

SEPAFLASH®

It's not an ordinary FLASH!



SANTA
TECHNOLOGIES

Superior Performance

High Reproducibility

Reliability & Compatibility

- Flash Column

Standard Series E Series HP Series

Bonded Series iLOK™ Series

- TLC Plates

- Bulk Media



Contents

- 01 Santai Focus & Product Highlights**
- 03 SepaFlash® Column Overview**
- 06 SepaFlash® Columns – Standard Series**
- 10 SepaFlash® Columns – E Series**
- 11 SepaFlash® Columns – HP Series**
- 16 SepaFlash® Columns – Bonded Series**
- 22 SepaFlash® Columns – iLOK™ Series**
- 25 SepaFlash® TLC Plates**
- 25 Optimizing Flash Chromatography Purification**
- 26 SepaFlash® Flash Columns Product List**
- 27 Flash Column Sorbent Selection Guide**
- 27 Stationary Phase Polarity**
- 28 Silica-based Stationary Phase Information Table**
- 29 Advantages of Using SepaFlash® Flash Columns**
- 29 Tips for Using SepaFlash® Chromatography Products**
- 30 SepaFlash® UltraPure Media Chart**
- 32 More Order Information**
- 36 How to Order**

About SANTAI

Santai Technologies is a technology company founded in 2004 and focused on developing separation and purification tools and services for professionals and scientists in pharmaceutical, biotechnology, fine chemicals, natural products and petrochemical industries.

Santai currently offers flash chromatographic columns and accessories for separation and purification of organic compounds peptides, proteins and other bio-molecules. Santai is known as one of the best and most consistent column packing and chromatography product company in the world. Santai will continue to develop innovative solutions and tools to meet the separation and purification needs of professionals and scientists.

SANTAI Focus

Santai is known as one of the best and most consistent column packing and chromatography product company in the world.

Santai offers a full line of products designed for high-reproducibility separation and purification. Try us now!

Santai also offers custom packing columns using only selected sources of media.

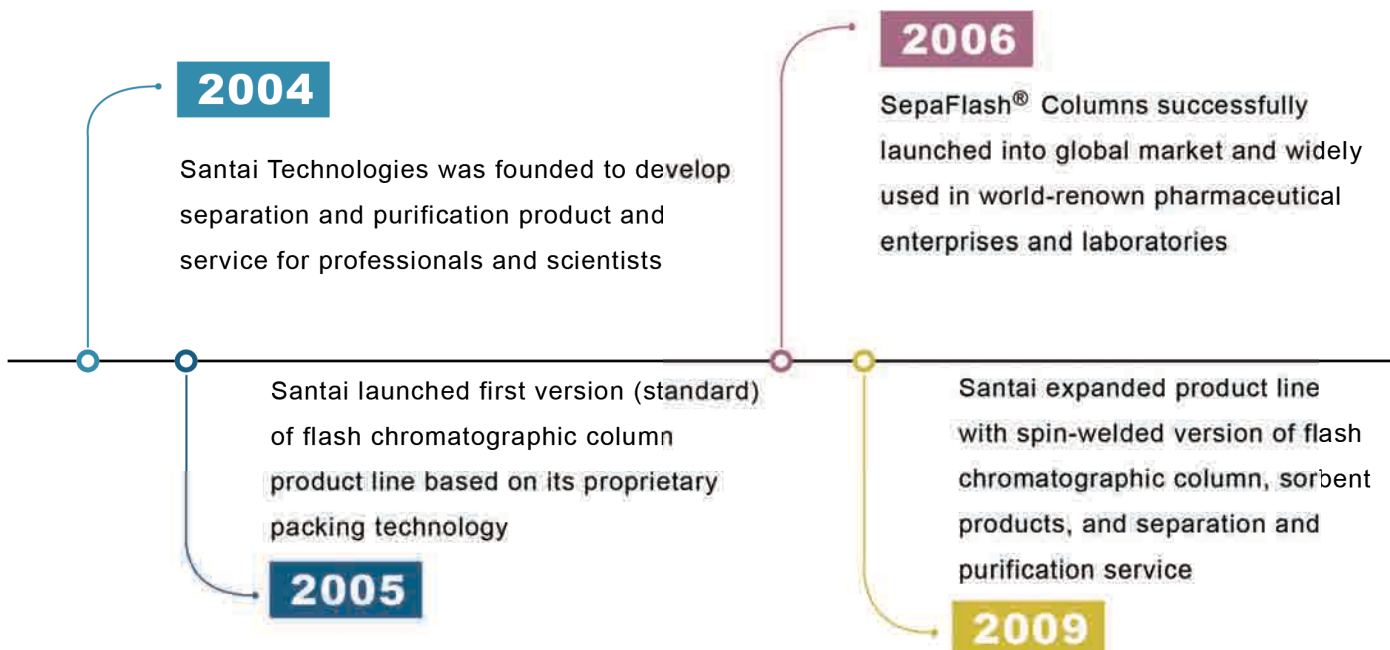
We can quickly produce OEM/private label columns—complete with your own labels AND your own packaging.

Santai has operations and warehousing business in many countries across America, Asia and Europe.

Our semi-automated packing process enables us to provide reproducibility with a direct-manufacturing cost structure.

By doing business with us, you are dealing directly with the most highly respected manufacturing engineers and chemists who uphold the highest standards of confidentiality.

Santai will continue to develop innovative solutions and tools to meet the separation and purification needs of professionals and scientists.



Product Highlights

Santai cartridges are an excellent alternative to the other cartridges available on the market as they offer the following advantages:

- Low fines; Neutral pH; 100% guaranteed leak-free
- Clean, pre-packed, pharmaceutical-grade polypropylene cartridges
- Made with UltraPure silica gel (we can pack your own source)
- Tight particle-size distribution to avoid leaching and/or channelling, no tailing
- Water activity and controlled water content for silica
- Innovative and semi-automated packing technology
- Five series available (Standard Series, E Series, HP Series, Bonded Series and iLOK™ Series)
- Proprietary coating technology for TLC plates available
- “lot-to-lot” reproducibility since 2004

100% COMPATIBILITY with other instruments

- Teledyne Isco (CombiFlash®: Rf, Companion®, RETRIEVE®, OptiX®)
- Biotage (Isolera™, SP, Flash, FlashMaster II)
- Moritex (Purif-α2, Purif-compact)
- Yamazen (Smart Flash EPCLC W-Prep 2XY)
- BUCHI (Reveleris®, Sepacore®)
- Interchim (Puri Flash®)
- Gilson (PLC)

2013

Santai developed iLOK™ flash cartridges which offers users convenience for manual assembly, allowing for a flexible sample loading method

2016

SepaBean™ machine , a unique flash chromatography system with networking ability and built-in knowledge, was launched

Santai developed Bonded Series flash columns, and added sized 3000g to standard version flash column

2015

SepaFlash® Column Overview for Standard Series

SepaFlash® columns are an excellent alternative to the other columns available on the market, and you will enjoy fast, easy purification and scale-up from milligram to hundreds of grams. SepaFlash® columns offer the following advantages:

Reliable and Reproducible

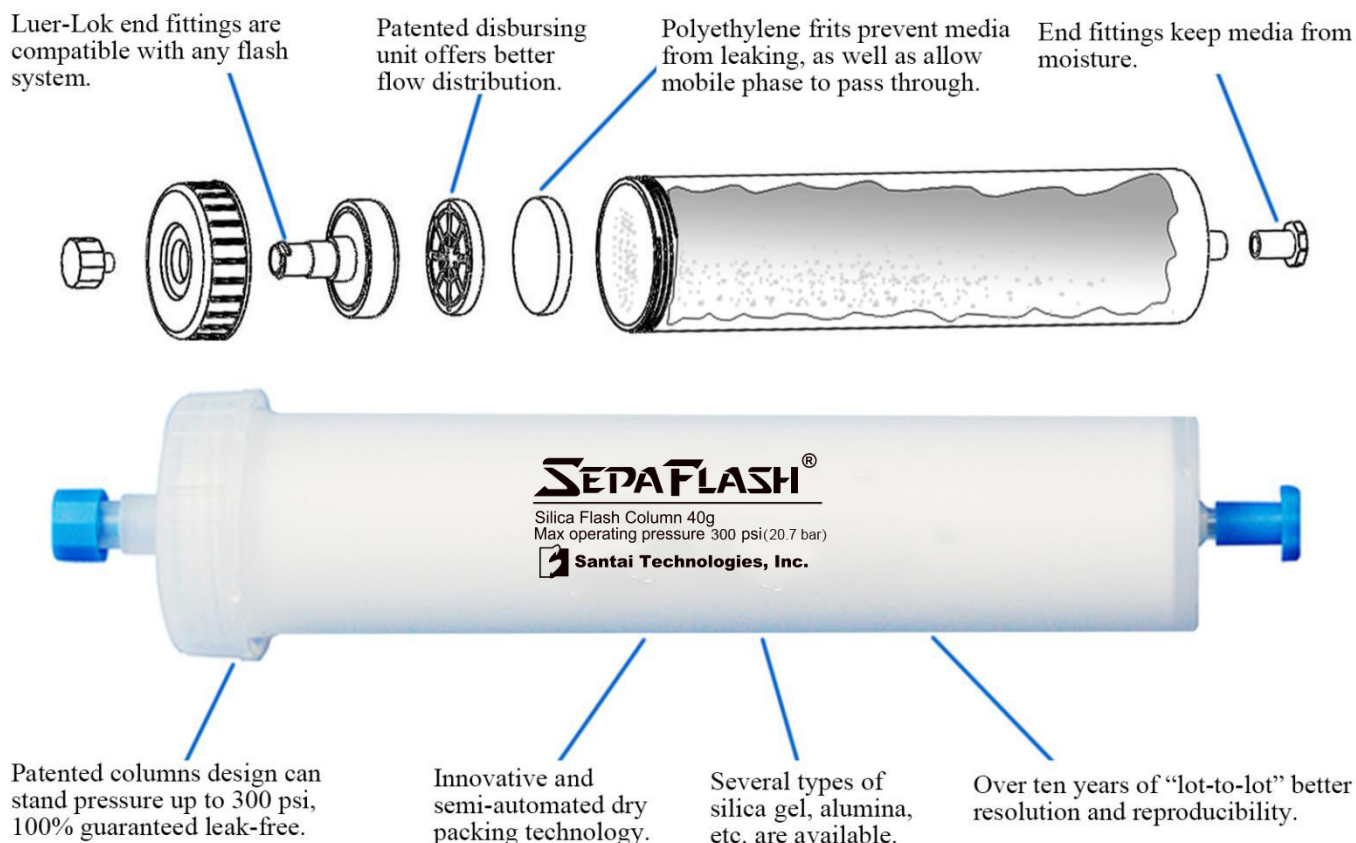
SepaFlash® columns are produced with proprietary dry packing technique for uniform packed sorbent bed with less channeling effect, tighter band and symmetrical peak definition, resulting higher resolution and reproducibility. They feature innovative design with standard Luer-Lok end fittings for quick, easy connection to commercially available flash systems on the market. The quality is consistent for SepaFlash® columns over for decades of years, to ensure that the chemists are able to complete the everyday purification with pleasure.

Versatile

SepaFlash® columns are available from 4 gram up to 3 kg column size allowing purification from 10 milligram up to 300 grams. The enhanced product offering with high-efficiency silica gel (irregular, 25-40 μm , 60 \AA) provides an outstanding performance with lower use-cost.

Safe

Innovative column design on SepaFlash® columns are pressure rated for safe operation. Machine assembling column heads ensure that the columns are able to withstand the pressure capacity of modern flash systems and leak-free guaranteed valuable compound.



SepaFlash® Column Overview for HP Series

SepaFlash® columns are an excellent alternative to the other columns available on the market, and you will enjoy fast, easy purification and scale-up from milligram to dozens of grams. SepaFlash® columns offer the following advantages:

Reliable and Reproducible

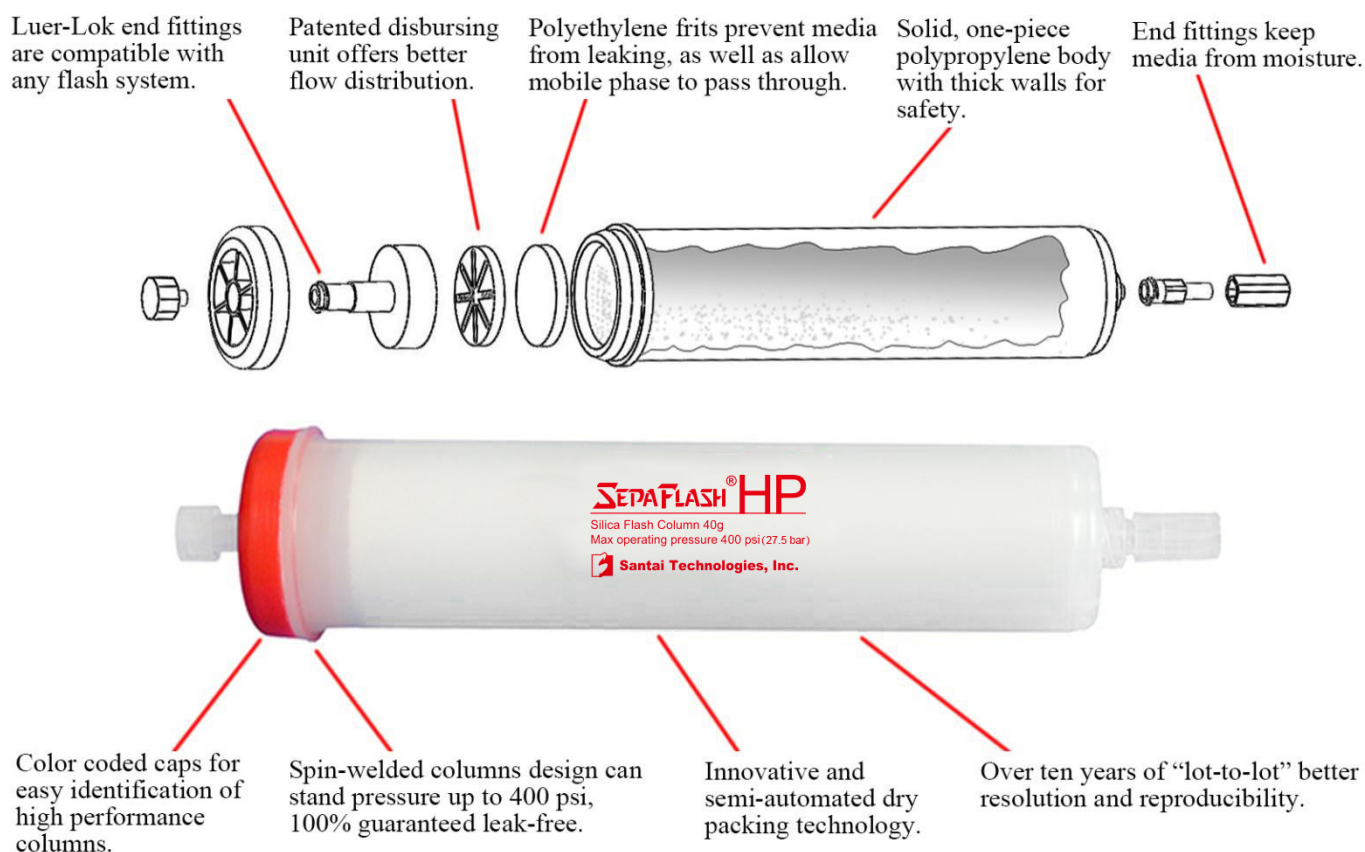
SepaFlash® columns are produced with proprietary dry packing technique for uniform packed sorbent bed with less channeling effect, tighter band and symmetrical peak definition, resulting higher resolution and reproducibility. They feature patent design with standard Luer-Lok end fittings for quick, easy connection to commercially available flash systems on the market. The quality is consistent for SepaFlash® columns for decades of years, to ensure that the chemists are able to complete the everyday purification with pleasure.

