

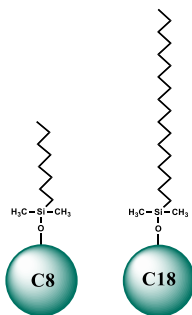
# Brownlee Pecosphere Cartridge Columns

PerkinElmer pioneered the development of Fast HPLC and introduced the popular 3  $\mu\text{m}$  particle size '3 x 3' Columns (33 mm x 4.6 mm) in the 1980s. The '3 x 3' columns are capable of very rapid analysis and still they are still very popular because of the economical price and reliable performance. The Pecosphere cartridges are also available 83 mm and 150 mm lengths for the separation of more complex mixtures.

They are packed with rugged, high purity silica in 3  $\mu\text{m}$  and 5  $\mu\text{m}$ , 80  $\text{\AA}$  pore size particles; with standard end-capping for the analysis of acidic and neutral analytes. A special end-capped Reduced Activity (RA) version that is especially suited for the analysis basic analytes. In addition the 10  $\mu\text{m}$  particles size C18 Scavenger cartridge designed to remove contaminants from the mobile phase when installed prior to the HPLC injector. These columns use cartridge style hardware – thus the associated column holder needs to be ordered with the column.

## Features and Benefits

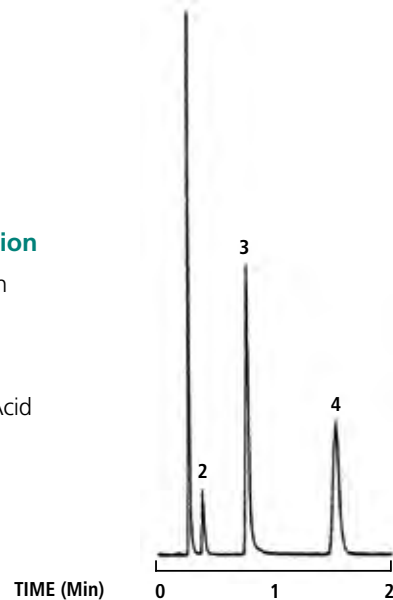
- The Pecosphere '3 x 3' column is the world's first fast HPLC column
- Reduced Activity C18 and C8 with low silanol activity for the analysis of basic compounds



## Analysis of an Analgesic Tablet Using Fast LC

### Peak Identification

1. Acetaminophen
2. Caffeine
3. Salicylamide
4. Acetylsalicylic Acid



### Chromatographic Conditions

Column	Detection	Mobile Phase	Flow Rate	Sample	Part No.
Pecosphere 3 x 3 C18 (33 x 4.6 mm) CH <sub>3</sub> CN in H <sub>2</sub> O	UV at 240 nm	0 – 15%	2.0 mL/min	1 $\mu\text{L}$ of the tablet extract	<b>02580164</b>

## Material Characteristics

Phase*	Particle Sizes ( $\mu\text{m}$ )	Pore Size ( $\text{\AA}$ )	Carbon Load	Surface Area ( $\text{M}^2/\text{g}$ )	End Capping	pH Stability	USP Code
C18	3.0, 5.0	80	11%	170	Yes	2.0 – 8.0	L1
RA C8	3.0, 5.0	80	5%	200	Yes	2.0 – 8.0	L7
RA C18	3.0, 5.0	80	12%	200	Yes	2.0 – 8.0	L1
C18 Scavenger	10	80	11%	170	Yes	2.0 – 8.0	L1

## Cartridge Columns and Hardware

Phase	Length (mm)	Particle Size	Qty.	4.6 mm ID Part No.	Column Holder Part No.
Aquapore Octyl (C18)	33	3 $\mu\text{m}$	5	<b>02580164</b>	<b>07150028</b>
	83	3 $\mu\text{m}$	1	<b>02580166</b>	<b>07150029</b>
	150	5 $\mu\text{m}$	1	<b>02580169</b>	<b>07150030</b>
RA C18	33	3 $\mu\text{m}$	5	<b>02580195</b>	<b>07150028</b>
	83	3 $\mu\text{m}$	1	<b>02580194</b>	<b>07150029</b>
RA C8	33	3 $\mu\text{m}$	5	<b>02580191</b>	<b>07150028</b>
	83	3 $\mu\text{m}$	1	<b>02580192</b>	<b>07150029</b>
C18 Scavenger	33	10 $\mu\text{m}$	5	<b>02580202</b>	<b>07150028</b>
C18 Scavenger Kit*	33	10 $\mu\text{m}$	1	<b>02580204</b>	–

\* Scavenger kit includes C18 cartridge (**02580202**) and holder (**07150028**)