

S*PURE Application Note - Environmental

PAH's in Soil On SEClute SPE Column



SPE Conditions

Procedure using SEClute™ C18-Max SPE tube, 500mg/6mL (Part #5138767)

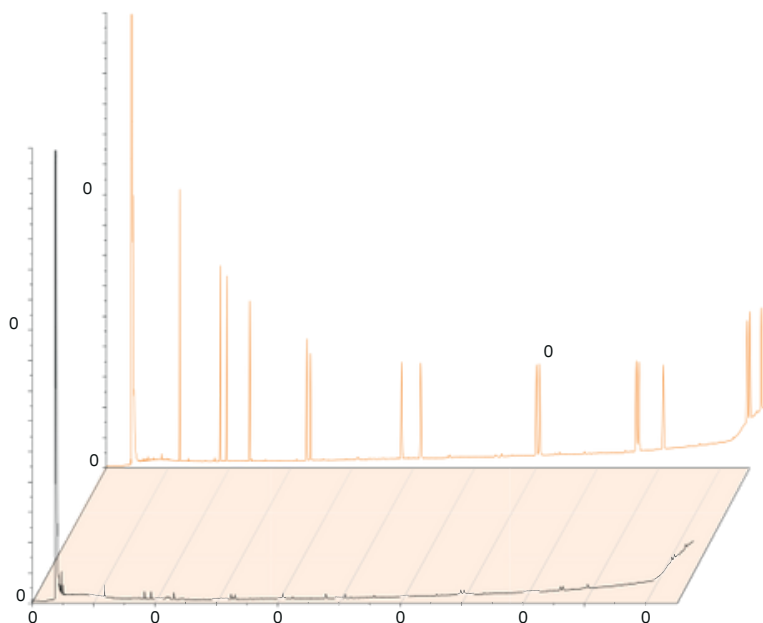
Sample Treatment: Weighed out 5 grams soil, spike with 80µg of each PAH, add 30mL 2-propanol and homogenize. Filter with 75mL filter tube (Part #210775). Bring up to 200mL with deionized water and shake.

Conditioning: 2 x 5mL of methanol, then 5mL of 85% water/15% 2-propanol.

Sample Application: Attach 75mL reservoir (Part #210575) with a syringe adapter (Part #210705) and apply entire sample.

Wash: 2 x 500µL of 85% water/15% 2-propanol. Dry columns for 10 minutes at full vacuum.

Elution: Elute PAHs with 2 x 1mL CH₂Cl₂ and adjusted the volume to 1mL by evaporating under a gentle nitrogen stream.



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|-------------------|----------------------------|
| 1. Naphthalene | 9. Benzo(a)anthracene |
| 2. Acenaphthylene | 10. Chrysene |
| 3. Acenaphthene | 11. Benzo(b)fluoranthene |
| 4. Fluorene | 12. Benzo(k)fluoranthene |
| 5. Phenanthrene | 13. Benzo(a)pyrene |
| 6. Anthracene | 14. Indeno(1,2,3-cd)pyrene |
| 7. Fluoranthene | 15. Dibenzo(a,h)anthracene |
| 8. Pyrene | 16. Benzo(ghi)perylene |

GC Conditions

AT⁵ms columns, (Part #15807), as follows:

Oven: 80°C (1min hold) to 160°C at 25°C/min, to 300°C at 3°C/min, to 325°C (3 min hold) at 25°C/min

Injector: 270°C

FID: 340°C

Split Ratio: 50:1, 14.0psig, helium

Linear Velocity: 28cm/sec (at 80°C)

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