any any sample ID's, etc. as needed.

e) Bring to volume or evaporate as necessary for analysis.