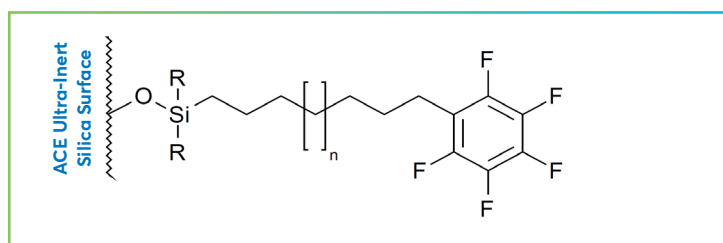


## ACE C18-PFP

- Combines the C18 and pentafluorophenyl (PFP) functionalities
- Hydrophobicity, stability and low bleed characteristics of a C18 and the  $\pi$ - $\pi$  interactions, dipole-dipole interactions and shape selectivity of a PFP phase
- Unique selectivity phase can separate mixtures that cannot be readily separated by either phase alone



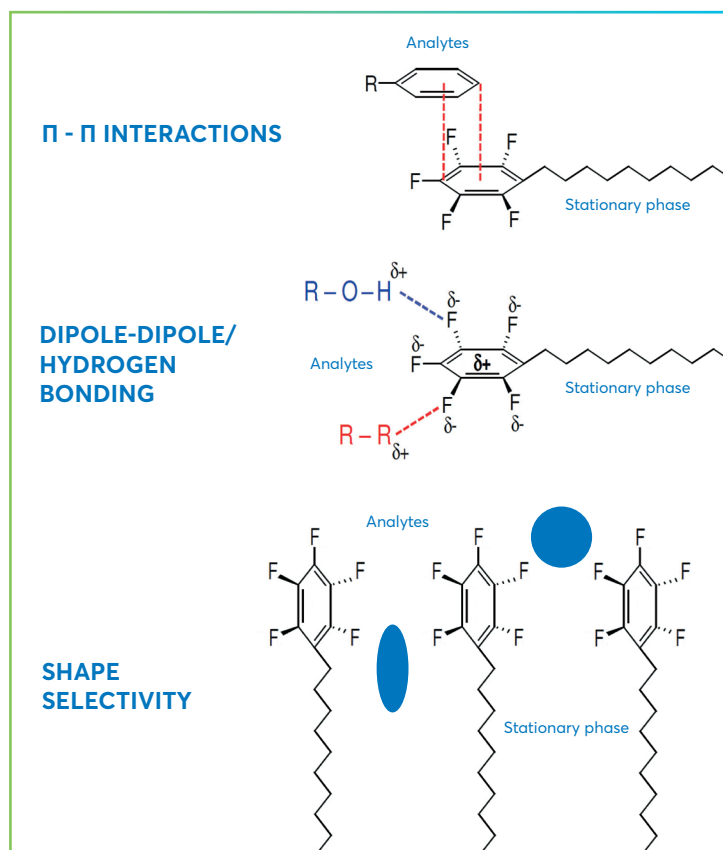
## PHASE SPECIFICATIONS

Phase	USP Listing	Functional group	Endcapped	Particle size ( $\mu\text{m}$ )	Pore size ( $\text{\AA}$ )	Surface area ( $\text{m}^2/\text{g}$ )	Carbon load (%)	pH range	100% aqueous compatibility
C18-PFP	L1	Octadecyl with integral PFP group	Yes	1.7, 2, 3, 5, 10	100	300	14.3	2-8	Yes