Versatile

SepaFlash® columns are available from 4 gram up to 330 gram column size allowing purification from 10 milligram up to 50 grams. The enhanced product offering with high-efficiency silica gel (spherical, 20-45 µm, 70 Å) provides an outstanding performance without increasing the backpressure.

Safe

Extra thick walls on SepaFlash® columns are pressure rated for safe operation. Spin-welded column heads ensure that the columns are able to withstand the pressure capability of modern flash systems and not leak valuable compound.



SepaFlash® Column Overview for iLOK™ Series

SepaFlash® columns are an excellent alternative to the other columns available on the market, and you will enjoy fast, easy purification and scale-up from milligram to dozens of grams. SepaFlash® columns offer the following advantages:

Reliable and Reproducible

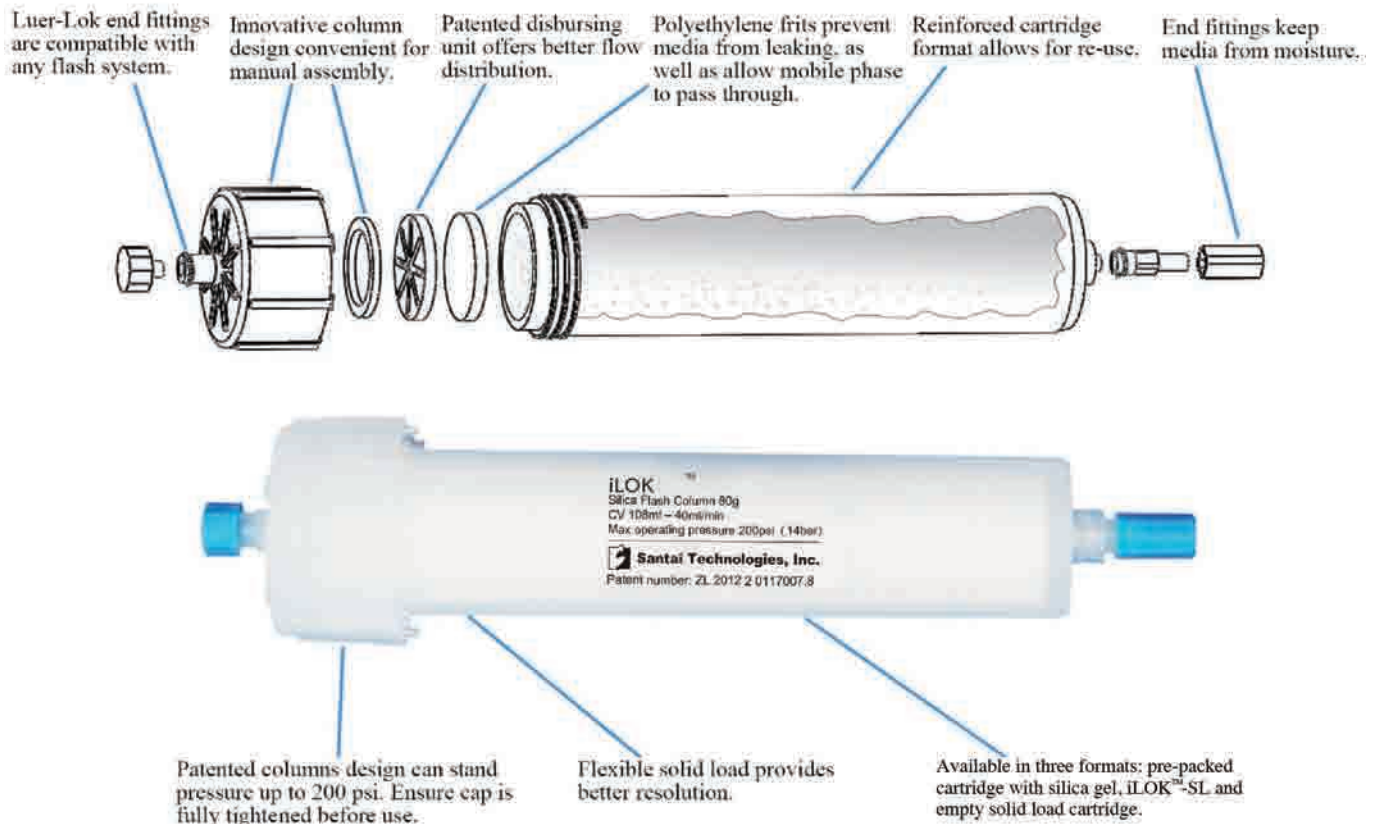
SepaFlash® iLOK™ cartridges are offered in three formats: iLOK™ pre-packed cartridge, iLOK™-SL cartridge and iLOK™ empty cartridge. iLOK™ pre-packed cartridges are produced with proprietary dry packing technique for higher resolution and reproducibility. They feature patent design with standard Luer-Lok end fittings for quick, easy connection to commercially available flash systems on the market. The quality is consistent for SepaFlash® columns for decades of years, to ensure that the chemists are able to complete the everyday purification with pleasure.

Versatile

SepaFlash® iLOK™ cartridges are available from 4 gram up to 330 gram column size allowing purification from 10 milligram up to 33 grams. They offer users convenience for manual assembly, allowing for a flexible sample loading method: solid loading and direct liquid injection.

Safe

Extra thick walls on SepaFlash® columns are pressure rated for safe operation. Reinforced cartridge body ensures that the column is able to withstand the pressure capability of modern flash systems and not leak valuable compound.



Standard Series

Standard Series flash columns are machine packed with UltraPure silica gel using proprietary dry packing technique.

- UltraPure silica features tight particle size distribution, low level of fines and low trace metal content, neutral pH, controlled water content and high surface area, providing scientists the desired reproducible experimental results
- Unique, proprietary dry packing technique guarantees high resolution and reproducibility for everyday purifications.
- Improved pressure rated up to 300 psi



UltraPure irregular silica, 40–63 μm , 60 Å

(surface area 500 m²/g, pH 6.5–7.5, loading capacity 0.1–10%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-5101-0004	4 g	4 mg–0.4 g	20	15–40	105.8	12.4	300/20.7
S-5101-0012	12 g	12 mg–1.2 g	18	30–60	124.5	21.2	300/20.7
S-5101-0025	25 g	25 mg–2.5 g	12	30–60	172.7	21.3	300/20.7
S-5101-0040	40 g	40 mg–4.0 g	12	40–70	176.0	26.7	300/20.7
S-5101-0080	80 g	80 mg–8.0 g	10	50–100	246.8	30.9	200/13.8
S-5101-0120	120 g	120 mg–12 g	10	60–150	264.6	36.2	200/13.8
S-5101-0220	220 g	220 mg–22 g	6	80–220	203.7	60.1	150/10.3
S-5101-0330	330 g	330 mg–33 g	5	80–220	275.0	60.4	150/10.3
S-5101-0800	800 g	800 mg–80 g	3	100–300	382.9	78.2	100/6.9
S-5101-1600	1600 g	1.6 g–160 g	2	200–500	432.4	103.8	100/6.9
S-5101-3000	3000 g	3.0 g–300 g	1	200–500	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency irregular silica, 25–40 μm , 60Å

(surface area 500 m²/g, pH 6.5–7.5, loading capacity 0.1–15%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-5102-0004	4 g	4 mg–0.6 g	20	15–30	105.8	12.4	300/20.7
S-5102-0012	12 g	12 mg–1.8 g	18	25–50	124.5	21.2	300/20.7
S-5102-0025	25 g	25 mg–3.8 g	12	25–50	172.7	21.3	300/20.7
S-5102-0040	40 g	40 mg–6.0 g	12	30–60	176.0	26.7	300/20.7
S-5102-0080	80 g	80 mg–12 g	10	40–80	246.8	30.9	200/13.8
S-5102-0120	120 g	120 mg–18 g	10	45–90	264.6	36.2	200/13.8
S-5102-0220	220 g	220 mg–33 g	6	60–120	203.7	60.1	150/10.3
S-5102-0330	330 g	330 mg–50 g	5	60–120	275.0	60.4	150/10.3

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

Applications and results with SepaFlash® flash columns

SepaFlash® flash columns offer incredible performance over competitive products due to the higher silica gel quality and innovative packing technique.

High Reproducibility with SepaFlash®

SepaFlash® Silica Flash Column 120 g

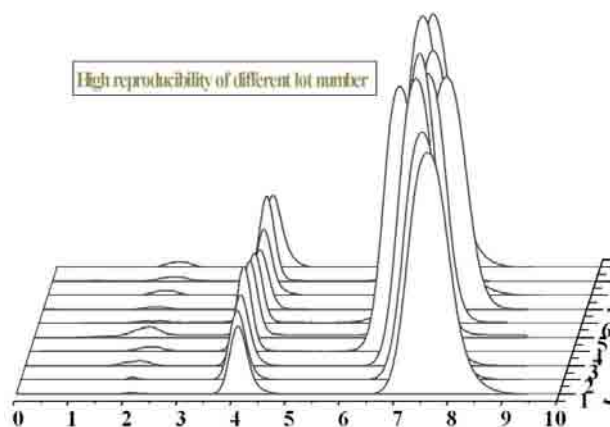
Sample: Acetophenone and P-Methoxyacetophenone

Mobile Phase: 80% hexane and 20% ethyl acetate

Flow Rate: 85 mL/min

Sample Size: 1.5 mL

Wave Length: 254 nm



Better Separations with SepaFlash®

Santai evaluated the performance of the SepaFlash® columns compared to two well-known brands. Results show SepaFlash® outperforms the competitors.

SepaFlash® 120 g Versus Brand A 120 g

Sample: Acetophenone and P-Methoxyacetophenone

Mobile Phase: 80% hexane and 20% ethyl acetate

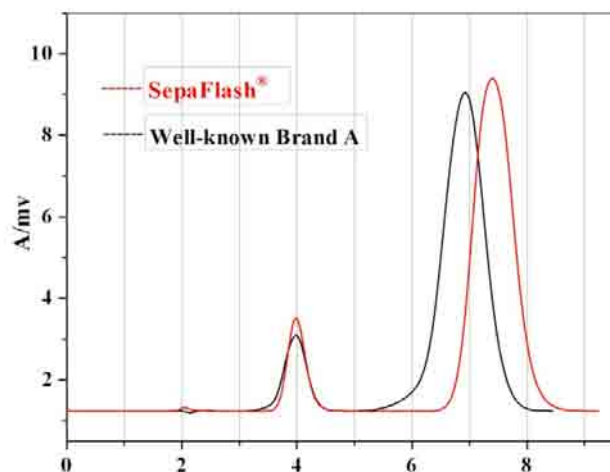
Flow Rate: 85 mL/min

Sample Size: 1.5 mL

Wave Length: 254 nm

Chromatographic Parameters:

Column Size	t _R	N	R _s	T
SepaFlash® 120g	4.0 min	519	3.54	1.13
Brand A 120g	4.0 min	408	0.92	



SepaFlash® 330 g Versus Brand B 340 g

Sample: Acetophenone and P-Methoxyacetophenone

Mobile Phase: 80% hexane and 20% ethyl acetate

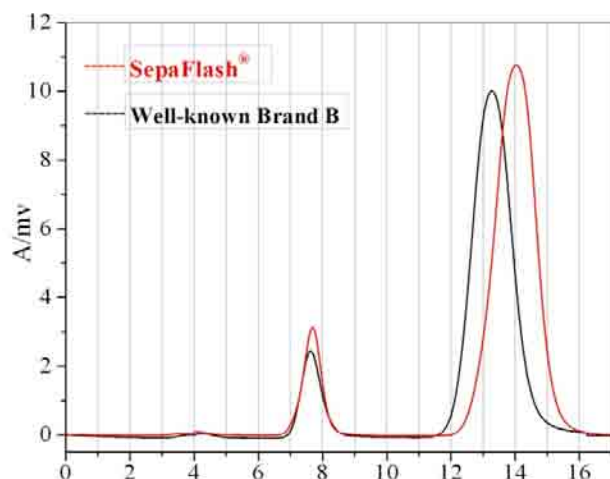
Flow Rate: 120 mL/min

Sample Size: 5 mL

Wave Length: 254 nm

Chromatographic Parameters:

Column Size	t _R	N	R _s	T
SepaFlash® 330g	7.7min	539	3.54	0.97
Brand B 340g	7.6 min	510	3.11	1.11



NEW COLUMN SIZE — 3 kg

SepaFlash[®] columns are now available in a 3 kg column size which could purify up to 300 grams in a single run with the same reliability and reproducibility. The 3 kg flash columns are spin-welded and can stand pressure up to 100 psi. Universal Luer-Lok ending fittings facilitate compatibility with any flash system on the market.

