

restek **innovation!**

Viva silica has a narrow distribution around the mean pore size, permitting a larger portion of the silica surface to play a role in the separation of large molecules and biomolecules.

**Physical Characteristics:**

particle size: 3µm or 5µm, spherical
 pore size: 300Å
 carbon load: 9%
 endcap: yes
 pH range: 2.5 to 8
 temperature limit: 80°C



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Viva Wide Pore Columns: 3µm or 5µm particles; 300Å pore size

- Excellent for separating peptides or proteins.
- Rugged, spherical particles, with 300Å pore size.
- High proportion of pore/surface area available to large molecules.

Viva columns are based on a wide pore material we designed for optimal large molecule separations. In developing Viva silica, we found that although many commercial wide-pore silicas meet the standard 300Å mean pore size, most have very broad distributions about this mean, with a significant portion of their pore volume falling below 150Å. This means a large portion of the surface area is unavailable to larger molecules. Viva columns have a narrow distribution around the mean pore size, permitting a larger portion of the silica surface to play a role in the separation.

Viva C18 Columns (USP L1)**Chromatographic Properties:**

Highly base-deactivated wide pore packing that exhibits excellent peak shape for a wide range of compounds. Excellent general-purpose column for analyzing large molecules and biomolecules.

	1.0mm ID	2.1mm ID	3.2mm ID	4.6mm ID
Length	cat.#	cat.#	cat.#	cat.#
3µm Columns				
30mm	9514331	9514332	9514333	9514335
50mm	9514351	9514352	9514353	9514355
100mm	9514311	9514312	9514313	9514315
150mm	9514361	9514362	9514363	9514365
5µm Columns				
30mm	9514531	9514532	9514533	9514535
50mm	9514551	9514552	9514553	9514555
100mm	9514511	9514512	9514513	9514515
150mm	9514561	9514562	9514563	9514565
200mm	9514521	9514522	9514523	9514525
250mm	9514571	9514572	9514573	9514575

3.0mm ID available on request for 3µm particle applications above 4,000 psi (275 Bar).

Viva C18 Guard Cartridges

Guard Cartridges	3-pk. (10 x 2.1mm)	3-pk. (10 x 4.0mm)	2-pk. (20 x 2.1mm)	2-pk. (20 x 4.0mm)
Viva C18 Guard Cartridge	951450212	951450210	951450222	951450220

Viva C18 HPLC Prep Columns

	10mm ID	21.2mm ID	30mm ID	50mm ID
Length	cat.#	cat.#	cat.#	cat.#
5µm Columns				
50mm	9514557	9514558	9514559	9514550
100mm	9514517	9514518	9514519	9514510
150mm	9514567	9514568	9514569	9514560
250mm	9514577	9514578	9514579	9514570

also available**Capillary HPLC Columns**
www.restek.com

- High quality, Restek manufactured packing materials.
- Superior packing technology ensures rugged, reproducible columns.
- Wide range of phases and dimensions available—please inquire.

**Viva C8 Columns (USP L7)****Chromatographic Properties:**

Highly base-deactivated wide pore packing that exhibits excellent peak shape for a wide range of compounds. Less retention in reversed phase assays than Viva C18.

	1.0mm ID	2.1mm ID	3.2mm ID	4.6mm ID
Length	cat.#	cat.#	cat.#	cat.#
5μm Columns				
30mm	9513531	9513532	9513533	9513535
50mm	9513551	9513552	9513553	9513555
100mm	9513511	9513512	9513513	9513515
150mm	9513561	9513562	9513563	9513565
200mm	9513521	9513522	9513523	9513525
250mm	9513571	9513572	9513573	9513575

Viva C8 Guard Cartridges

Guard Cartridges	3-pk. (10 x 2.1mm)	3-pk. (10 x 4.0mm)	2-pk. (20 x 2.1mm)	2-pk. (20 x 4.0mm)
Viva C8 Guard Cartridge	951350212	951350210	951350222	951350220

Viva C8 HPLC Prep Columns

	10mm ID	21.2mm ID	30mm ID	50mm ID
Length	cat.#	cat.#	cat.#	cat.#
5μm Columns				
50mm	9513557	9513558	9513559	9513550
100mm	9513517	9513518	9513519	9513510
150mm	9513567	9513568	9513569	9513560
250mm	9513577	9513578	9513579	9513570

Viva C4 Columns (USP L26)**Chromatographic Properties:**

Highly base-deactivated wide pore packing that exhibits excellent peak shape for a wide range of compounds. Less retention in reversed phase assays than Viva C18 or Viva C8.