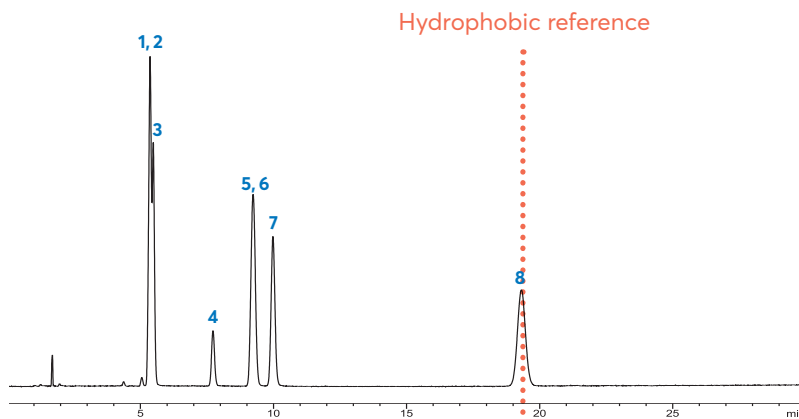
## RECOMMENDED APPLICATIONS

- Analytes with  $\pi$ -bonding, conjugated systems and electron donating groups such as phenols, aromatic ethers and amines
- Analytes with proton donor groups
- Structural isomers, steroids, substituted aromatics and taxanes
- Applications where C18 does not provide adequate separation
- Applications where conventional PFP phases provide insufficient retention, poor stability or significant bleed

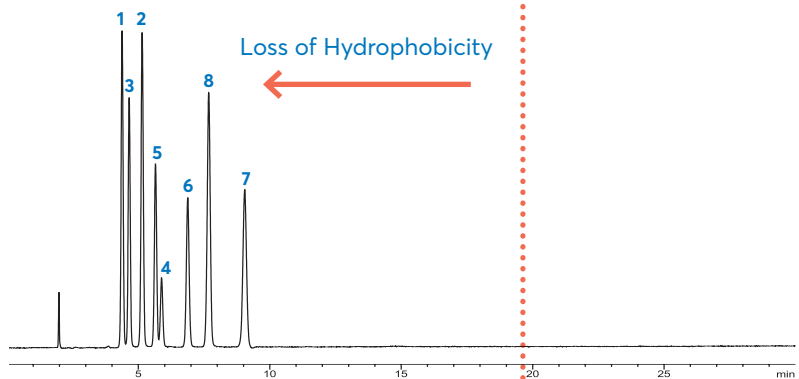


THE IMPORTANCE OF MAINTAINING HYDROPHOBICITY DURING MULTI-MODE INTERACTIONS

ACE 3 C18

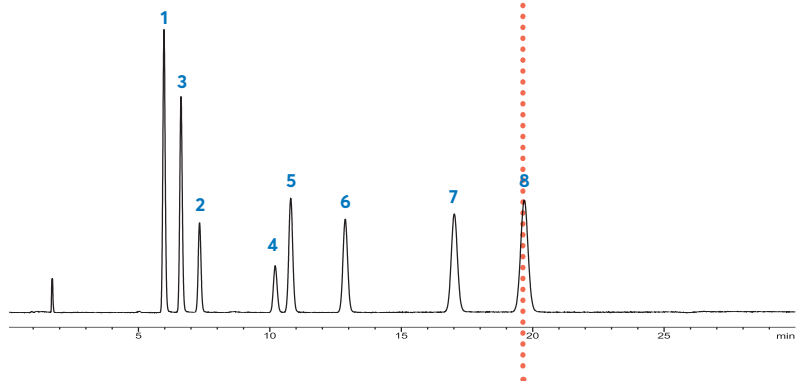


Typical 3 µm PFP (propyl spacer)



Alternative selectivity – but significant decrease in hydrophobicity

ACE 3 C18-PFP



Alternative selectivity – but hydrophobicity maintained

**Sample:** 1) 1,2,3-trimethoxybenzene 2) 1,2,4-trimethoxybenzene 3) 1,2-dimethoxybenzene 4) 1,4-dimethoxybenzene 5) methoxybenzene 6) 1,3-dimethoxybenzene 7) 1,3,5-trimethoxybenzene 8) neutral molecule (reference)  
**Column Dimensions:** 150 x 4.6 mm - **Flow Rate:** 1.00 ml/min - **Temperature:** 40°C - **Detection:** UV, 254 nm - **Mobile Phase:** 50:50 v/v MeOH/H<sub>2</sub>O  
 Phenomenex columns were not used in the above comparison. Comparative data may not be representative of all applications.