- Reliable, consistent performance from proprietary packing technique
- Reinforced cartridge body with maximum operating pressure up to 100 psi
- Luer-Lok end fittings compatible with any flash system
- Faster purification runs to save time and solvent



UltraPure irregular silica, 40–63 μm , 60 \AA (NEW Product)

(surface area 500 m²/g, pH 6.5–7.5, loading capacity 0.1–10%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-5101-3000	3000 g	3.0 g–300 g	1	200–500	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

Better Separation with SepaFlash[®]

SepaFlash[®] 3 kg Versus Competitor A 3 kg

Sample: Acetophenone and P-Methoxyacetophenone

Mobile Phase: 80% hexane and 20% ethyl acetate

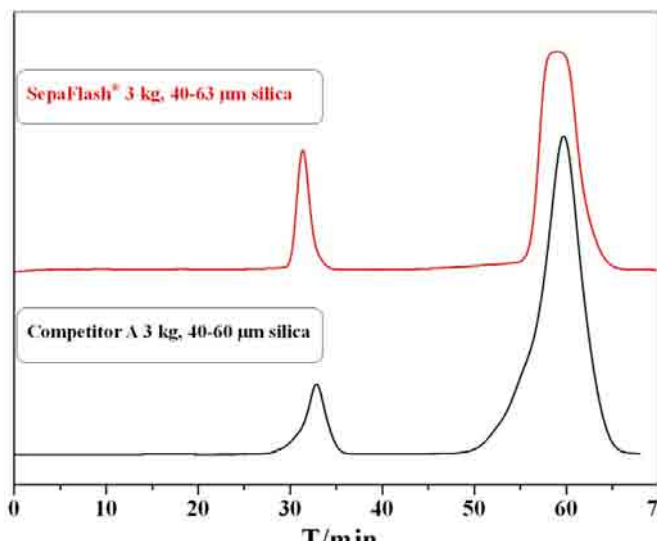
Flow Rate: 250 mL/min

Sample Size: 40 mL

Wave Length: 254 nm

Chromatographic Parameters:

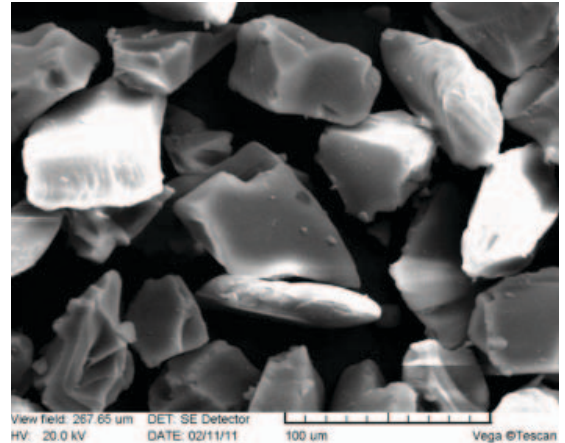
Column Size	t _R	N	R _s	T
SepaFlash [®] 3 kg	31 min	890	5.13	1.20
Competitor A 3 kg	33 min	743	4.00	0.80



The characteristics for UltraPure irregular silica gel

This cost efficient material has an irregular particle shape with smooth edges, a very narrow particle size distribution and the low level of fines offered by Santai, which will optimize your separating power and save your time and money. The irregular silica gel has two kinds of specifications, 40-63 μm and 25-40 μm .

Especially, Santai further develops the stable dry packing technique for irregular 25-40 μm silica, and the pre-packed 25-40 μm silica cartridges will show extraordinary separation ability.



SEM picture of 40-63 μm silica gel

Santai' silica gel also offers these advantages over competitor's products:

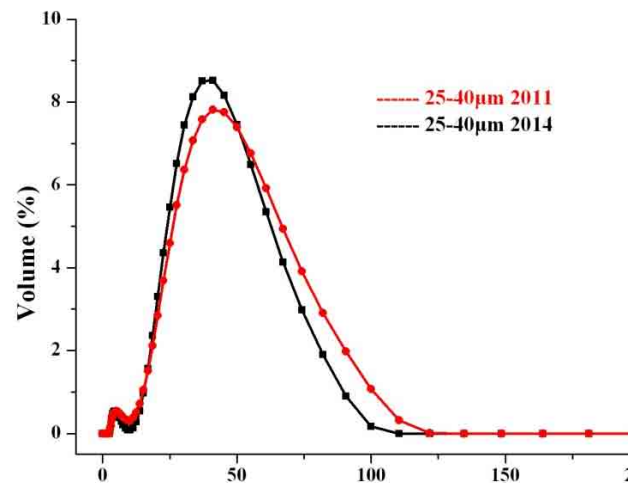
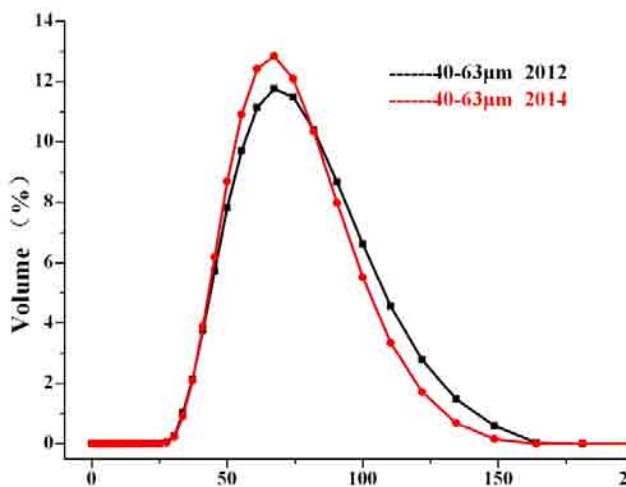
Neutral pH: The pH of Santai's irregular silica gel is kept between 6.5–7.5. A neutral pH is needed to separate pH sensitive compounds.

Stable water content: Water content of silica gel can affect the selectivity of the silica. Santai's irregular silica gel has a controlled water content of 4% to 6%.

High surface area: Higher surface area (500 m^2/g for 60 \AA pore size) provides greater separation power.

Tight particle size distribution and high batch-to-batch reproducibility: A narrower particle size distribution will give a more homogenous packing that will help in collecting more concentrated fractions and reducing solvent consumption, which will lead to cost savings. The high batch-to-batch reproducibility of particle size distribution fundamentally guarantees the excellent separation performance. The details please see the SEM picture and particle size distribution of two batches.

Particle size distribution of two batches for 40-63 μm and 25-40 μm silica gel



E Series

E series flash columns are manufactured with the same cartridges as the standard series (and therefore have all the same great characteristics) but are packed with economical, high-quality silica gel (40–63 μm , 60 Å) or 50–75 μm alumina. Especially, the alumina flash columns are useful when the samples are sensitive and prone to degradation on silica gel. This series represents money savings for everyday purification.



High-quality irregular silica, 40–63 μm , 60 Å

(surface area 500 m^2/g , pH 6.5–7.5, loading capacity 0.1–10%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-8101-0004	4 g	4 mg–0.4 g	20	15–40	105.8	12.4	300/20.7
S-8101-0012	12 g	12 mg–1.2 g	18	30–60	124.5	21.2	300/20.7
S-8101-0025	25 g	25 mg–2.5 g	12	30–60	172.7	21.3	300/20.7
S-8101-0040	40 g	40 mg–4.0 g	12	40–70	176.0	26.7	300/20.7
S-8101-0080	80 g	80 mg–8.0 g	10	50–100	246.8	30.9	200/13.8
S-8101-0120	120 g	120 mg–12 g	10	60–150	264.4	36.2	200/13.8
S-8101-0220	220 g	220 mg–22 g	6	80–220	203.7	60.1	150/10.3
S-8101-0330	330 g	330 mg–33 g	5	80–220	275.0	60.4	150/10.3
S-8101-0800	800 g	800 mg–80 g	3	100–300	382.9	78.2	100/6.9
S-8101-1600	1600 g	1.6 g–160 g	2	200–500	432.4	103.8	100/6.9
S-8101-3000	3000 g	3.0 g–300 g	1	200–500	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-quality alumina, 50–75 μm , 55 Å

(surface area 155 m^2/g , pH: acidic 3.8–4.8, neutral 6.5–7.5, basic 9.0–10.0; loading capacity 0.1–4%)

For acidic alumina, replace “N” with “A” in item number, and for basic alumina with “B”.

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-8601-0004-N	8 g	8 mg–0.32 g	20	10–30	105.8	12.4	300/20.7
S-8601-0012-N	24 g	24 mg–1.0 g	18	15–45	124.5	21.2	300/20.7
S-8601-0025-N	50 g	50 mg–2.0 g	12	15–45	172.7	21.3	300/20.7
S-8601-0040-N	80 g	80 mg–3.2 g	12	20–50	176.0	26.7	300/20.7
S-8601-0080-N	160 g	160 mg–6.4 g	10	30–70	246.8	30.9	200/13.8
S-8601-0120-N	240 g	240 mg–9.6 g	10	40–80	264.4	36.2	200/13.8
S-8601-0220-N	440 g	440 mg–17.6 g	6	50–120	203.7	60.1	150/10.3
S-8601-0330-N	660 g	660 mg–26.4 g	5	50–120	275.0	60.4	150/10.3
S-8601-0800-N	1600 g	1.6 g–64 g	3	100–200	382.9	78.2	100/6.9
S-8601-1600-N	3200 g	3.2 g–128 g	2	150–300	432.4	103.8	100/6.9
S-8601-3000-N	6000 g	6 g–240 g	1	150–300	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

HP Series

HP series flash columns are spin-welded and allow for higher pressure of up to 400 psi. Available adapter facilitates compatibility with any flash system on the market. This series provides Luer-Lok in and Luer-Lok out flexibility for convenient column stacking. When pre-packed high-efficiency silica gel (irregular, 25-40 μm , 60 \AA ; spherical, 20-45 μm , 70 \AA), this series presents an outstanding resolution over conventional flash cartridges.

- Solid, one-piece polypropylene body with thick walls for safety
- Freely choose irregular silica or spherical silica according to your personal preference
- Markedly improved resolution and high load ability
- Spherical silica provides improved performance without increasing the backpressure



UltraPure irregular silica, 40–63 μm , 60 \AA

(surface area 500 m^2/g , pH 6.5–7.5, loading capacity 0.1–10%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5101-004	4 g	4 mg–0.4 g	20	15-40	113.8	12.4	400/27.5
SW-5101-012	12 g	12 mg–1.2 g	18	30-60	134.8	21.4	400/27.5
SW-5101-025	25 g	25 mg–2.5 g	12	30-60	184.0	21.4	400/27.5
SW-5101-040	40 g	40 mg–4.0 g	12	40-70	184.4	26.7	400/27.5
SW-5101-080	80 g	80 mg–8.0 g	10	50-100	257.4	31.2	350/24.0
SW-5101-120	120 g	120 mg–12 g	10	60-150	261.5	38.6	300/20.7
SW-5101-220	220 g	220 mg–22 g	6	80-220	223.5	61.4	300/20.7
SW-5101-330	330 g	330 mg–33 g	5	80-220	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency irregular silica, 25–40 μm , 60 \AA

(surface area 500 m^2/g , pH 6.5–7.5, loading capacity 0.1–15%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5102-004	4 g	4 mg–0.6 g	20	15-30	113.8	12.4	400/27.5
SW-5102-012	12 g	12 mg–1.8 g	18	25-50	134.8	21.4	400/27.5
SW-5102-025	25 g	25 mg–3.8g	12	25-50	184.0	21.4	400/27.5
SW-5102-040	40 g	40 mg–6.0 g	12	30–60	184.4	26.7	400/27.5
SW-5102-080	80 g	80 mg–12 g	10	40–80	257.4	31.2	350/24.0
SW-5102-120	120 g	120 mg–18 g	10	45-90	261.5	38.6	300/20.7
SW-5102-220	220 g	220 mg–33 g	6	60-120	223.5	61.4	300/20.7
SW-5102-330	330 g	330 mg–50 g	5	60-120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure spherical silica, 40–75 µm, 70 Å

(surface area 500 m²/g, pH 6.0–8.0, loading capacity 0.1–10%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-2101-004-SP	4 g	4 mg–0.4 g	20	15–40	113.8	12.4	400/27.5
SW-2101-012-SP	12 g	12 mg–1.2 g	18	30–60	134.8	21.4	400/27.5
SW-2101-025-SP	25 g	25 mg–2.5 g	12	30–60	184.0	21.4	400/27.5
SW-2101-040-SP	40 g	40 mg–4.0 g	12	40–70	184.4	26.7	400/27.5
SW-2101-080-SP	80 g	80 mg–8.0 g	10	50–100	257.4	31.2	350/24.0
SW-2101-120-SP	120 g	120 mg–12 g	10	60–150	261.5	38.6	300/20.7
SW-2101-220-SP	220 g	220 mg–22 g	6	80–220	223.5	61.4	300/20.7
SW-2101-330-SP	330 g	330 mg–33 g	5	80–220	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical silica, 20–45 µm, 70 Å

(surface area 500 m²/g, pH 6.0–8.0, loading capacity 0.1–15%)

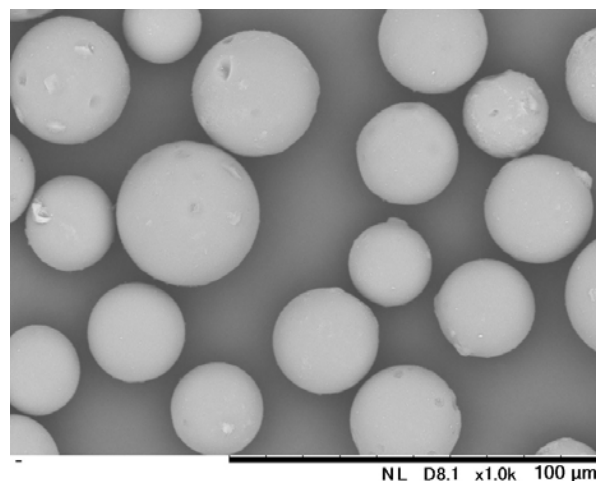
Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-2102-004-SP	4 g	4 mg–0.6 g	20	15–30	113.8	12.4	400/27.5
SW-2102-012-SP	12 g	12 mg–1.8 g	18	25–50	134.8	21.4	400/27.5
SW-2102-025-SP	25 g	25 mg–3.8g	12	25–50	184.0	21.4	400/27.5
SW-2102-040-SP	40 g	40 mg–6.0 g	12	30–60	184.4	26.7	400/27.5
SW-2102-080-SP	80 g	80 mg–12 g	10	40–80	257.4	31.2	350/24.0
SW-2102-120-SP	120 g	120 mg–18 g	10	45–90	261.5	38.6	300/20.7
SW-2102-220-SP	220 g	220 mg–33 g	6	60–120	223.5	61.4	300/20.7
SW-2102-330-SP	330 g	330 mg–50 g	5	60–120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

The benefits for spherical silica gel

For spherical silica gel, strict quality controls from raw material to finished product ensure high lot-to-lot reproducibility and tightly controlled specifications.

