

## SiliaFlash & SiliaBond SPE Cartridges and 96 Well Plates

### SiliCycle UltraPure Solid Phase Extraction Cartridges

Solid Phase Extraction (SPE) improves sample purity, quantification, and HPLC column lifetime. You can optimize your SPE protocols by using SiliCycle's SPE cartridges and 96 well plates.

SiliCycle SPE cartridges are available with our SiliaFlash and SiliaBond phases with bed weight up to 20 grams. Our 96 well plates are used in high throughput combinatorial chemistry, metabolite analysis, drug screening, and clinical chemistry applications.

By using our SPE products, you will generate higher purity samples and reduce the number of false positives in your screening, resulting in higher quality data. All our SPEs are packed with sorbents based on our fines-free SiliaFlash silica gel which is the highest purity silica gel on the market. When you use SiliCycle's SPEs or plates, we guarantee the following:

- **High quality and wide variety of SiliaBond sorbents available**
- **Very good separation (very tight particle size distribution and no fines)**
- **High recoveries and yields**
- **Less time and solvent spent conditioning the sorbent**
- **No silica contamination of your final product**
- **Reproducible flow rate from lot-to-lot cartridges and plates**
- **Excellent packing and storage qualities**

### SiliCycle UltraPure 96 Well Plates

You can increase your recovery from HPLC purification by doing a first pass purification with our 96 well plates. These are the characteristics of our UltraPure 96 Well Plates:

- **Small-scale versions of our syringe barrel columns**
- **Packed with the same high purity fines-free sorbent**
- **Reproducible flow rate**
- **Industry standard 8 x 12 array**
- **Excellent well-to-well packing and sorbent mass reproducibility**
- **Superior storage qualities**
- **Can be used on most instruments and will map to all major brands of collection plate.**

### SiliCycle UltraPure SPE formats

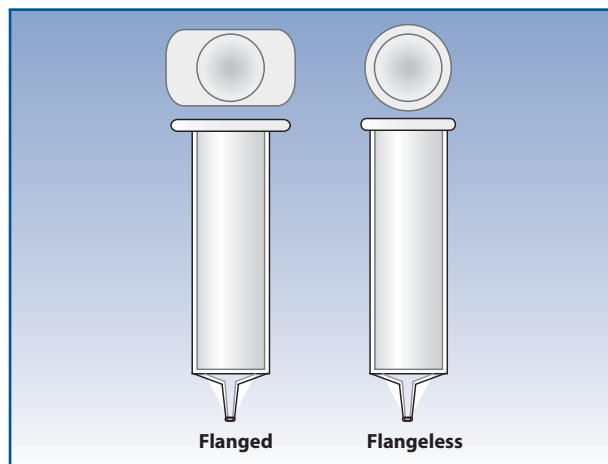
SiliCycle's goal is to offer our customers products that will answer specific purification needs, and with that in mind, SiliCycle's UltraPure SPE Cartridges (or plates) are available in different formats with specific characteristics. Our SPE product line offers the standard cartridges, but you can also

customize your own SPE cartridge. In fact, with SiliCycle, you can choose every component of the cartridge:

- Rim
- Volume
- Sorbent weight

- **SPE rim**

The rim of the SPE will often dictate its compatibility with automated liquid handlers and other synthesis equipments. SiliCycle's standard SPE is flanged but our custom packing service can provide you with sorbent packed into any format at a competitive price.





• **SPE sizes and sorbent masses**

The size of a SPE is normally listed by volume, but this fact can be confusing and misleading. The only important measurements are the **length, column diameter, and the mass of the sorbent**. Most SPE manufacturers use the same injection molds for making disposable syringes but list the volume

differently. In the scheme below, the volume in parentheses represents the equivalent volume used by some manufacturers. It also shows schematics of our SPE cartridges including the length, the diameter and the standard mass sorbent that we can provide for each cartridge size.

SiliCycle UltraPure SPE available cartridge sizes				
1 mL	3 mL	6 mL (8 mL)	12 mL (15 mL)	25 mL (20 mL)
Available standard cartridges sorbent weights				
1 mL	3 mL	6 mL (8 mL)	12 mL (15 mL)	25 mL (20 mL)
50 mg 100 mg	200 mg 500 mg	500 mg 1 g 2 g	2 g	5 g

