

pHidelity® C18 Columns

- Stable under extreme pH conditions.
- Patented technology protects the silica particle from dissolution.
- True C18 selectivity.

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Restek is pleased to offer pHidelity® C18 columns, designed for analyses that require extreme pH conditions. Using technology patented by Selerity Technologies (US Patent 2005/0191503A1), pHidelity® silica-based columns have exceptional stability under aggressive pH conditions.

In pHidelity® columns, a polycarbosilane barrier layer protects the silica particle from extremely basic conditions. This layer, with multiple points of attachment to the silica particle, yields a modified surface with enhanced stability. A second layer is then attached, providing the functional group (C18). Using this approach to shield the silica surface, a highly durable stationary phase is created.

Even after 50 hours of exposure to base (pH 10) at 60°C, a pHidelity® column maintains its original column efficiency. (A decrease in column efficiency indicates the dissolution of support silica and loss from the column.) This exceptional performance ensures pHidelity® columns offer greater resolution under harsh mobile phase conditions and will continue to resolve your target compounds over a long column lifetime. A pHidelity® column also maintains a very consistent capacity factor, k' , after exposure to pH 10 and 60°C. Under extremely basic conditions, a decrease in retention time indicates loss of both support silica and bonded phase. Backpressure in the pHidelity® C18 column is very stable, indicating little or no degradation of the packing material.

The patented process used to protect the support silica in pHidelity® columns ensures more consistent retention times over the lifetime of the column.

for more info

For more information about pH stable pHidelity® HPLC Columns, review the *Restek Advantage 2007.01* at www.restek.com.

lit. cat.# 580133

pHidelity® C18 Columns**Physical Characteristics:**

particle size: 3µm or 5µm

pore size: 140Å

pH limit: up to 12

temperature limit: 80°C

Chromatographic Properties:

Excellent stability under extreme pH conditions. True C18 selectivity in a silica-based stationary phase.

Length	2.1mm ID	3.2mm ID	4.6mm ID
	cat.#	cat.#	cat.#
3µm Columns			
30mm	9579332	9579333	9579335
50mm	9579352	9579353	9579355
100mm	9579312	9579313	9579315
150mm	9579362	9579363	9579365
5µm Columns			
150mm			9579565
250mm			9579575

new!

ordering note

To order a 2.1mm, 3.2mm, or 4.6mm ID column with a Trident Integral Inlet Fitting, add "-700" to the catalog number for the column.

Nominal additional charge

Example: 100mm x 4.6mm ID Ultra C18 column with Trident Integral Inlet Fitting: 9174315-700

Also order an XG-XF fitting (cat.#25026 or 25062), see page 337.

For guard cartridges for these columns, see page 339.