- Consistency reliability, reproducibility
- No contamination, lower backpressure
- Superior separation
- Symmetrical peaks with no tailing
- Greater loading capacity



SEM picture of q20–45 µm
spherical silica gel

SepaFlash® column stacking to improve resolution of normal phase flash chromatography

Purification of compounds that are difficult to separate by flash chromatography ($\Delta R_f \leq 0.2$ between spots on TLC) often results in additional steps such as subsequent purification by preparative scale HPLC. It is possible to reduce the amount of additional work required for purification by simply stacking several prepacked SepaFlash® columns end to end on a flash chromatography system.



In liquid chromatography, chemical species are separated on the basis of their difference in velocity as they move through the column. Increasing column length can significantly increase resolution. By stacking columns end to end the length to diameter (L to D) ratio is increased so that no major changes to the media and solvent system are necessary. Often this increased L to D is sufficient to provide successful separation of difficult mixtures due to close compounds retention time that is not obtained on a single column. The data illustrates the linear relationship between of resolution and overall column length.

Columns: SepaFlash® flash columns, 25 g
Item number: SW-5102-025
Sample: Acetophenone and P-Methoxyacetophenone
Mobile Phase: 80% hexane and 20% ethyl acetate
Flow Rate: 20 mL/min
Sample Size: One 25g 0.25 mL
 Two 25g stacked 0.50 mL
 Three 25g stacked 0.75 mL
 Four 25g stacked 1.00 mL
 Five 25g stacked 1.25 mL

Wave Length: 254 nm

Observed Chromatographic Parameters:

Column Size	t _{R1} (Peak 1)	t _{R2} (Peak 2)	N	R _s	T
One 25g	3.7 min	6.5 min	1075	4.42	1.11
Two 25g	7.3 min	13.1 min	1770	6.02	1.10
Three 25g	11.0 min	19.8 min	1832	6.41	1.23
Four 25g	15.1 min	27.0 min	1902	6.51	1.20
Five 25g	19.0 min	34.2 min	2183	7.13	1.29

Table 1: Experimental parameters and results

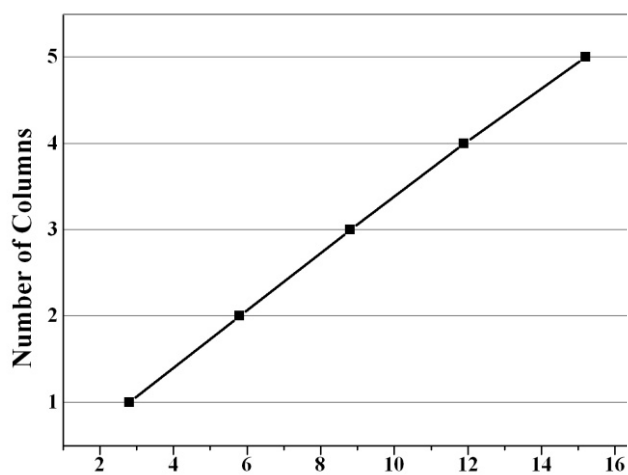


Figure 1: Linear relationship between number of stacked columns and peak-to-peak resolution times

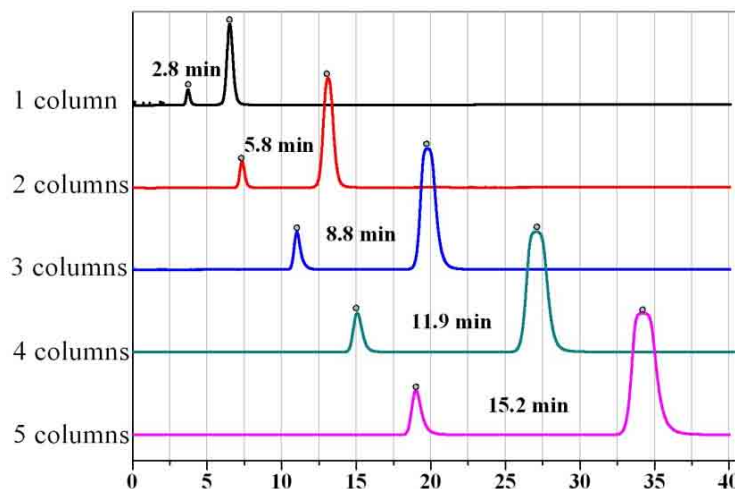


Figure 2: Peak-to-peak resolution of multiple stacked 25 g columns

HP Series - High-capacity spherical silica gel

The Highest Purification Performance Available

HP series flash columns are precisely manufactured with high-capacity silica gel, and deliver the highest purification performance available. The high-capacity spherical silica has 40% higher surface area, doubling the loading capacity of lower surface area silica.

- High-capacity silica with 40% more surface area
- Higher loading means smaller, faster and cheaper cartridges can be used for any separation
- Less solvent required
- The highest peak resolution



High-capacity spherical silica, 25 μm , 50 \AA (NEW Product)

(surface area 700 m^2/g , pH 5.0–8.0, loading capacity 0.1–30%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-2102-004-SP(H)	4 g	4 mg–1.2 g	20	15-30	113.8	12.4	400/27.5
SW-2102-012-SP(H)	12 g	12 mg–3.6 g	18	25-50	134.8	21.4	400/27.5
SW-2102-025-SP(H)	25 g	25 mg–7.5g	12	25-50	184.0	21.4	400/27.5
SW-2102-040-SP(H)	40 g	40 mg–12 g	12	30-60	184.4	26.7	400/27.5
SW-2102-080-SP(H)	80 g	80 mg–24 g	10	40-80	257.4	31.2	350/24.0
SW-2102-120-SP(H)	120 g	120 mg–36 g	10	45-90	261.5	38.6	300/20.7
SW-2102-220-SP(H)	220 g	220 mg–66 g	6	60-120	223.5	61.4	300/20.7
SW-2102-330-SP(H)	330 g	330 mg–99 g	5	60-120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-capacity spherical silica, 15 μm , 50 \AA (NEW Product)

(surface area 700 m^2/g , pH 5.0–8.0, loading capacity 0.1–30%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-2103-004-SP(H)	4 g	4 mg–1.2 g	20	15-30	113.8	12.4	400/27.5
SW-2103-012-SP(H)	12 g	12 mg–3.6 g	18	25-50	134.8	21.4	400/27.5
SW-2103-025-SP(H)	25 g	25 mg–7.5g	12	25-50	184.0	21.4	400/27.5
SW-2103-040-SP(H)	40 g	40 mg–12 g	12	30-60	184.4	26.7	400/27.5
SW-2103-080-SP(H)	80 g	80 mg–24 g	10	40-80	257.4	31.2	350/24.0
SW-2103-120-SP(H)	120 g	120 mg–36 g	10	45-90	261.5	38.6	300/20.7
SW-2103-220-SP(H)	220 g	220 mg–66 g	6	60-120	223.5	61.4	300/20.7
SW-2103-330-SP(H)	330 g	330 mg–99 g	5	60-120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

Applications and results with SepaFlash® high-capacity spherical silica gel

Cartridges pre-packed with high-capacity silica gel (700 m²/g for 50 Å pore size) deliver the highest purification performance available. The high-capacity 25 µm or 15 µm spherical silica has 40% higher surface area, doubling the loading capacity of lower surface area silica. Santai evaluated the performance of the SepaFlash® columns compared to two well-known brands. Results show SepaFlash® outperforms the competitors.

Better Separations with SepaFlash®

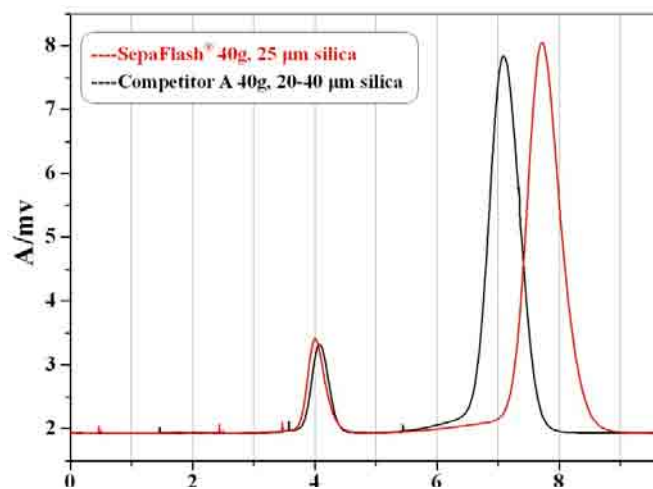
SepaFlash® 40g Versus Competitor A 40g

Sample: Acetophenone and P-Methoxyacetophenone

Mobile Phase: 80% hexane and 20% ethyl acetate

Sample Size: 0.35 mL

Wave Length: 254 nm



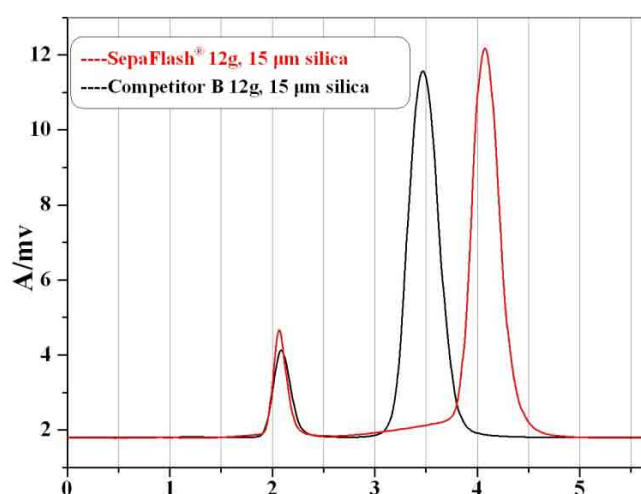
SepaFlash® 12g Versus Competitor B 12g

Sample: Acetophenone and P-Methoxyacetophenone

Mobile Phase: 80% hexane and 20% ethyl acetate

Sample Size: 0.20 mL

Wave Length: 254 nm



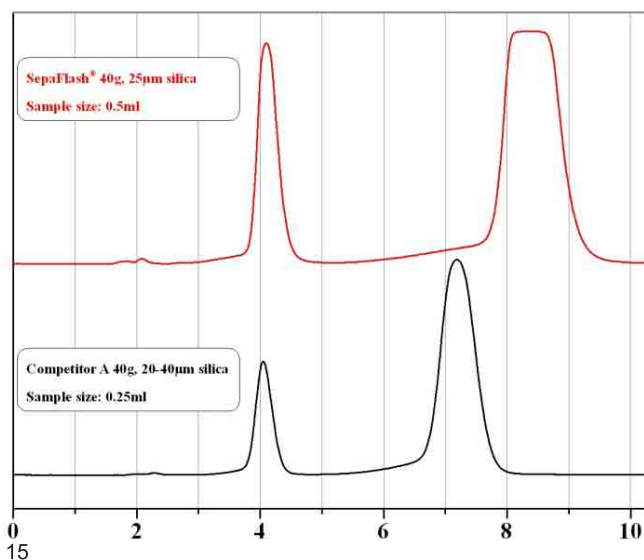
Double Loading Capacity with SepaFlash®

SepaFlash® 40g Versus Competitor A 40g

Sample: Acetophenone and P-Methoxyacetophenone
30mg/mL

Mobile Phase: 80% hexane and 20% ethyl acetate

Wave Length: 254 nm

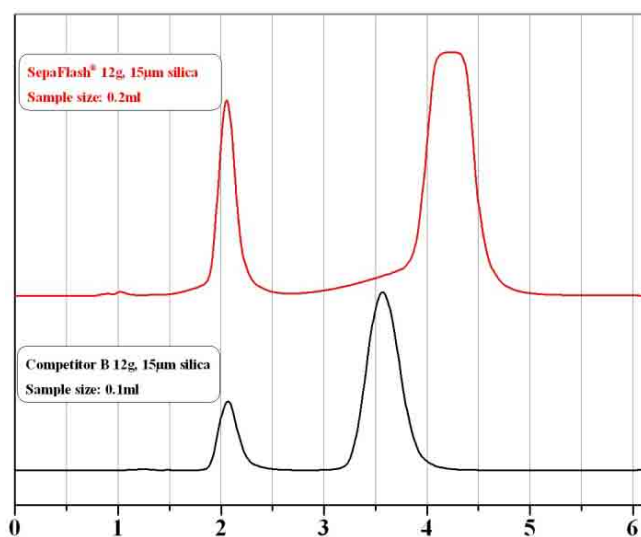


SepaFlash® 12g Versus Competitor B 12g

Sample: Acetophenone and P-Methoxyacetophenone
30mg/mL

Mobile Phase: 80% hexane and 20% ethyl acetate

Wave Length: 254 nm



Bonded Series – 16 kinds of bonded silica

Bonded series flash columns are manufactured with the same cartridges as the HP series but are packed with UltraPure, high-quality, high-efficiency bonded silica. This series offers a wide variety of sorbents to better satisfy the requirements for different users.



- Available in a wide variety of specifications
- Improved pressure rated up to 400 psi
- Reusability: 20 times (average)
- Economical substitute for preparative HPLC
- Meet a variety of needs for specific purifications

Irregular Family	<ul style="list-style-type: none"> • Irregular C18, 40-63 μm, 60 \AA • Irregular C18, 40-63 μm, 90 \AA • Irregular NH₂, 40-63 μm, 60 \AA • Irregular SAX, 40-63 μm, 60 \AA • Irregular SCX, 40-63 μm, 60 \AA
Hemispherical Family	<ul style="list-style-type: none"> • Hemispherical C18, 50 μm, 90 \AA
Spherical Family	<ul style="list-style-type: none"> • Spherical C18, 40-63 μm, 120 \AA • Spherical C18, 30-50 μm, 120 \AA • Spherical C18, 40-75 μm, 100 \AA • Spherical C18, 20-45 μm, 100 \AA • Spherical C18, 15 μm, 100 \AA • Spherical CN, 20-45 μm, 100 \AA • Spherical C4, 20-45 μm, 100 \AA • Spherical C8, 20-45 μm, 100 \AA • Spherical Diol, 20-45 μm, 100 \AA • Spherical ARG, 20-45 μm, 100 \AA
Notes: The detailed specification please sees the ordering information.	

