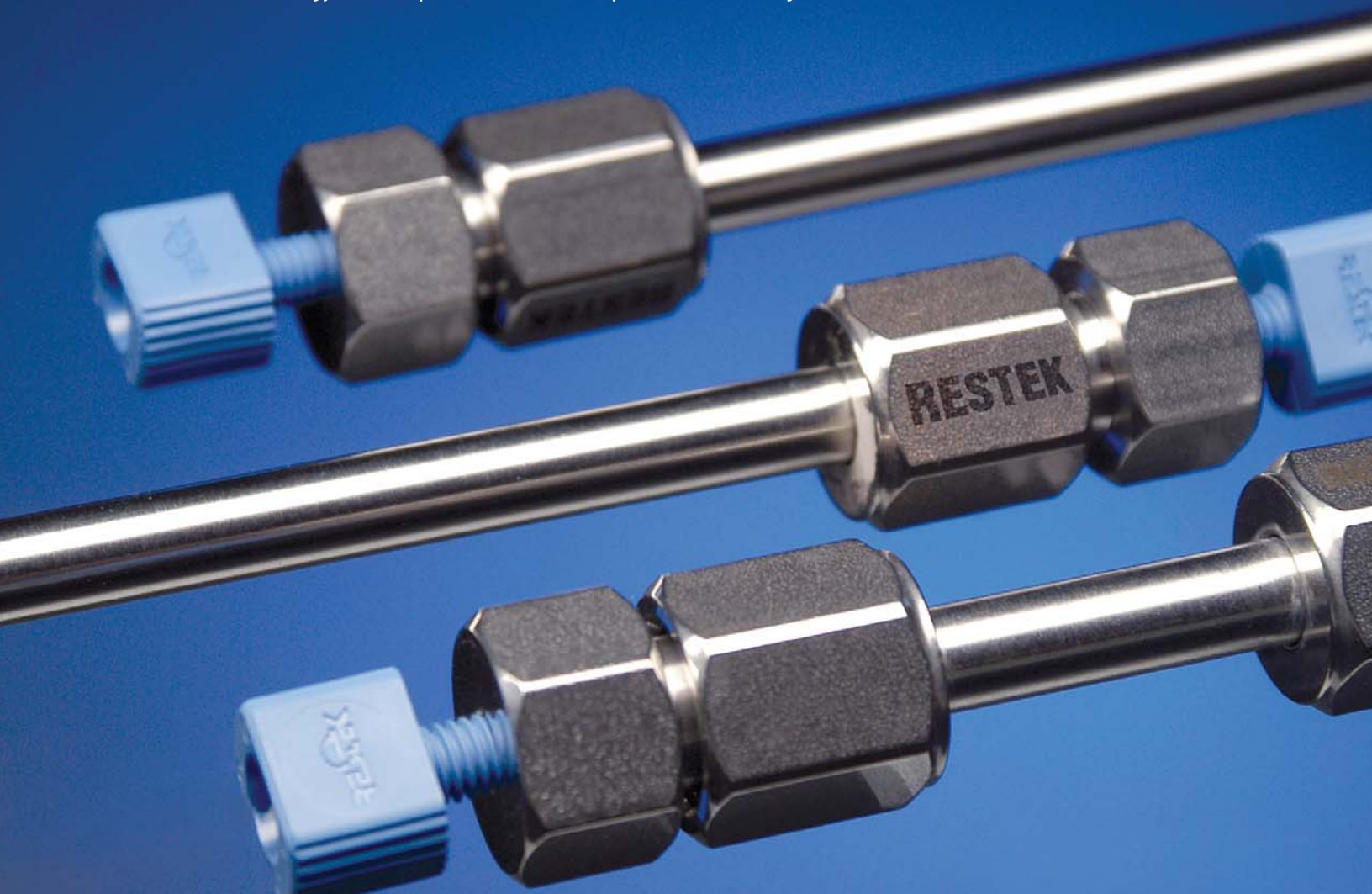


# Restek pHidelity™ C18

pH-Stable HPLC Columns

- Stable up to pH 12 – superior chromatography for basic compounds.
- Patented barrier technology protects silica particles.
- True C18 selectivity, for simpler and more reproducible analyses.



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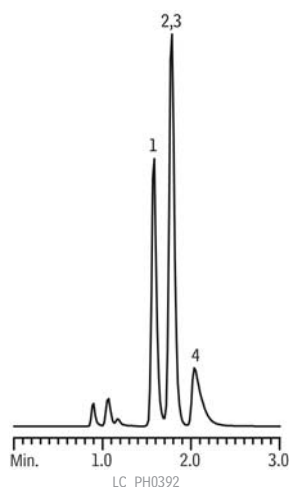
www.restek.com 800-356-1688 • 814-353-1300

## Restek pHidelity™ C18 pH Stable HPLC Columns

We are pleased to introduce pHidelity™ pH-stable HPLC columns, designed for analyses that require, or benefit from, extreme pH conditions. pHidelity™ columns incorporate a proprietary barrier layer that protects the base silica particle, and a secondary layer that provides the functional stationary phase ligand. pHidelity™ columns can be used routinely up to pH 12 – a significant improvement over the typical pH 2.5 to 7.5 range for silica-based materials. pHidelity™ columns give you more control over analyte retention and resolution; mobile phase pH can be increased to enhance retention of basic analytes – without sacrificing column lifetime.

