

# S\*PURE Application Note - Environment

## PAH's in Water On SEClute SPE Column



### SPE Conditions

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

Sample Treatment: 500mL of water and add 75mL of 2-propanol, spiked with 20uL of PAH mixture at 2000ug/mL of each PAH, which corresponds to 40ug/500mL water, or 80ppb of each PAH.

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. Dry columns for 30 minutes at full vacuum.

Elution: Elute PAHs with 3 x 1mL CH<sub>2</sub>Cl<sub>2</sub> and adjusted the volume to 1mL by evaporating under a gentle nitrogen stream.

### GC Conditions

GC Column: AT 5ms columns, (Part #15807)

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

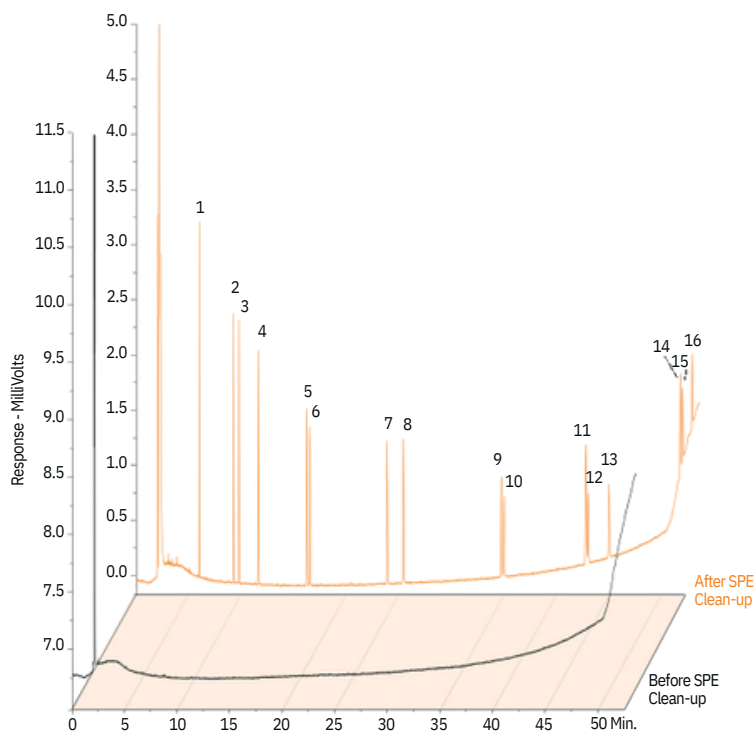
Injector: 270°C

FID: 340°C

Split Ratio: 50:1, 14.Opsig, helium

Linear Velocity: 28cm/sec (at 80°C)

1.0uL injections were done via 7683B autosampler.



- |                   |                            |
|-------------------|----------------------------|
| 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     |

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S\*Pure Pte Ltd

55 Toh Guan Road East

#03-05 Unitech Centre

Singapore 608601

Tel: +65 6563 3901

Email: [corporate@sstarpure.com](mailto:corporate@sstarpure.com)