UltraPure irregular C18, 40-63 μm , 60 \AA

(carbon content 17%, end-capping, surface area 500 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5201-004-IR	5.9 g	5.9 mg–118 mg	2	10–20	113.8	12.4	400/27.5
SW-5201-012-IR	23 g	23 mg–0.46 g	1	15–30	134.8	21.4	400/27.5
SW-5201-025-IR	38 g	38 mg–0.76 g	1	15–30	184.0	21.4	400/27.5
SW-5201-040-IR	55 g	55 mg–1.1 g	1	20–40	184.4	26.7	400/27.5
SW-5201-080-IR	122 g	122 mg–2.5 g	1	30–60	257.4	31.2	350/24.0
SW-5201-120-IR	180 g	180 mg–3.6 g	1	40–80	261.5	38.6	300/20.7
SW-5201-220-IR	340 g	340 mg–6.8 g	1	50–100	223.5	61.4	300/20.7
SW-5201-330-IR	475 g	475 mg–9.5 g	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure irregular C18, 40-63 μm , 90 \AA

(carbon content 15%, end-capping, surface area 400 m^2/g , loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5211-004-IR	5.2 g	5.2 mg–104 mg	2	10–20	113.8	12.4	400/27.5
SW-5211-012-IR	20 g	20 mg–0.40g	1	15–30	134.8	21.4	400/27.5
SW-5211-025-IR	33 g	33 mg–0.66 g	1	15–30	184.0	21.4	400/27.5
SW-5211-040-IR	48 g	48 mg–0.96 g	1	20–40	184.4	26.7	400/27.5
SW-5211-080-IR	105 g	105 mg–2.1 g	1	30–60	257.4	31.2	350/24.0
SW-5211-120-IR	155 g	155 mg–3.1 g	1	40–80	261.5	38.6	300/20.7
SW-5211-220-IR	295 g	295 mg–5.9 g	1	50–100	223.5	61.4	300/20.7
SW-5211-330-IR	420 g	420 mg–8.4g	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure hemispherical C18, 50 μm , 90 \AA

(carbon content 17%, end-capping, surface area 400 m^2/g , loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5211-004-SS	5 g	5 mg–100 mg	2	10–20	113.8	12.4	400/27.5
SW-5211-012-SS	19 g	19 mg–0.38 g	1	15–30	134.8	21.4	400/27.5
SW-5211-025-SS	32 g	32 mg–0.64 g	1	15–30	184.0	21.4	400/27.5
SW-5211-040-SS	46 g	46 mg–0.92 g	1	20–40	184.4	26.7	400/27.5
SW-5211-080-SS	100 g	100 mg–2.0 g	1	30–60	257.4	31.2	350/24.0
SW-5211-120-SS	150 g	150 mg–3.0 g	1	40–80	261.5	38.6	300/20.7
SW-5211-220-SS	280 g	280 mg–5.6 g	1	50–100	223.5	61.4	300/20.7
SW-5211-330-SS	395 g	395 mg–7.9 g	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure spherical C18, 40-60 μm , 120 \AA

(carbon content 17%, end-capping, surface area 300 m^2/g , loading capacity 0.1–1.5%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5231-004-SP	4.5 g	4.5 mg–68 mg	2	10–20	113.8	12.4	400/27.5
SW-5231-012-SP	18 g	18 mg–0.27 g	1	15–30	134.8	21.4	400/27.5
SW-5231-025-SP	28 g	28 mg–0.42 g	1	15–30	184.0	21.4	400/27.5
SW-5231-040-SP	40 g	40 mg–0.60 g	1	20–40	184.4	26.7	400/27.5
SW-5231-080-SP	90 g	90 mg–1.35 g	1	30–60	257.4	31.2	350/24.0
SW-5231-120-SP	130 g	130 mg–1.95 g	1	40–80	261.5	38.6	300/20.7
SW-5231-220-SP	245 g	245 mg–3.68 g	1	50–100	223.5	61.4	300/20.7
SW-5231-330-SP	350 g	350 mg–5.25 g	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical C18, 30-50 μm , 120 Å

(carbon content 17%, end-capping, surface area 300 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5232-004-SP	4.3 g	4.3 mg–86 mg	2	5–15	113.8	12.4	400/27.5
SW-5232-012-SP	16 g	16 mg–0.32 g	1	10–25	134.8	21.4	400/27.5
SW-5232-025-SP	26 g	26 mg–0.52 g	1	10–25	184.0	21.4	400/27.5
SW-5232-040-SP	39 g	39 mg–0.78 g	1	15–30	184.4	26.7	400/27.5
SW-5232-080-SP	85 g	85 mg–1.7 g	1	20–50	257.4	31.2	350/24.0
SW-5232-120-SP	125 g	125 mg–2.5 g	1	30–60	261.5	38.6	300/20.7
SW-5232-220-SP	240 g	240 mg–4.8 g	1	40–80	223.5	61.4	300/20.7
SW-5232-330-SP	335 g	335 mg–6.7 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure spherical C18, 40-75 μm , 100 Å

(carbon content 17%, end-capping, surface area 300 m²/g, loading capacity 0.1–1.5%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5221-004-SP	4.6 g	4.6 mg–69 mg	2	10–20	113.8	12.4	400/27.5
SW-5221-012-SP	18 g	18 mg–0.27 g	1	15–30	134.8	21.4	400/27.5
SW-5221-025-SP	30 g	30 mg–0.45 g	1	15–30	184.0	21.4	400/27.5
SW-5221-040-SP	43 g	43mg–0.65 g	1	20–40	184.4	26.7	400/27.5
SW-5221-080-SP	95 g	95 mg–1.43 g	1	30–60	257.4	31.2	350/24.0
SW-5221-120-SP	142 g	142 mg–2.13 g	1	40–80	261.5	38.6	300/20.7
SW-5221-220-SP	265 g	265 mg–3.98 g	1	50–100	223.5	61.4	300/20.7
SW-5221-330-SP	385 g	385 mg–5.78 g	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical C18, 20-45 μm , 100 Å

(carbon content 17%, end-capping, surface area 320 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5222-004-SP	5.4 g	5.4 mg–108 mg	2	5–15	113.8	12.4	400/27.5
SW-5222-012-SP	20 g	20 mg–0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5222-025-SP	33 g	33 mg–0.66 g	1	10–25	184.0	21.4	400/27.5
SW-5222-040-SP	48 g	48mg–0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5222-080-SP	105 g	105 mg–2.1g	1	20–50	257.4	31.2	350/24.0
SW-5222-120-SP	155 g	155 mg–3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5222-220-SP	300 g	300 mg–6.0 g	1	40–80	223.5	61.4	300/20.7
SW-5222-330-SP	420 g	420 mg–8.4 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical C18, 15 µm, 100 Å

(carbon content 17%, end-capping, surface area 320 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5223-004-SP	5.4 g	5.4 mg–108 mg	2	5–15	113.8	12.4	400/27.5
SW-5223-012-SP	20 g	20 mg–0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5223-025-SP	33 g	33 mg–0.66 g	1	10–25	184.0	21.4	400/27.5
SW-5223-040-SP	48 g	48 mg–0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5223-080-SP	105 g	105 mg–2.1 g	1	20–50	257.4	31.2	350/24.0
SW-5223-120-SP	155 g	155 mg–3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5223-220-SP	290 g	290 mg–5.8 g	1	40–80	223.5	61.4	300/20.7
SW-5223-330-SP	410 g	410 mg–8.2 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical CN, 20-45 µm, 100 Å

(carbon content 5.5%, end-capping, surface area 320 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5322-004-SP	5.4 g	5.4 mg–108 mg	2	5–15	113.8	12.4	400/27.5
SW-5322-012-SP	20 g	20 mg–0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5322-025-SP	33 g	33 mg–0.66 g	1	10–25	184.0	21.4	400/27.5
SW-5322-040-SP	48 g	48 mg–0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5322-080-SP	105 g	105 mg–2.1 g	1	20–50	257.4	31.2	350/24.0
SW-5322-120-SP	155 g	155 mg–3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5322-220-SP	300 g	300 mg–6.0 g	1	40–80	223.5	61.4	300/20.7
SW-5322-330-SP	420 g	420 mg–8.4 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical C4, 20-45 µm, 100 Å

(carbon content 5.8%, end-capping, surface area 320 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5422-004-SP	5.4 g	5.4 mg–108 mg	2	5–15	113.8	12.4	400/27.5
SW-5422-012-SP	20 g	20 mg–0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5422-025-SP	33 g	33 mg–0.66 g	1	10–25	184.0	21.4	400/27.5
SW-5422-040-SP	48 g	48 mg–0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5422-080-SP	105 g	105 mg–2.1 g	1	20–50	257.4	31.2	350/24.0
SW-5422-120-SP	155 g	155 mg–3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5422-220-SP	300 g	300 mg–6.0 g	1	40–80	223.5	61.4	300/20.7
SW-5422-330-SP	420 g	420 mg–8.4 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical C8, 20-45 μm , 100 Å

(carbon content 7%, end-capping, surface area 320 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5822-004-SP	5.4 g	5.4 mg–108 mg	2	5–15	113.8	12.4	400/27.5
SW-5822-012-SP	20 g	20 mg–0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5822-025-SP	33 g	33 mg–0.66 g	1	10–25	184.0	21.4	400/27.5
SW-5822-040-SP	48 g	48 mg–0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5822-080-SP	105 g	105 mg–2.1 g	1	20–50	257.4	31.2	350/24.0
SW-5822-120-SP	155 g	155 mg–3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5822-220-SP	300 g	300 mg–6.0 g	1	40–80	223.5	61.4	300/20.7
SW-5822-330-SP	420 g	420 mg–8.4 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical Diol, 20-45 μm , 100 Å

(carbon content 5%, end-capping, surface area 320 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5922-004-SP	5.4 g	5.4 mg–108 mg	2	5–15	113.8	12.4	400/27.5
SW-5922-012-SP	20 g	20 mg–0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5922-025-SP	33 g	33 mg–0.66 g	1	10–25	184.0	21.4	400/27.5
SW-5922-040-SP	48 g	48 mg–0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5922-080-SP	105 g	105 mg–2.1 g	1	20–50	257.4	31.2	350/24.0
SW-5922-120-SP	155 g	155 mg–3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5922-220-SP	300 g	300 mg–6.0 g	1	40–80	223.5	61.4	300/20.7
SW-5922-330-SP	420 g	420 mg–8.4 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure irregular NH₂, 40-63 μm , 60 Å

(amino content 1.3 mmol/g, end-capping, surface area 500 m²/g, loading capacity 0.1–2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5501-004-IR	5.9 g	5.9 mg–118 mg	2	10–20	113.8	12.4	400/27.5
SW-5501-012-IR	23 g	23 mg–0.46 g	1	15–30	134.8	21.4	400/27.5
SW-5501-025-IR	38 g	38 mg–0.76 g	1	15–30	184.0	21.4	400/27.5
SW-5501-040-IR	55 g	55 mg–1.1 g	1	20–40	184.4	26.7	400/27.5
SW-5501-080-IR	122 g	122 mg–2.5 g	1	30–60	257.4	31.2	350/24.0
SW-5501-120-IR	180 g	180 mg–3.6 g	1	40–80	261.5	38.6	300/20.7
SW-5501-220-IR	340 g	340 mg–6.8 g	1	50–100	223.5	61.4	300/20.7
SW-5501-330-IR	475 g	475 mg–9.5 g	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure irregular SAX, 40-63 μm , 60 \AA

(carbon content 8%, surface area 500 m^2/g , ion-exchange capacity ≤ 0.26 meq/g)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5001-004-IR	5.9 g	≤ 1.53 meq	2	10–20	113.8	12.4	400/27.5
SW-5001-012-IR	23 g	≤ 5.98 meq	1	15–30	134.8	21.4	400/27.5
SW-5001-025-IR	38 g	≤ 9.88 meq	1	15–30	184.0	21.4	400/27.5
SW-5001-040-IR	55 g	≤ 14.30 meq	1	20–40	184.4	26.7	400/27.5
SW-5001-080-IR	122 g	≤ 31.72 meq	1	30–60	257.4	31.2	350/24.0
SW-5001-120-IR	180 g	≤ 46.80 meq	1	40–80	261.5	38.6	300/20.7
SW-5001-220-IR	340 g	≤ 88.40 meq	1	50–100	223.5	61.4	300/20.7
SW-5001-330-IR	475 g	≤ 123.50 meq	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

UltraPure irregular SCX, 40-63 μm , 60 \AA

(carbon content 10%, surface area 500 m^2/g , ion-exchange capacity ≤ 0.34 meq/g)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5701-004-IR	5.9 g	≤ 2.01 meq	2	10–20	113.8	12.4	400/27.5
SW-5701-012-IR	23 g	≤ 7.82 meq	1	15–30	134.8	21.4	400/27.5
SW-5701-025-IR	38 g	≤ 12.92 meq	1	15–30	184.0	21.4	400/27.5
SW-5701-040-IR	55 g	≤ 18.70 meq	1	20–40	184.4	26.7	400/27.5
SW-5701-080-IR	122 g	≤ 41.48 meq	1	30–60	257.4	31.2	350/24.0
SW-5701-120-IR	180 g	≤ 61.20 meq	1	40–80	261.5	38.6	300/20.7
SW-5701-220-IR	340 g	≤ 115.60 meq	1	50–100	223.5	61.4	300/20.7
SW-5701-330-IR	475 g	≤ 161.50 meq	1	50–100	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

NEW! High-efficiency spherical ARG, 20-45 μm , 100 \AA

(carbon content 8%, surface area 320 m^2/g , loading capacity 0.1-2%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-5622-004-SP	5.4 g	5.4 mg-108 mg	2	5–15	113.8	12.4	400/27.5
SW-5622-012-SP	20 g	20 mg-0.40 g	1	10–25	134.8	21.4	400/27.5
SW-5622-025-SP	33 g	33 mg-0.66 g	1	10–25	184	21.4	400/27.5
SW-5622-040-SP	48 g	48 mg-0.96 g	1	15–30	184.4	26.7	400/27.5
SW-5622-080-SP	105 g	105 mg-2.1 g	1	20–50	257.4	31.2	350/24.0
SW-5622-120-SP	155 g	155 mg-3.1 g	1	30–60	261.5	38.6	300/20.7
SW-5622-220-SP	270 g	300 mg-6.0 g	1	40–80	223.5	61.4	300/20.7
SW-5622-330-SP	420 g	420 mg-8.4 g	1	40–80	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

iLOK™ Series

SepaFlash® iLOK™ flash cartridges offer users convenience for manual assembly, allowing for a flexible sample loading method: solid load and direct liquid injection. The series is offered in three formats: iLOK™ flash cartridge pre-packed with UltraPure silica gel (40–63 µm, 60 Å), iLOK™-SL cartridge and iLOK™ empty solid load cartridge with screw cap, frits, disbursing unit, O-ring and end tips.



