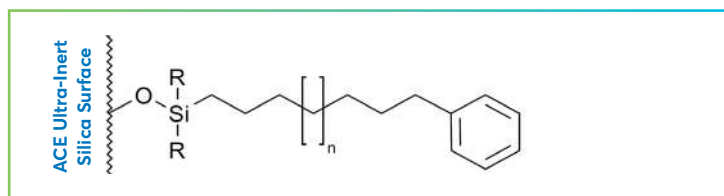


## ACE C18-AR

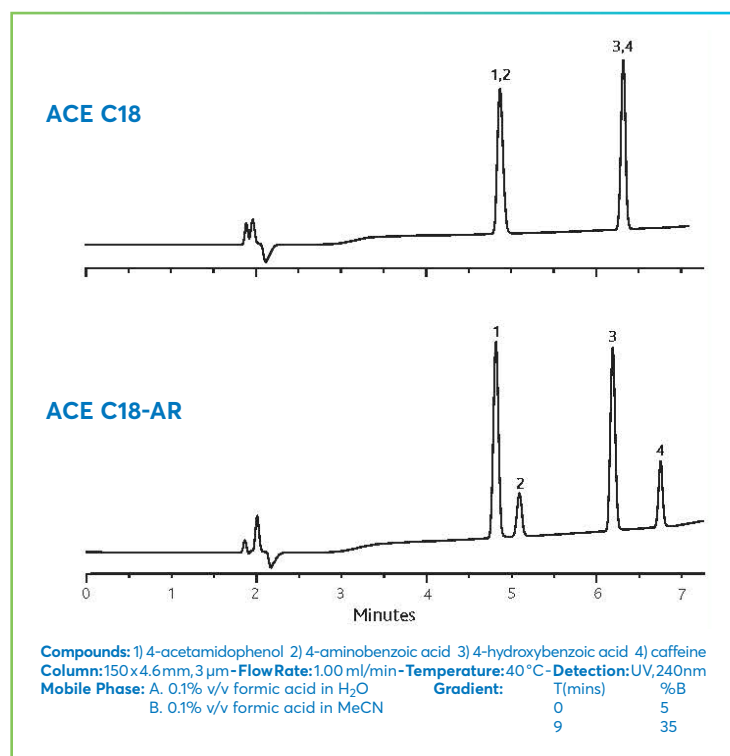
- Combines the C18 and phenyl functionalities
- Hydrophobicity, stability and low bleed characteristics of a C18 combined with the  $\pi$ - $\pi$  interactions provided by a phenyl phase
- Unique selectivity phase can separate mixtures that cannot be readily separated by C18 or phenyl phases alone



## 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-AR	L1	Octadecyl with integral phenyl group	Yes	1.7, 2, 3, 5, 10	100	300	15.5	2-8	Yes