	1.0mm ID	2.1mm ID	3.2mm ID	4.6mm ID
Length	cat.#	cat.#	cat.#	cat.#
5μm Columns				
30mm	9512531	9512532	9512533	9512535
50mm	9512551	9512552	9512553	9512555
100mm	9512511	9512512	9512513	9512515
150mm	9512561	9512562	9512563	9512565
200mm	9512521	9512522	9512523	9512525
250mm	9512571	9512572	9512573	9512575

Viva C4 Guard Cartridges

Guard Cartridges	3-pk. (10 x 2.1mm)	3-pk. (10 x 4.0mm)	2-pk. (20 x 2.1mm)	2-pk. (20 x 4.0mm)
Viva C4 Guard Cartridge	951250212	951250210	951250222	951250220

Viva C4 HPLC Prep Columns

	10mm ID	21.2mm ID	30mm ID	50mm ID
Length	cat.#	cat.#	cat.#	cat.#
5μm Columns				
50mm	9512557	9512558	9512559	9512550
100mm	9512517	9512518	9512519	9512510
150mm	9512567	9512568	9512569	9512560
250mm	9512577	9512578	9512579	9512570

**Physical Characteristics:**

particle size: 5 μ m, spherical
pore size: 300 \AA
carbon load: 5%
endcap: yes
pH range: 2.5 to 8
temperature limit: 80 $^{\circ}$ C

also available

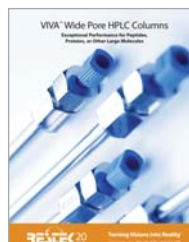
3 μ m particles are available for all Viva phases—please inquire.

**Physical Characteristics:**

particle size: 5 μ m, spherical
pore size: 300 \AA
carbon load: 3.5%
endcap: yes
pH range: 2.5 to 8
temperature limit: 80 $^{\circ}$ C

ordering note

Other column dimensions and phases are available. Please call for a quote.

**free literature****Viva Wide Pore HPLC Columns**

Download your free copy from
www.restek.com

lit. cat# 59939

restek **exclusive!****Physical Characteristics:**

particle size: 5µm
 pore size: 300Å
 carbon load: 6.7%
 endcap: yes
 pH range: 2.5 to 8
 temperature limit: 80°C

also available

3µm particles are available for all Viva phases—
 please inquire.

Viva Biphenyl Columns (USP L11)**Chromatographic Properties:**

Highly base-deactivated wide pore packing that exhibits excellent peak shape for a wide range of compounds; ideal for large molecule and biomolecule assays. Highly retentive and selective phase for aromatic and unsaturated compounds, with increased retention, relative to phenyl phases.

Length	1.0mm ID	2.1mm ID	3.2mm ID	4.6mm ID
	cat.#	cat.#	cat.#	cat.#
5µm Columns				
30mm	9516531	9516532	9516533	9516535
50mm	9516551	9516552	9516553	9516555
100mm	9516511	9516512	9516513	9516515
150mm	9516561	9516562	9516563	9516565
200mm	9516521	9516522	9516523	9516525
250mm	9516571	9516572	9516573	9516575

Viva Biphenyl Guard Cartridges

Guard Cartridges	3-pk.	3-pk.	2-pk.	2-pk.
	(10 x 2.1mm)	(10 x 4.0mm)	(20 x 2.1mm)	(20 x 4.0mm)
Viva Biphenyl Guard Cartridge	951650212	951650210	951650222	951650220

Viva PFP Propyl Columns (USP L43)**Chromatographic Properties:**

A pentafluorophenyl phase with a propyl spacer. Highly retentive for basic analytes. Highly base-deactivated wide pore packing that exhibits excellent peak shape for a wide range of compounds, including nucleosides, nucleotides, and halogenated compounds.

Length	1.0mm ID	2.1mm ID	3.2mm ID	4.6mm ID
	cat.#	cat.#	cat.#	cat.#
5µm Columns				
30mm	9519531	9519532	9519533	9519535
50mm	9519551	9519552	9519553	9519555
100mm	9519511	9519512	9519513	9519515
150mm	9519561	9519562	9519563	9519565
200mm	9519521	9519522	9519523	9519525
250mm	9519571	9519572	9519573	9519575

Viva PFP Propyl Guard Cartridges

Guard Cartridges	3-pk.	3-pk.	2-pk.	2-pk.
	(10 x 2.1mm)	(10 x 4.0mm)	(20 x 2.1mm)	(20 x 4.0mm)
Viva PFP Propyl Guard Cartridge	951950212	951950210	951950222	951950220

**Physical Characteristics:**

particle size: 5µm, spherical
 pore size: 300Å
 carbon load: 5%
 endcap: yes
 pH range: 2.5 to 8
 temperature limit: 80°C

also available**Looking for HPLC syringes?**

See pages 346-349.



Viva Silica Columns (USP L3)

Chromatographic Properties:

Highly base-deactivated wide pore packing that exhibits excellent peak shape for a wide range of compounds in normal phase separations.

Length	1.0mm ID cat.#	2.1mm ID cat.#	3.2mm ID cat.#	4.6mm ID cat.#
5µm Columns				
30mm	9510531	9510532	9510533	9510535
50mm	9510551	9510552	9510553	9510555
100mm	9510511	9510512	9510513	9510515
150mm	9510561	9510562	9510563	9510565
200mm	9510521	9510522	9510523	9510525
250mm	9510571	9510572	9510573	9510575

Viva Silica Guard Cartridges

Guard Cartridges	3-pk. (10 x 2.1mm)	3-pk. (10 x 4.0mm)	2-pk. (20 x 2.1mm)	2-pk. (20 x 4.0mm)
Viva Silica Guard Cartridge	951050212	951050210	951050222	951050220



Physical Characteristics:

particle size: 5µm, spherical
pore size: 300Å
pH range: 2.5 to 8
temperature limit: 80°C



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 (10mm: cat.#25026 or 20mm: 25062), see page 196.



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Search by compound name, synonym, CAS # or keyword

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