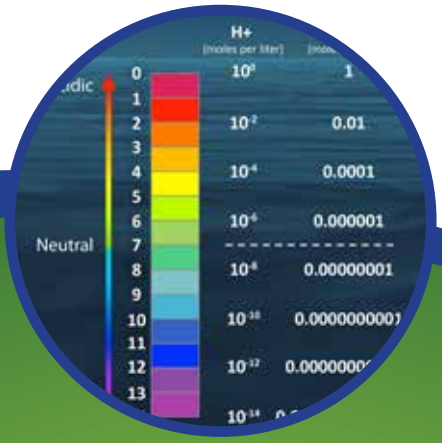
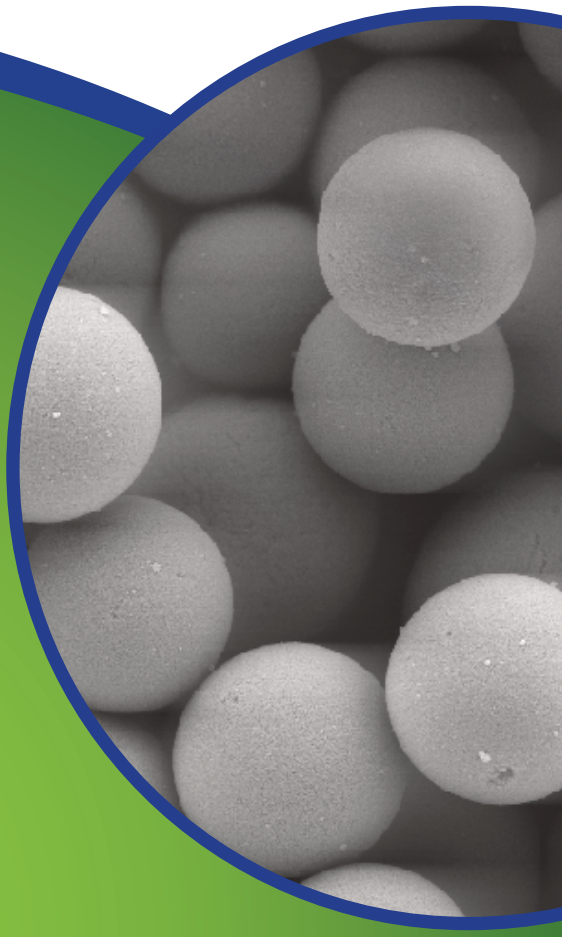
Qualitas
Peak Quality Resolution
HPLC & UHPLC Columns

FORCE
SCIENTIFIC
Science Simplified





- Porosity - Surface Enhanced Accessibility
- Ultrahigh Purity BDS Range
- Batch to Batch Reproducibility
- Individual Tested Column
- Large surface Area
- Better pH Stability

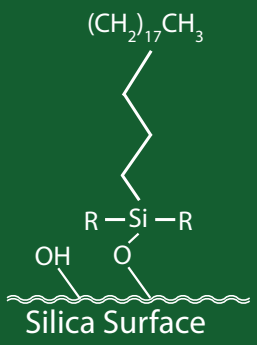
C18 HP

Mechanisms of Separation	
Hydrophobic	Very Strong
Hydrophilic	Low
Acidic	Low
Basic	Low
Ion Exchange	-
π- π	-

Target Analytes
Analytes differing in hydrophobicity
Polar, moderately Polar, & non-polar analytes
Uncharged acids & bases
Ionized acids or bases using ion-pairing

Applications
Analytes differing in hydrophobicity
Homologous compounds differing by -CH2

Specifications	
Pore size (Å)	100
Particle Size (µm)	3, 5
Surface Area (m2/g)	450
Carbon Load %	17
End-Capping	Yes
pH Range	2 to 9
Aq. Compatible	95%
USP Listing	L1
Phase Type	Monomeric



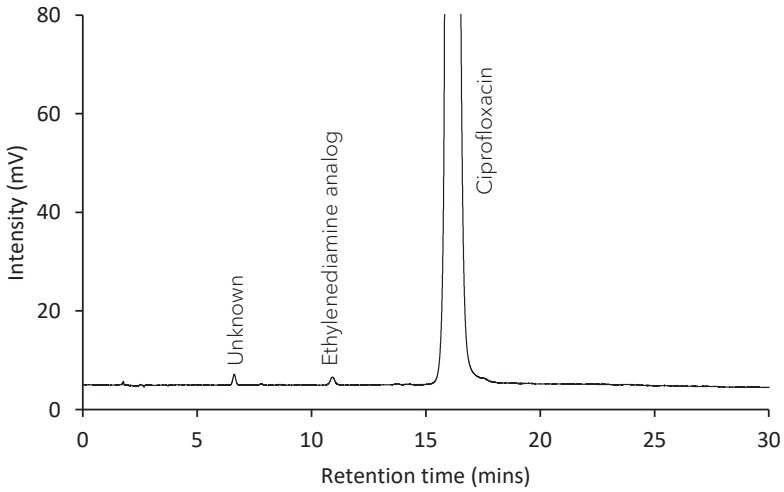
Ciprofloxacin & Related impurities

Conditions

Column:	Qualitas C18 HP 250X4.6 mm, 5 µm
Buffer:	0.025 M phosphoric acid. Adjust with triethylamine to a pH of 3.0 ± 0.1.
Mobile Phase:	Mix Buffer : Acetonitrile (87:13 v/v)
Flow Rate:	1.5 ml/min
Temperature:	30°C
Detection:	UV, 278 nm
Injection Volumne:	10µl
Sample:	Transfer 25 mg of Ciprofloxacin to a 50-mL volumetric flask. Add 0.2 mL of7% phosphoric acid, and dilute with Mobile phase to volume.
Pressure Drop:	130-134 Bar(1885-1943 psi)

Compounds

1. Unknown
2. Ethylenediamine analog
3. Ciprofloxacin



No.	Compound	Retention Time (min)	RRT	Tailing factor
1	Unknown	6.6	0.41	1.01
2	Ethylenediamine analog	10.9	0.68	1.06
3	Ciprofloxacin	16.0	1.00	1.72

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