- Innovative column design convenient for manual assembly and column stacking
- Available in wide range of cartridge sizes for any situation
- Reinforced cartridge body with maximum operating pressure up to 200 psi

iLOK™ Flash Cartridges (pre-packed, UltraPure irregular silica, 40–63 µm, 60 Å)

(surface area 500 m²/g, pH 6.5–7.5, loading capacity 0.1–10%)

Item Number	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SD-5101-004	4 g	4 mg–0.4 g	20	15–40	115.1	12.8	200/13.8
SD-5101-012	12 g	12 mg–1.2 g	18	30–60	137.8	21.4	200/13.8
SD-5101-025	25 g	25 mg–2.5g	12	30–60	188.2	21.6	200/13.8
SD-5101-040	40 g	40 mg–4.0 g	12	40–70	188.7	26.8	200/13.8
SD-5101-060	60 g	60 mg–6.0 g	12	60–150	173.3	36.6	200/13.8
SD-5101-080	80 g	80 mg–8.0g	10	50–100	263.5	31.2	200/13.8
SD-5101-100	100 g	100 mg–10 g	6	80–220	146.6	60.4	150/10.3
SD-5101-120	120 g	120 mg–12 g	10	60–150	277.7	36.6	200/13.8
SD-5101-220	220 g	220 mg–22 g	6	80–220	218.5	60.6	150/10.3
SD-5101-330	330 g	330 mg–33 g	5	80–220	271.6	60.6	150/10.3

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

iLOK™ Empty Solid Load Cartridges

(iLOK™ empty solid load cartridge with screw cap, frits, disbursing unit, O-ring and end tips.)

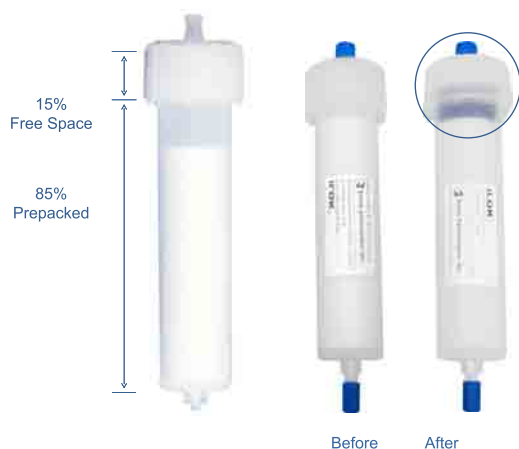
Item Number	Description	Units/Box	Volume (mL)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SD-0000-004	Empty solid load cartridge, 4 g	optional	8	115.1	12.8	200/13.8
SD-0000-012	Empty solid load cartridge, 12 g	optional	27	137.8	21.4	200/13.8
SD-0000-025	Empty solid load cartridge, 25 g	optional	46	188.2	21.6	200/13.8
SD-0000-040	Empty solid load cartridge, 40 g	optional	70	188.7	26.8	200/13.8
SD-0000-060	Empty solid load cartridge, 60 g	optional	104	173.3	36.6	200/13.8
SD-0000-080	Empty solid load cartridge, 80 g	optional	147	263.5	31.2	200/13.8
SD-0000-100	Empty solid load cartridge, 100 g	optional	176	146.6	60.4	150/10.3
SD-0000-120	Empty solid load cartridge, 120 g	optional	215	277.7	36.6	200/13.8
SD-0000-220	Empty solid load cartridge, 220 g	optional	377	218.5	60.6	150/10.3
SD-0000-330	Empty solid load cartridge, 330 g	optional	539	271.6	60.6	150/10.3

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

Configurations for solid loading

Solid sample loading is a useful technique to load sample to be purified onto a column, particularly in the case of low-solubility samples. On this occasion, iLOK™ flash cartridge is a very suitable choice.

The sample is dissolved in a suitable solvent and absorbed onto diatomaceous earth. After removal of the residual solvent, the adsorbent is put on top of partly filled cartridge or into an empty cartridge.



Configurations 1: iLOK™-SL Cartridges

85% pre-packed with silica gel
15% free space for solid loading



Configurations 2: Empty iLOK™ Cartridge

100% pre-packed with silica gel. Put the pre-adsorbed sample media into an empty cartridge

Optional accessories and bulk silica gel

iLOK™ empty solid load cartridge with screw cap, frits, disbursing unit, O-ring and end tips with optional bulk silica gel.

NEW! iLOK™-SL Cartridges

NEW iLOK™-SL (Solid-Load) Openable Columns (Twist-Cap) for Solid Loading with 15% Free Space on the Top!

Flexibility and Performance

iLOK™-SL Cartridges offer users convenience for manual assembly, allowing for flexible sample loading methods: solid loading and direct liquid injection. The unique, proprietary dry packing technique guarantees high resolution and reproducibility for everyday purifications.



15% Free Space for Solid Loading

Versatile and Safe

iLOK™-SL Cartridges are available in wide range of cartridge sizes for any situation (3.5 g, 10 g, 20 g, 35 g, 70 g, 100 g, 185 g, 280 g), allowing purification from milligram to dozens of grams. They are packed with UltraPure silica (irregular silica or spherical), alumina, C18, C8, C4, DIOL, CN, NH₂, SAX, SCX or ARG, better satisfying the requirements for different users. Reinforced cartridge body allows for higher pressure of up to 200 psi, fully compatible with any flash system on the market.

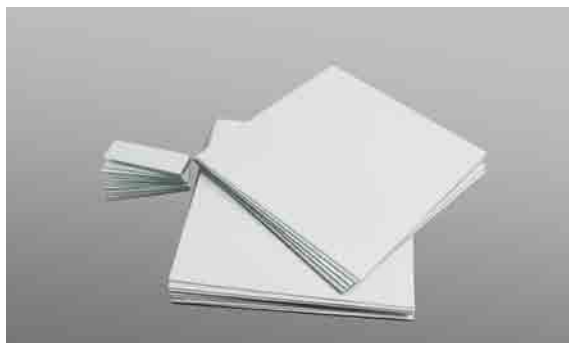
Advantages

- Universal fittings
- Flexible sample loading options
- Improved pressure rated up to 200 psi
- Innovative design convenient for manual assembly
- Higher peak resolution than competitive cartridges

More information, please visit our website at www.santaitech.com.

SepaFlash® TLC Plates

SepaFlash® TLC plates are made of high-quality media, which exactly matches the sorbents used in SepaFlash® flash columns. This combination provides the user with confidence and increased reproducibility in method development. The plates are coated by the modern equipments, and offer highly increased sensitivity and faster analysis.



Silica Particle Size	6-10 µm
Layer Thickness	200 µm
pH Value	6.2-6.8
Adhesion Strength	Can mark with pencil and cut with glass cutter.
Anti-interference Ability	Resistance to concentrated sulfuric acid or potassium permanganate.
Separation Effects	Effective separation of standard three dye mixture.

Notes: Storage of TLC plates must keep away from moisture and pollutants. As preferred, use TLC plates after activation.

Item Number	Description	Units/Box
TL-8103-2101	High performance silica TLC plate, glass backed, F254, 25*80 mm	320
TL-8103-2106	High performance silica TLC plate, glass backed, F254, 200*200 mm	20
TL-8103-2116	High performance silica TLC plate, aluminum sheet, F254, 200*200 mm	20
TL-8601-2106-N	Neutral alumina TLC plate, glass backed, F254, 200*200 mm	20
TL-8601-2101-N	Neutral alumina TLC plate, glass backed, F254, 25*80 mm	320
TL-8601-2106-B	Basic alumina TLC plate, glass backed, F254, 200*200 mm	20
TL-8601-2101-B	Basic alumina TLC plate, glass backed, F254, 25*80 mm	320

Optimizing Flash Chromatography Purification

Thin Layer Chromatography (TLC) is often performed on crude reaction mixtures to determine optimal conditions for purification by flash chromatography.

(1) Solvent Composition Selection and Strength Adjustment

The optimal solvent composition can be achieved by using different binary eluent which may possess same solvent strength but have different R_f value for the same pair of compounds. After the optimal solvent composition was found, the solvent strength had to be optimized. The optimal eluent strength is established by adjusting the different ratio to keep the R_f value in the range of 0.15 to 0.4.

(2) Band Tailing Improvement

The band tailing can be improved by adding more polar solvent into the solvent system or slightly changing the pH of the system, until the spots on the TLC plate become flat shape and no longer strip-shaped.

(3) Column Selection and Loading Capacity

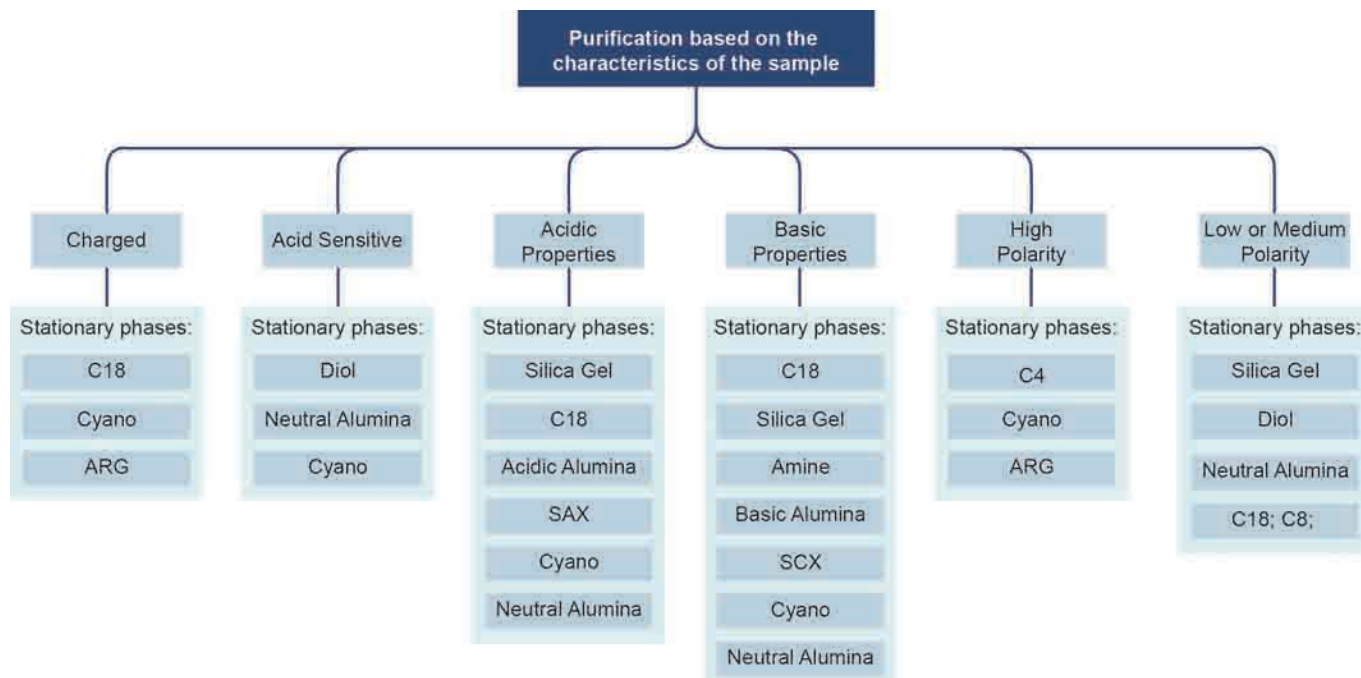
The column selection can be determined by the ratio of R_f value of border upon compounds. Smaller R_f with larger ratio of R_f value means a short column or larger sample size is preferred.

SepaFlash® Flash Columns Product List

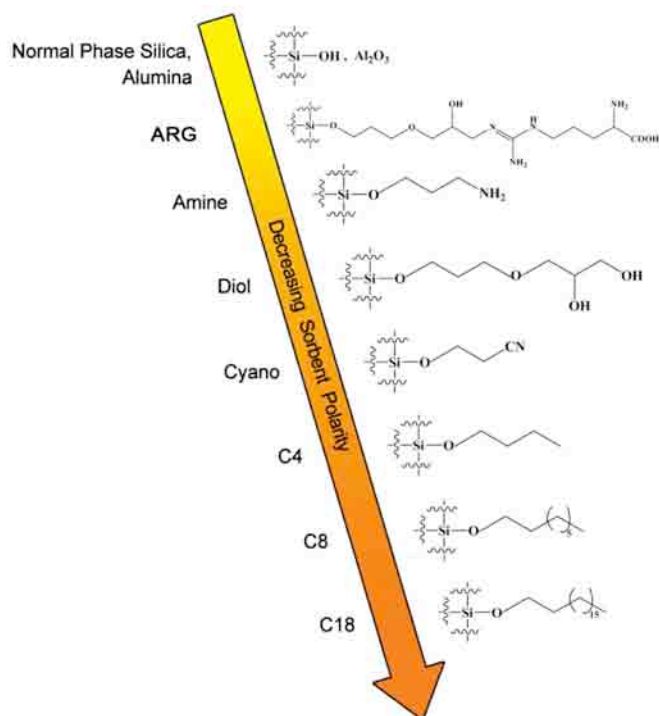
	Products Characteristics	Standard Series (Max. Pressure 300 psi)	iLok™ Series (pre-packed) (Max. Pressure 200 psi)	E Series (Max. Pressure 300 psi)	HP Series (Max. Pressure 400 psi)	Bonded Series (Max. Pressure 400 psi)
Media packed	Irregular silica (40-63 µm, 60Å)	4 g-3000 g	4 g-330 g	4 g-3000 g	4 g-330 g	/
	Irregular silica (25-40 µm, 60Å)	4 g-330 g	/	/	4 g-330 g	/
	Spherical silica (40-75 µm, 70Å)	/	/	/	4 g-330 g	/
	Spherical silica (20-45 µm, 70Å)	/	/	/	4 g-330 g	/
	Alimima (50-75 µm)	/	/	8 g-3200 g	/	/
C18 bonded phase packed	Irregular, 40-63 µm, 60Å	/	/	/	/	5.9 g-475 g
	Irregular, 40-63 µm, 90Å	/	/	/	/	5.2 g-420 g
	Hemispherical, 50 µm, 90Å	/	/	/	/	5.0 g-395 g
	Spherical, 40-60 µm, 120Å	/	/	/	/	4.5 g-350 g
	Spherical, 30-50 µm, 120Å	/	/	/	/	4.3 g-335 g
	Spherical, 40-75 µm, 100Å	/	/	/	/	4.6 g-385 g
	Spherical, 20-45 µm, 100Å	/	/	/	/	5.4 g-420 g
	Spherical, 15 µm, 100Å	/	/	/	/	5.4 g-410 g
	Spherical C8, 20-45 µm, 100Å	/	/	/	/	5.2 g-420 g
	Spherical C4, 20-45 µm, 100Å	/	/	/	/	5.2 g-420 g
Other bonded phase packed	Spherical CN, 20-45 µm, 100Å	/	/	/	/	5.2 g-420 g
	Spherical Diol, 20-45 µm, 100Å	/	/	/	/	5.2 g-420 g
	Irregular NH ₂ , 40-63 µm, 60Å	/	/	/	/	5.9 g-475 g
	Irregular SAX, 40-63 µm, 60Å	/	/	/	/	5.9 g-475 g
	Irregular SCX, 40-63 µm, 60Å	/	/	/	/	5.9 g-475 g
	Spherical ARG, 20-45 µm, 100Å	/	/	/	/	5.4 g-420 g
	Open top (solid load)	No	Yes	No	No	No

SepaFlash® Flash Column Sorbent Selection Guide

The following chart is designed to serve as a guide for the selection of the appropriate sorbent based on the characteristics of the sample to be purified.