## ACE C18-AR SHOWS ALTERNATIVE SELECTIVITY TO C18 BONDED COLUMNS

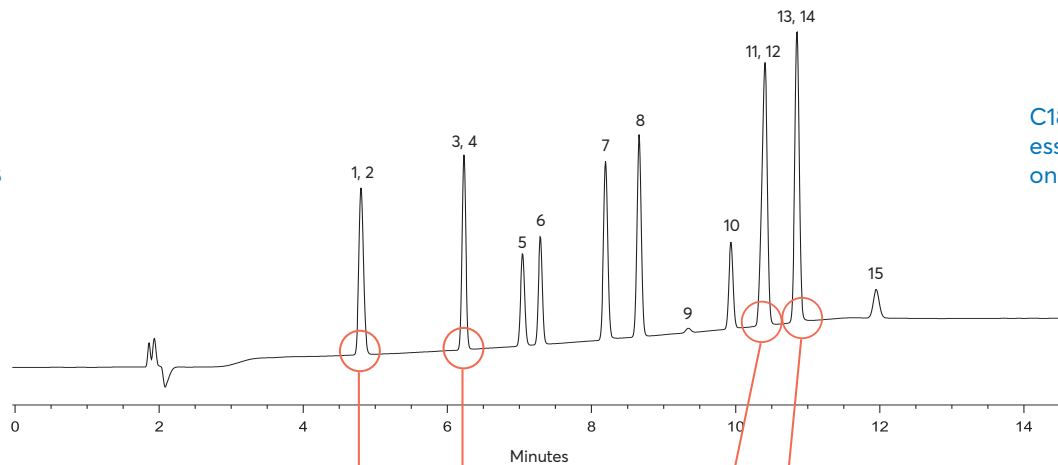


## RECOMMENDED APPLICATIONS

- Analytes with  $\pi$ -bonding, conjugated systems and electron-withdrawing groups such as halogens, nitro groups, ketones, esters and acids
- Stereoisomers, steroids, substituted aromatics and sulphur containing compounds
- Applications where C18 does not provide adequate separation
- Applications where conventional phenyl phases provide insufficient retention, poor stability, or significant bleed

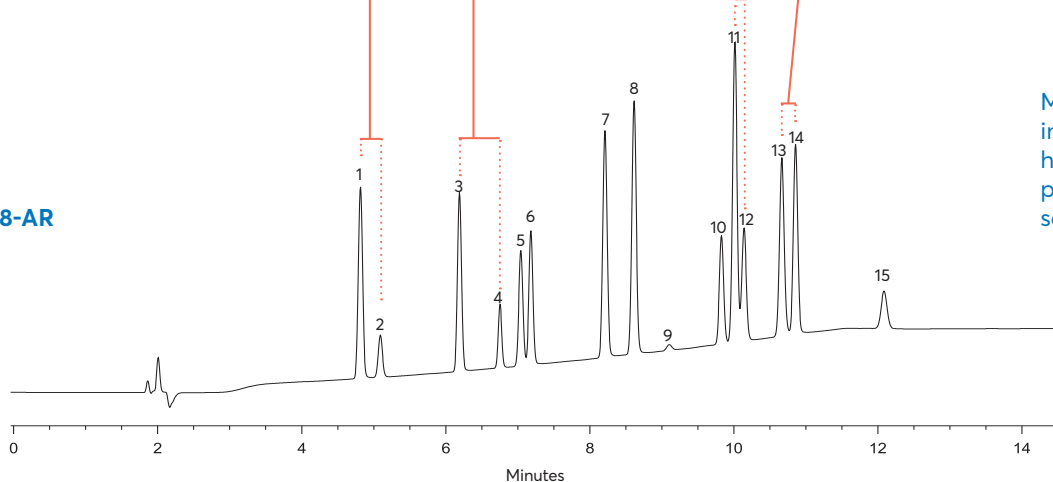
SEPARATION OF ANALGESICS

ACE 3 C18



C18 phase provides essentially hydrophobic-only interaction

ACE 3 C18-AR



Multi-mode interaction including  $\pi - \pi$  and hydrophobic interactions provides complete separation

**Sample:** 1) 4-acetamidophenol 2) 4-aminobenzoic acid 3) 4-hydroxybenzoic acid 4) caffeine 5) 2-acetamidophenol 6) 3-hydroxybenzoic acid 7) salicylamide 8) acetanilide 9) phenol 10) acetylsalicylic acid 11) benzoic acid 12) sorbic acid 13) salicylic acid 14) phenylacetin 15) salicylaldehyde  
**Mobile Phase:** A = 0.1% v/v formic acid in H<sub>2</sub>O B = 0.1% v/v formic acid in MeCN - **Gradient:** 5 - 35% B in 9 minutes, hold at 35% B until 14 minutes  
**Column Dimensions:** 150 x 4.6 mm - **Flow Rate:** 1.00 ml/min - **Temperature:** 40°C - **Detection:** 240nm