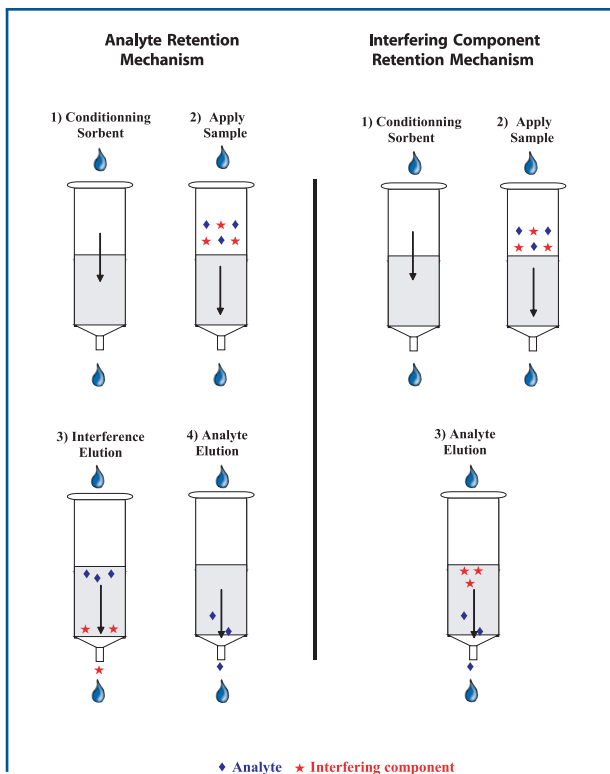
**SiliaBond and SiliaFlash sorbents for SPE cartridges and plates**

SPE methods were first used for the isolation of organic compounds from biological fluids such as blood and urine for toxicology and clinical work. It has also become widely used for the concentration and purification of trace organic pollutants in environmental research and analytes in agrochemical, food, forensic, and pharmaceutical analyses. More recently, organic and medicinal chemists have started using this technique to purify libraries of compounds.

Many applications use different mechanisms and sorbents. Biological and environmental applications generally process aqueous samples and therefore utilize mostly

non-polar, mixed-mode non-polar/ion exchange sorbents. Chemists typically purify non-aqueous samples and utilize polar and mixed-phase polar/weak ion exchange sorbents. Silica-bound scavengers are now being used in SPE formats to chemoselectively purify reactions due to their fast kinetics and solvent independence.

Typically, a solid phase extraction can be done following two different extraction pathways; use a sorbent that will retain the analyte of interest and let the interfering component pass through the cartridge or use a sorbent that can achieve the opposite (retains the interfering component and let the analyte pass through).



## Sorbent selection

As previously shown, solid phase extraction can be done using different types of interactions. In effect, we can categorize the different kinds of functionalized silica gels by the molecular interactions taking place between compounds. There are three principal types of interactions:

- Polar interactions (normal phase silica gel)
- Non-polar interactions (reversed-phase silica gel)
- Ionic interactions (ion exchange silica gel)

SiliCycle has developed many functionalized silica gels (SiliaBond products) of which many can be used in SPE cartridges or plates. The “standard sorbents” for solid phase extraction are presented on the following page. Almost all of our SiliaBond phases in the catalog can be packed in cartridges. If the one you want is not listed, please ask us for a quote.

## Sorbent bed weight selection

In solid phase extraction, it exists a general rule concerning the correlation of the sorbent bed weight and the mass of the sample to be extracted: generally, the mass of the sample or the analyte to be purified should **not represent more than 5% of the sorbent bed weight**.

The flow chart on the next page is designed to serve as a guide in sorbent selection by considering the nature of the solvent and of the compound to be isolated. For your convenience, we offer a broad range of mixed-mode phases that allows the isolation of compounds using selective modes of interactions.



# SPE CARTRIDGES AND 96 WELL PLATES

Phase	Extraction of	From
• Normal	Polar analytes	Non-polar organic solvent
• Reversed	Hydrophobic or polar analytes	Aqueous solution
• Ion Exchange	Charged analytes	Aqueous or non-polar organic matrix





## SPE method development

Before performing a solid phase extraction, make sure you properly select:

The sorbent:	Use the solvent of the sample and the chemical properties of your analyte to select your sorbent
The cartridge size:	For purification, you need a column large enough to hold the reaction mixture and sufficient bed mass to bind either your product or the impurities
The solvent:	Choose a solvent in which the analyte is very soluble

The solid phase methodology will vary according to the sorbent used (normal, reversed, ion exchange). Here, we propose “generic methods” for each phase. The usual procedure can be slightly different from what we present but it will always be based on the properties of the sample and the sorbent.