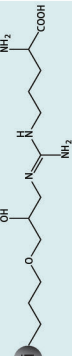
Stationary Phase Polarity



Compatible with all Flash Chromatography Systems

SEPAFLASH®

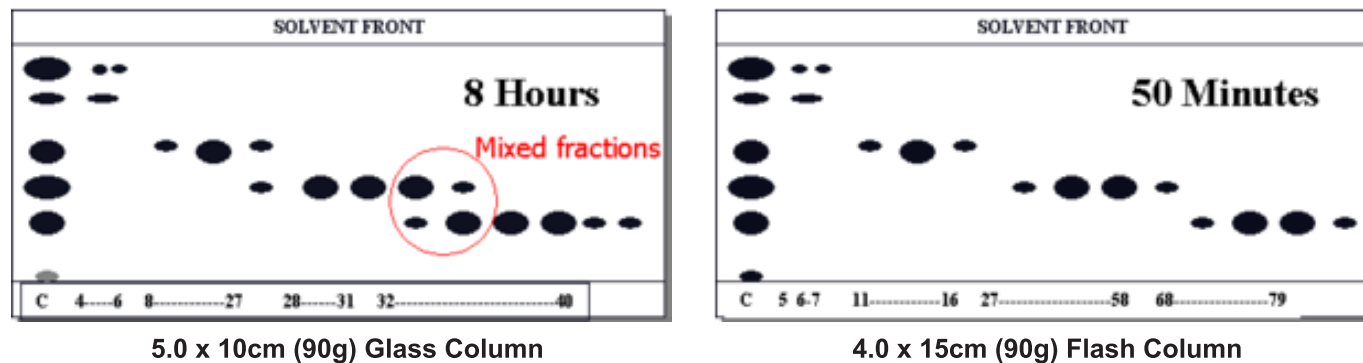
Silica-based Stationary Phase Information Table

Sorbent	Structure	Characteristics	Typical Applications	Storage Conditions
Silica		Irregular, 40-63 µm	Most popular sorbent for day-to-day use for the purification of non-ionic polar organic compounds.	Single use recommended.
		Spherical, 40-75 µm		
Amine		Irregular, 25-40 µm	High performance sorbent for difficult separations (isomers); Higher loading capacity.	Single use recommended.
		Spherical, 20-45 µm		
Diol		Irregular, 40-63 µm Endcapping: Yes Amino content: 1.3 mmol/g	Good alternative for normal phase purification of compounds with basic properties, which would normally have to be purified by reversed phase.	Flush the cartridge with 3 column volumes of 80% acetonitrile in water. Store in flush solvent with tips.
		Spherical, 20-45 µm Endcapping: Yes Carbon content: 5.0%		
Cyano		Spherical, 20-45 µm Endcapping: Yes Carbon content: 5.5%	Versatile sorbent that can be used either as normal or reversed phase. Indicated for products with intermediate to extreme polarity. The slightly hydrophobic nature of cyano group offers alternative selectivities.	Flush the cartridge with 3 column volumes of 80% acetonitrile in water or 80% methanol in water. Store in flush solvent with tips.
		Spherical, 20-45 µm Endcapping: Yes Carbon content: 5.8%		
C4		Spherical, 20-45 µm Endcapping: Yes Carbon content: 7.0%	Reversed-phase matrix can provide less retention of non-polar compounds than C18 and C8 and is useful in ion-pairing chromatography. Used to separate large biomolecules.	Flush with 3 column volumes of 80% acetonitrile in water or 80% methanol in water. Store in flush solvent with tips.
		Spherical, 20-45 µm Endcapping: Yes Carbon content: 7.0%		
C8		Spherical, 20-45 µm Endcapping: Yes Carbon content: 17%	Reversed-phase matrix with a moderate degree of hydrophobicity that works well for separating a wide range of compounds. May be used as replacement of C18 when shorter retention times are desired or required.	Flush with 3 column volumes of 80% acetonitrile in water or 80% methanol in water. Store in flush solvent with tips.
		Spherical, or Irregular Endcapping: Yes Carbon content: 17%		
SAX		Irregular, 40-63 µm Endcapping: No Carbon content: 8.0%	Indicated for the purification of medium to high polarity compounds, they provide reproducible purification without the complexity and cost of preparative HPLC.	Flush the cartridge with 10 column volumes of 80% methanol in water or 100% isopropanol. Store in flush solvent with tips.
		Irregular, 40-63 µm Endcapping: No Carbon content: 10%		
ARG		Spherical, 20-45 µm Endcapping: Yes Carbon content: 8.0%	It is widely used for the scavenging of amines and other basic functionalities, including weakly basic anilines, borohydrides, and metals such as Ni and Ag.	Flush with 3 column volumes of 80% acetonitrile in water or 80% methanol in water. Store in flush solvent with tips.
		Spherical, 20-45 µm Endcapping: Yes Carbon content: 8.0%		

Advantages of Using SepaFlash® Flash Columns

Compared with traditional separation methods, SepaFlash® flash columns have the following advantages:

- Using SepaFlash® flash columns significantly reduces the separation and purification times when compared to traditional glass columns – see example:



- The separation and purification costs in time, apparatus and materials will be significantly reduced when compared with traditional flash chromatography.
- Pre-packed SepaFlash® flash columns greatly reduce the risks to human health and environment.

Tips for Using SepaFlash® Chromatography Products

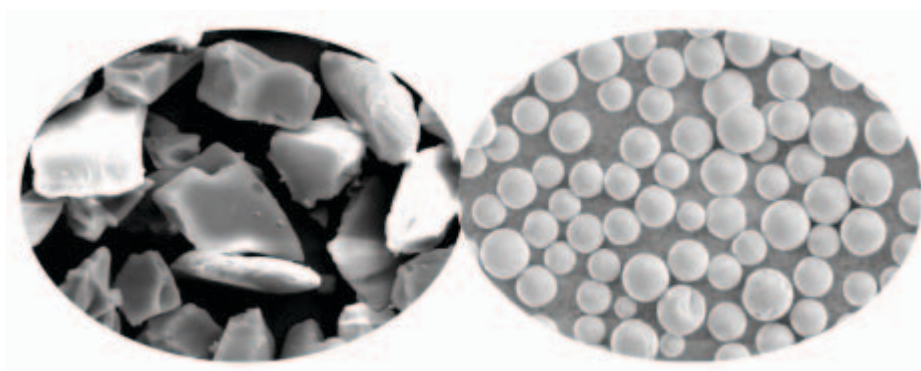
- SepaFlash® silica flash columns are disposable and for single use, but with proper handling, SepaFlash® silica cartridges can be reused without sacrificing performance. For multiple usages, simply air dry the flash column using compressed air and store the column in a sealed bag.
- SepaFlash® alumina flash columns are useful when the samples are sensitive and prone to degradation on silica gel.
- SepaFlash® bonded silica flash columns offer a wide variety of sorbents to better satisfy the requirements for different users, and this series can be used multiple times under the correct preservation conditions.
- Solid sample loading is a useful technique to load sample to be purified onto a column, particularly in the case of low-solubility samples. On this occasion, iLOK™ flash cartridge is a very suitable choice.
- For safety reasons, do not operate the flash column above the maximum pressure printed on the column body.
- For optimum use of the flash column, please use the eluents which have been filtered through a 0.45 µm filter membrane to remove any impurities.
- Storage of TLC plates must keep away from moisture and pollutants. As preferred, use TLC plates after activation.

SepaFlash® UltraPure Media Chart

Irregular

Spherical

Bonded Phases



UltraPure Silica

Media	Particle	Container Size	Item Number	Media	Particle	Container Size	Item Number
Silica	40–63 μm , 60 Å Irregular	500 g	ST5101-IR-500g	Silica	40–75 μm , 60 Å Spherical	500 g	ST2121-SP-500g
		1 kg	ST5101-IR-1kg			1 kg	ST2121-SP-1kg
		25 kg	ST5101-IR-25kg			20 kg	ST2121-SP-20kg
Silica	25–40 μm , 60 Å Irregular	500 g	ST5102-IR-500g	Silica	20–45 μm , 60 Å Spherical	500 g	ST2102-SP-500g
		1 kg	ST5102-IR-1kg			1 kg	ST2102-SP-1kg
		25 kg	ST5102-IR-25kg			20 kg	ST2102-SP-20kg
Silica	40–75 μm , 70 Å Spherical	500 g	ST2101-SP-500g	Silica	20–45 μm , 70 Å Spherical	500 g	ST2122-SP-500g
		1 kg	ST2101-SP-1kg			1 kg	ST2122-SP-1kg
		20 kg	ST2101-SP-20kg			20 kg	ST2122-SP-20kg

UltraPure Bonded Phases

Media	Particle	Container Size	Item Number	Media	Particle	Container Size	Item Number
C18	40–63 μm , 60 Å Irregular	500 g	ST5201-IR-500g	C18	30–50 μm , 120 Å Spherical	500 g	ST5232-SP-500g
		1 kg	ST5201-IR-1kg			1 kg	ST5232-SP-1kg
		25 kg	ST5201-IR-25kg			20 kg	ST5232-SP-20kg
C18	40–63 μm , 90 Å Irregular	500 g	ST5211-IR-500g	C18	40–75 μm , 100 Å Spherical	500 g	ST5221-SP-500g
		1 kg	ST5211-IR-1kg			1 kg	ST5221-SP-1kg
		25 kg	ST5211-IR-25kg			20 kg	ST5221-SP-20kg
C18	50 μm , 90 Å Hemispherical	500 g	ST5211-SS-500g	C18	20–45 μm , 100 Å Spherical	500 g	ST5222-SP-500g
		1 kg	ST5211-SS-1kg			1 kg	ST5222-SP-1kg
		20 kg	ST5211-SS-20kg			20 kg	ST5222-SP-20kg

Media	Particle	Container Size	Item Number	Media	Particle	Container Size	Item Number
C18	40–60 µm, 120 Å Spherical	500 g	ST5231-SP-500g	C18	15 µm, 100 Å Spherical	500 g	ST5223-SP-500g
		1 kg	ST5231-SP-1kg			1 kg	ST5223-SP-1kg
		20 kg	ST5231-SP-20kg			20 kg	ST5223-SP-20kg
Cyano	20–45 µm, 100 Å Spherical	500 g	ST5322-SP-500g	Amine	40–63 µm, 60 Å Irregular	500 g	ST5501-IR-500g
		1 kg	ST5322-SP-1kg			1 kg	ST5501-IR-1kg
		20 kg	ST5322-SP-20kg			25 kg	ST5501-IR-25kg
C4	20–45 µm, 100 Å Spherical	500 g	ST5422-SP-500g	SAX	40–63 µm, 60 Å Irregular	500 g	ST5001-IR-500g
		1 kg	ST5422-SP-1kg			1 kg	ST5001-IR-1kg
		20 kg	ST5422-SP-20kg			25 kg	ST5001-IR-25kg
C8	20–45 µm, 100 Å Spherical	500 g	ST5822-SP-500g	SCX	40–63 µm, 60 Å Irregular	500 g	ST5701-IR-500g
		1 kg	ST5822-SP-1kg			1 kg	ST5701-IR-1kg
		20 kg	ST5822-SP-20kg			25 kg	ST5701-IR-25kg
Diol	20–45 µm, 100 Å Spherical	500 g	ST5922-SP-500g	ARG	20–45 µm, 100 Å Spherical	500 g	ST5622-SP-500g
		1 kg	ST5922-SP-1kg			1 kg	ST5622-SP-1kg
		25 kg	ST5922-SP-25kg			20kg	ST5622-SP-20kg

Contact us for more Bonded Phase options.

High-quality Media

Media	Particle	Container Size	Item Number
Silica	40–63 µm, 60 Å Irregular	500 g	ST8101-IR-500g
		1 kg	ST8101-IR-1kg
		25 kg	ST8101-IR-25kg
Neutral alumina	50–75 µm Irregular	500 g	ST8601-N-500g
		1 kg	ST8601-N-1kg
		25 kg	ST8601-N-25kg
Acidic alumina	50–75 µm Irregular	500 g	ST8601-A-500g
		1 kg	ST8601-A-1kg
		25 kg	ST8601-A-25kg
Basic alumina	50–75 µm Irregular	500 g	ST8601-B-500g
		1 kg	ST8601-B-1kg
		25 kg	ST8601-B-25kg
C18	40–63 µm, 60 Å Irregular	500 g	ST8201-IR-500g
		1 kg	ST8201-IR-1kg
		25 kg	ST8201-IR-25kg

Media	Particle	Container Size	Item Number
C18	20–45 µm, 100 Å Spherical	500 g	ST8222-SP-500g
		1 kg	ST8222-SP-1kg
		25 kg	ST8222-SP-25kg



More Ordering Information

SepaFlash® Standard Series

UltraPure spherical silica gel 40-75 µm, 70 Å

(surface area 500 m²/g, pH 6.0-8.0, loading capacity 0.1-10%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-2101-0004-SP	0.1-10%	4 g	4 mg-0.4 g	20	15-40	105.8	12.4	300/20.7
S-2101-0012-SP	0.1-10%	12 g	12 mg-1.2 g	18	30-60	124.5	21.2	300/20.7
S-2101-0025-SP	0.1-10%	25 g	25 mg-2.5 g	12	30-60	172.7	21.3	300/20.7
S-2101-0040-SP	0.1-10%	40 g	40 mg-4.0 g	12	40-70	176	26.7	300/20.7
S-2101-0080-SP	0.1-10%	80 g	80 mg-8.0 g	10	50-100	246.8	30.9	200/13.8
S-2101-0120-SP	0.1-10%	120 g	120 mg-12 g	10	60-150	264.8	36.2	200/13.8
S-2101-0220-SP	0.1-10%	220 g	220 mg-22 g	6	80-220	203.7	60.1	150/10.3
S-2101-0330-SP	0.1-10%	330 g	330 mg-33 g	5	80-220	275	60.4	150/10.3
S-2101-0800-SP	0.1-10%	800 g	800 mg-80 g	3	100-300	382.9	78.2	100/6.9
S-2101-1600-SP	0.1-10%	1600 g	1.6 g-160 g	2	200-500	432.4	103.8	100/6.9
S-2101-3000-SP	0.1-10%	3000 g	3.0 g-300 g	1	200-500	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-capacity spherical silica gel 50 µm, 54 Å