### Using a high pH mobile phase is an easy way to improve peak retention, resolution, and symmetry in a test mix of compounds varying in pKa values.

#### A) Poor separation of bases under typical conditions on a conventional C18 column at pH 4



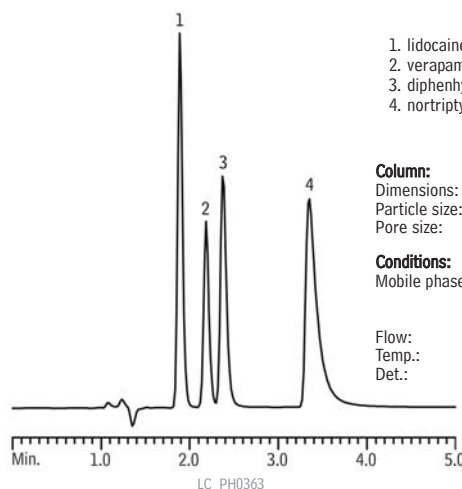
1. lidocaine  
2/3. verapamil/diphenhydramine  
4. nortriptyline

**Sample:**  
Inj.: 10µL  
Conc.: 100µg/mL each component  
Sample diluent: acetonitrile

**Column:**  
Dimensions: 150 x 4.6 mm  
Particle size: 3µm  
Pore size: 200Å

**Conditions:**  
Mobile phase: 20mM ammonium acetate (pH 4):acetonitrile 50:50  
Flow: 0.75mL/min.  
Temp.: ambient  
Det.: UV @ 254 nm

#### B) Complete separation of bases on a pHidelity™ column at pH 11

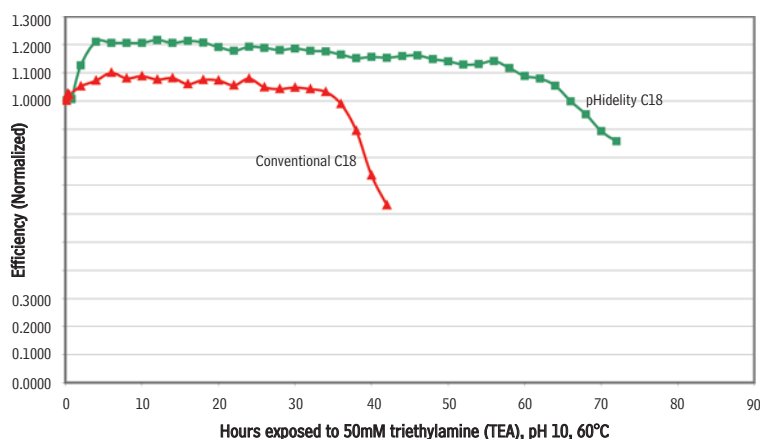


1. lidocaine  
2. verapamil  
3. diphenhydramine  
4. nortriptyline

**Column:** pHidelity™ C18 (cat.# 9579365)  
Dimensions: 150 x 4.6 mm  
Particle size: 3µm  
Pore size: 200Å

**Conditions:**  
Mobile phase: 10mM ammonium bicarbonate (pH 11): acetonitrile: tetrahydrofuran, 35:55:10 (v/v/v)  
Flow: 1.5mL/min.  
Temp.: ambient  
Det.: UV @ 254 nm

### pHidelity™ C18 columns - exceptional performance under accelerated high pH stability testing conditions.



### pHidelity™ C18 Columns

#### Physical Characteristics:

particle size: 3µm  
pore size: 200Å

pH range: 1 to 12  
temperature limit: 80°C

#### 3µm Column, 4.6mm

	cat. #
30mm	9579335
50mm	9579355
100mm	9579315
150mm	9579365
30mm (with Trident™ Inlet Fitting)	9579335-700
50mm (with Trident™ Inlet Fitting)	9579355-700
100mm (with Trident™ Inlet Fitting)	9579315-700
150mm (with Trident™ Inlet Fitting)	9579365-700

#### pHidelity™ C18 Guard Cartridges

	qty.	cat. #
10 x 4.0mm	3-pk.	957930210
20 x 4.0mm	2-pk.	957930220

Restek Trademarks:  
pHidelity, Trident, Restek logo.



Lit. Cat.# 580145

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