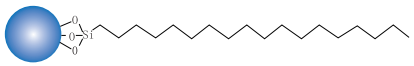
Ultisil™ PAH

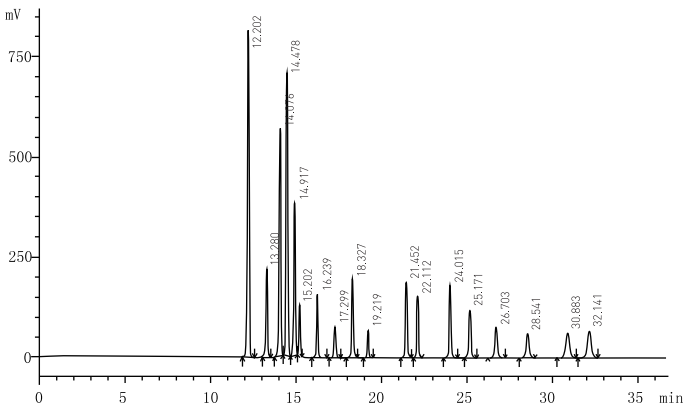
Ultisil™ PAH Column is a special column recently designed by Welch for the separation of PAHs in EPA method 610. PAHs (Polycyclic Aromatic Hydrocarbon) are hydrocarbons with two or more benzene rings, and considered major pollutants. Therefore, the analysis of these potentially carcinogenic compounds in water, air, soil and food takes high priority. Most of PAHs do not exist alone. Substances that may contain PAHs include charcoal, crude oil, creosote, tar, drugs, dyes, plastic, rubber, pesticide, lube, release agent, electrolyte, mineral oil, pitch, insecticide, and bactericide, etc.

Ultisil™ PAH

Structural Formula	
pH Range	1.5-10.0
Particle Size	3 µm, 5 µm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	22(120 Å)
USP List	L1
Endcapped	No

Ultisil™ PAH columns can separate all 18 PAHS in EPA method 610 rapidly with high resolution. Ultisil™ PAH columns are silica based columns for PAH analysis with the best peak shape.

Separation of 18 PAHs in EPA method 610



Column:	Ultisil™ PAH, 4.6 ×250 mm, 5 µm
Mobile Phase:	A:water B: acetonitrile

Time(min)	A(%)	B(%)
0	60	40
20	0	100
33	0	100
34	60	40

Flow Rate:	1.5 mL/min
Detector:	220 nm
Temperature:	25°C
Injection Volume:	10 µL

Mixed Standards:

1. Naphthalene	2. Acenaphthylene
3. 1- Methyl benzene	4. 2- Methyl benzene
5. Acenaphthene	6. Fluorene
7. Phenanthrene	8. Anthracene
9.Fluoranthene	10. Pyrene
11.Benzo(a)anthracene	12. Chrysene
13. Benzo(b)fluoranthene	14. Benzo(k)fluoranthene
15. Benzo(a)pyrene	16. Indeno(1,2,3-cd)pyrene
17. Dibenzo(a,h)anthracene	18. Benzo(g,hi)perylene

Ordering Information

Ultisil™ PAH

Particle size	Column ID (mm)	Column Length (mm)			Guard Cartridge	Guard Column Holder
		150	200	250	10mm length	
3 µm 120Å	2.1	00210-21014	00210-21015	00210-21016	00808-23018	00808-01107
	3.0	00210-21023	00210-21024	00210-21025	00808-23018	00808-01107
	4.6	00210-21041	00210-21042	00210-21043	00808-03012	00808-01101
5 µm 120 Å	2.1	00210-31014	00210-31015	00210-31016	00808-24010	00808-01107
	3.0	00210-31023	00210-31024	00210-31025	00808-24010	00808-01107
	4.6	00210-31041	00210-31042	00210-31043	00808-04010	00808-01101

Don't see your needed size or format? Contact Welch or your local distributor for other dimensions.