(surface area 680 m²/g, pH 7.0±1.0, loading capacity 0.1-20%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-2101-0004-SP (H)	0.1-20%	4 g	4 mg-0.8 g	20	15-40	105.8	12.4	300/20.7
S-2101-0012-SP (H)	0.1-20%	12 g	12 mg-2.4 g	18	30-60	124.5	21.2	300/20.7
S-2101-0025-SP (H)	0.1-20%	25 g	25 mg-5.0 g	12	30-60	172.7	21.3	300/20.7
S-2101-0040-SP (H)	0.1-20%	40 g	40 mg-8.0 g	12	40-70	176	26.7	300/20.7
S-2101-0080-SP (H)	0.1-20%	80 g	80 mg-16 g	10	50-100	246.8	30.9	200/13.8
S-2101-0120-SP (H)	0.1-20%	120 g	120 mg-24 g	10	60-150	264.8	36.2	200/13.8
S-2101-0220-SP (H)	0.1-20%	220 g	220 mg-44 g	6	80-220	203.7	60.1	150/10.3
S-2101-0330-SP (H)	0.1-20%	330 g	330 mg-66 g	5	80-220	275	60.4	150/10.3
S-2101-0800-SP (H)	0.1-20%	800 g	0.8 g-160 g	3	100-300	382.9	78.2	100/6.9
S-2101-1600-SP (H)	0.1-20%	1600 g	1.6 g-320 g	2	200-500	432.4	103.8	100/6.9
S-2101-3000-SP (H)	0.1-20%	3000 g	3.0 g-600 g	1	200-500	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-capacity spherical silica gel, 15 µm, 50 Å

(surface area 700 m²/g, pH 6.5±1.5, loading capacity 0.1-30%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-2103-0004-SP (H)	0.1-30%	4 g	4 mg-1.2 g	20	15-30	105.8	12.4	300/20.7
S-2103-0012-SP (H)	0.1-30%	12 g	12 mg-3.6 g	18	25-50	124.5	21.2	300/20.7
S-2103-0025-SP (H)	0.1-30%	25 g	25 mg-7.5 g	12	25-50	172.7	21.3	300/20.7
S-2103-0040-SP (H)	0.1-30%	40 g	40 mg-12 g	12	30-60	176	26.7	300/20.7
S-2103-0080-SP (H)	0.1-30%	80 g	80 mg-24 g	10	40-80	246.8	30.9	200/13.8
S-2103-0120-SP (H)	0.1-30%	120 g	120 mg-36 g	10	45-90	264.6	36.2	200/13.8
S-2103-0220-SP (H)	0.1-30%	220 g	220 mg-66 g	6	60-120	203.7	60.1	150/10.3
S-2103-0330-SP (H)	0.1-30%	330 g	330 mg-99 g	5	60-120	275	60.4	150/10.3

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-efficiency spherical silica gel, 20-45 μm , 70 \AA

(surface area 500 m^2/g , pH 6.0-8.0, loading capacity 0.1-15%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-2102-0004-SP	0.1-15%	4 g	4 mg-0.6 g	20	15-30	105.8	12.4	300/20.7
S-2102-0012-SP	0.1-15%	12 g	12 mg-1.8 g	18	25-50	124.5	21.2	300/20.7
S-2102-0025-SP	0.1-15%	25 g	25 mg-3.8 g	12	25-50	172.7	21.3	300/20.7
S-2102-0040-SP	0.1-15%	40 g	40 mg-6.0 g	12	30-60	176	26.7	300/20.7
S-2102-0080-SP	0.1-15%	80 g	80 mg-12 g	10	40-80	246.8	30.9	200/13.8
S-2102-0120-SP	0.1-15%	120 g	120 mg-18 g	10	45-90	264.6	36.2	200/13.8
S-2102-0220-SP	0.1-15%	220 g	220 mg-33 g	6	60-120	203.7	60.1	150/10.3
S-2102-0330-SP	0.1-15%	330 g	330 mg-50 g	5	60-120	275	60.4	150/10.3
S-2102-0800-SP	0.1-15%	800 g	0.8 g-120 g	3	80-200	382.9	78.2	100/6.9
S-2102-1600-SP	0.1-15%	1600 g	1.6 g-240 g	2	100-250	432.4	103.8	100/6.9
S-2102-3000-SP	0.1-15%	3000 g	3.0 g-450 g	1	100-250	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-capacity spherical silica gel 25 μm , 50 \AA

(surface area 700 m^2/g , pH 6.5 \pm 1.5, loading capacity 0.1-30%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-2102-0004-SP (H)	0.1-30%	4 g	4 mg-1.2 g	20	15-30	105.8	12.4	300/20.7
S-2102-0012-SP (H)	0.1-30%	12 g	12 mg-3.6 g	18	25-50	124.5	21.2	300/20.7
S-2102-0025-SP (H)	0.1-30%	25 g	25 mg-7.5 g	12	25-50	172.7	21.3	300/20.7
S-2102-0040-SP (H)	0.1-30%	40 g	40 mg-12 g	12	30-60	176	26.7	300/20.7
S-2102-0080-SP (H)	0.1-30%	80 g	80 mg-24 g	10	40-80	246.8	30.9	200/13.8
S-2102-0120-SP (H)	0.1-30%	120 g	120 mg-36 g	10	45-90	264.6	36.2	200/13.8
S-2102-0220-SP (H)	0.1-30%	220 g	220 mg-66 g	6	60-120	203.7	60.1	150/10.3
S-2102-0330-SP (H)	0.1-30%	330 g	330 mg-99 g	5	60-120	275	60.4	150/10.3
S-2102-0800-SP (H)	0.1-30%	800 g	0.8 g-240 g	3	80-200	382.9	78.2	100/6.9
S-2102-1600-SP (H)	0.1-30%	1600 g	1.6 g-480 g	2	100-250	432.4	103.8	100/6.9
S-2102-3000-SP (H)	0.1-30%	3000 g	3.0 g-900 g	1	100-250	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

SepaFlash® HP Series

High-quality neutral alumina 50-75 µm, 55 Å

(surface area 155 m²/g, pH 6.5-7.5, loading capacity 0.1-4%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-8601-0004-N	0.1-4%	8 g	8 mg-0.32 g	20	10-30	113.8	12.4	400/27.5
SW-8601-0012-N	0.1-4%	24 g	24 mg-1.0 g	18	15-45	134.8	21.4	400/27.5
SW-8601-0025-N	0.1-4%	50 g	50 mg-2.0 g	12	15-45	184	21.4	400/27.5
SW-8601-0040-N	0.1-4%	80 g	80 mg-3.2 g	12	20-50	184.4	26.7	400/27.5
SW-8601-0080-N	0.1-4%	160 g	160 mg-6.4 g	10	30-70	257.4	31.2	350/24.0
SW-8601-0120-N	0.1-4%	240 g	240 mg-9.6 g	10	40-80	261.5	38.6	300/20.7
SW-8601-0220-N	0.1-4%	440 g	440 mg-17.6 g	6	50-120	223.5	61.4	300/20.7
SW-8601-0330-N	0.1-4%	660 g	660 mg-26.4 g	5	50-120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-quality basic alumina 50-75 µm, 55 Å

(surface area 155 m²/g, pH 9.0-10.0, loading capacity 0.1-4%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-8601-0004-B	0.1-4%	8 g	8 mg-0.32 g	20	10-30	113.8	12.4	400/27.5
SW-8601-0012-B	0.1-4%	24 g	24 mg-1.0 g	18	15-45	134.8	21.4	400/27.5
SW-8601-0025-B	0.1-4%	50 g	50 mg-2.0 g	12	15-45	184	21.4	400/27.5
SW-8601-0040-B	0.1-4%	50 g	80 mg-3.2 g	12	20-50	184.4	26.7	400/27.5
SW-8601-0080-B	0.1-4%	160 g	160 mg-6.4 g	10	30-70	257.4	31.2	350/24.0
SW-8601-0120-B	0.1-4%	240 g	240 mg-9.6 g	10	40-80	261.5	38.6	300/20.7
SW-8601-0220-B	0.1-4%	440 g	440 mg-17.6 g	6	50-120	223.5	61.4	300/20.7
SW-8601-0330-B	0.1-4%	660 g	660 mg-26.4 g	5	50-120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-quality acidic alumina 50-75 µm, 55 Å

(surface area 155 m²/g, pH 3.8-4.8, loading capacity 0.1-4%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-8601-0004-A	0.1-4%	8 g	8 mg-0.32 g	20	10-30	113.8	12.4	400/27.5
SW-8601-0012-A	0.1-4%	24 g	24 mg-1.0 g	18	15-45	134.8	21.4	400/27.5
SW-8601-0025-A	0.1-4%	50 g	50 mg-2.0 g	12	15-45	184	21.4	400/27.5
SW-8601-0040-A	0.1-4%	50 g	80 mg-3.2 g	12	20-50	184.4	26.7	400/27.5
SW-8601-0080-A	0.1-4%	160 g	160 mg-6.4 g	10	30-70	257.4	31.2	350/24.0
SW-8601-0120-A	0.1-4%	240 g	240 mg-9.6 g	10	40-80	261.5	38.6	300/20.7
SW-8601-0220-A	0.1-4%	440 g	440 mg-17.6 g	6	50-120	223.5	61.4	300/20.7
SW-8601-0330-A	0.1-4%	660 g	660 mg-26.4 g	5	50-120	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-capacity spherical silica gel, 50 µm, 54 Å

(surface area 680 m²/g, pH 7.0±1.0, loading capacity 0.1-20%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
SW-2101-004-SP (H)	0.1-20%	4 g	4 mg–0.8 g	20	15–30	113.8	12.4	400/27.5
SW-2101-012-SP (H)	0.1-20%	12 g	12 mg–2.4 g	18	30–60	134.8	21.4	400/27.5
SW-2101-025-SP (H)	0.1-20%	25 g	25 mg–5.0 g	12	30–60	184	21.4	400/27.5
SW-2101-040-SP (H)	0.1-20%	40 g	40 mg–8.0 g	12	40–70	184.4	26.7	400/27.5
SW-2101-080-SP (H)	0.1-20%	80 g	80 mg–16 g	10	50–100	257.4	31.2	350/24.0
SW-2101-120-SP (H)	0.1-20%	120 g	120 mg–24 g	10	60–150	261.5	38.6	300/20.7
SW-2101-220-SP (H)	0.1-20%	220 g	220 mg–44 g	6	80–220	223.5	61.4	300/20.7
SW-2101-330-SP (H)	0.1-20%	330 g	330 mg–66 g	5	80–220	280.2	61.4	250/17.2

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

SepaFlash® Bonded Series

High-quality irregular C18, 40-63µm, 60 Å,

(carbon content 17%, end-capped, surface area 500 m²/g, loading capacity 0.1-2%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-8201-0004-IR	0.1-2%	5.9 g	5.9 mg–118 mg	2	10–20	105.8	12.4	300/20.7
S-8201-0012-IR	0.1-2%	23 g	23 mg–0.46 g	1	15–30	124.5	21.2	300/20.7
S-8201-0025-IR	0.1-2%	38 g	38 mg–0.76 g	1	15–30	172.7	21.3	300/20.7
S-8201-0040-IR	0.1-2%	55 g	55 mg–1.1 g	1	20–40	176	26.7	300/20.7
S-8201-0080-IR	0.1-2%	122 g	122 mg–2.5 g	1	30–60	246.8	30.9	200/13.8
S-8201-0120-IR	0.1-2%	180 g	180 mg–3.6 g	1	40–80	264.8	36.2	200/13.8
S-8201-0220-IR	0.1-2%	305 g	305 mg–6.1 g	1	50–100	203.7	60.1	150/10.3
S-8201-0330-IR	0.1-2%	475 g	475 mg–9.5 g	1	50–100	275	60.4	150/10.3
S-8201-0800-IR	0.1-2%	1220 g	1.22 g–24.4 g	1	80–160	382.9	78.2	100/6.9
S-8201-1600-IR	0.1-2%	2420 g	2.42 g–48.4 g	1	100–250	432.4	103.8	100/6.9
S-8201-3000-IR	0.1-2%	4330 g	4.33 g–86.6 g	1	100–250	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

High-quality spherical C18, 20-45 µm, 100 Å

(carbon content 17%, end-capped, surface area 320 m²/g, loading capacity 0.1-2%)

Item Number	Loading Capacity	Column Size	Sample Size	Units/Box	Flow Rate (mL/min)	Cartridge Length (mm)	Cartridge ID (mm)	Max. Pressure (psi/bar)
S-8222-0004-SP	0.1-2%	5.4 g	5.4 mg–108 mg	2	5–15	105.8	12.4	300/20.7
S-8222-0012-SP	0.1-2%	20 g	20 mg–0.40 g	1	10–25	124.5	21.2	300/20.7
S-8222-0025-SP	0.1-2%	33 g	33 mg–0.66 g	1	10–25	172.7	21.3	300/20.7
S-8222-0040-SP	0.1-2%	48 g	48 mg–0.96 g	1	15–30	176	26.7	300/20.7
S-8222-0080-SP	0.1-2%	105 g	105 mg–2.1 g	1	20–50	246.8	30.9	200/13.8
S-8222-0120-SP	0.1-2%	155 g	155 mg–3.1 g	1	30–60	264.8	36.2	200/13.8
S-8222-0220-SP	0.1-2%	270 g	270 mg–5.4 g	1	40–80	203.7	60.1	150/10.3
S-8222-0330-SP	0.1-2%	420 g	420 mg–8.4 g	1	40–80	275	60.4	150/10.3
S-8222-0800-SP	0.1-2%	1080 g	1.08 g–21.6 g	1	60–150	382.9	78.2	100/6.9
S-8222-1600-SP	0.1-2%	2140 g	2.14 g–42.8 g	1	80–220	432.4	103.8	100/6.9
S-8222-3000-SP	0.1-2%	3830 g	3.83 g–76.6 g	1	80–220	509.5	127.5	100/6.9

- Compatible with all flash chromatography systems, for example ISCO, Biotage, Yamazen, etc.

How to Order

Orders can be placed by phone, fax, or email.

When placing your order please have the following information available

- (1) Your name.
- (2) Company name, billing, and shipping addresses.
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You can place an order with our Customer Service staff in English or Chinese between 8:30 a.m. and 5:30 p.m. Beijing time, Monday through Friday.

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Orders can be emailed to the following address:

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