Properties	Sorbent Phase Type			
	Normal Phase	Reversed-Phase	Ion Exchange Phase	
			Anion Exchange	Cation Exchange
Typical sorbents	<ul style="list-style-type: none"> <li>SiliaFlash</li> <li>Florisil</li> <li>SiliaBond Amine</li> <li>SiliaBond Cyano</li> <li>SiliaBond Diol</li> </ul>	<ul style="list-style-type: none"> <li>SiliaBond C18</li> <li>SiliaBond C8</li> <li>SiliaBond C4</li> <li>SiliaBond Cyclohexyl</li> <li>SiliaBond Cyano</li> <li>SiliaBond Phenyl</li> </ul>	<ul style="list-style-type: none"> <li>SiliaBond WAX</li> <li>SiliaBond SAX</li> </ul>	<ul style="list-style-type: none"> <li>SiliaBond WCX</li> <li>SiliaBond SCX</li> <li>SiliaBond SCX-2</li> </ul>
Sorbent polarity	High	Low	High	
Matrix sample properties	<ul style="list-style-type: none"> <li>Organic solvents</li> </ul>	<ul style="list-style-type: none"> <li>Organic solvents</li> <li>Aqueous (buffer)</li> </ul>	<ul style="list-style-type: none"> <li>Organic solvents</li> <li>Aqueous (buffer)</li> </ul>	
Analyte properties	<ul style="list-style-type: none"> <li>Slightly to moderately polar</li> <li>Not charged</li> </ul>	<ul style="list-style-type: none"> <li>Non-polar</li> <li>Not charged</li> </ul>	<ul style="list-style-type: none"> <li>Acidic</li> </ul>	<ul style="list-style-type: none"> <li>Basic</li> </ul>
Retained compounds	Polar compounds	Non-polar compounds	Ionized compounds	
Step 1: Conditioning	Sample matrix solvent or methanol	Water-miscible organic solvents ex: methanol	Water-miscible organic solvents or aqueous solution ex: methanol	
Step 2: Sample loading	Dissolve analyte in low polarity solvents ex: hexanes, toluene, dichloromethane	Dissolve analyte in high polarity solvents ex: methanol/water, acetonitrile/water	Dissolve analyte in high polarity solvents ex: water, buffered solutions	
Step 3: Washing	Washing with non-polar solvents <i>(may contain small quantities of polar solvents &lt; 5%)</i>	Washing with mixture of aqueous solution or buffer and polar solvent ex: water/methanol	Washing with mixture of aqueous solution containing salts <i>(may contain organic solvent)</i> ex: water/methanol	
Step 4: Elution	Elution with mixture of non-polar and polar solvents <b>(5-50% polar solvent)</b> ex: hexanes with 10 % polar solvent	Elution with non-polar or polar organic solvents <i>(may contain water or buffer)</i> ex: methanol, water, acetonitrile	Elution with polar solvents <i>(may contain acid or base)</i> ex: water, buffered solutions	



### SiliCycle standard sorbents for solid phase extraction:

SiliCycle can provide standard sorbents for your solid phase extraction. The table below presents the sorbents commonly used in SPE cartridges and plates. Other phases available upon request.

Sorbent	End-capped	Sorbent code	Applications
<b>Polar Phases</b>			
SiliaFlash	-	100	Removal of baseline noise from organic samples
Florisil	-	AUT-0014	Clean up non-polar analytes containing polar interferences from non-polar solvent
SiliaBond Amine	Yes	520	Isolation of peptides, drugs and metabolites from physiological fluids, weak anion exchange sorbent
SiliaBond Cyano	Yes	380	Isolation of drugs and metabolites from physiological fluids, moderate polarity sorbent
SiliaBond Diol	No	350	Isolation of drugs and metabolites from physiological fluids, moderate polarity sorbent
<b>Non-Polar Phases</b>			
SiliaBond C8	Yes	310	Isolation of drugs and metabolites from physiological fluids, non-polar sorbent
SiliaBond C8 ne	No	311	Isolation of drugs and metabolites from physiological fluids, and pesticides from water, non-polar water wettable sorbent
SiliaBond C18 ne (23%)	No	301	See SiliaBond C8
SiliaBond C18 (17%)	Yes	302	See SiliaBond C8 ne
SiliaBond Cyclohexyl	Yes	615	Isolation of drugs and metabolites from physiological fluids, non-polar sorbent
SiliaBond Phenyl	Yes	340	Isolation of drugs and metabolites from physiological fluids, non-polar and electron rich sorbent
<b>Ion Exchange Phases</b>			
SiliaBond WCX	Yes	700	Isolation of very strong basic drugs (i.e.: quaternary amines)
SiliaBond SAX	Yes	665	"Catch and Release" purification of acidic molecules from organic solvents
SiliaBond SCX	Yes	605	"Catch and Release" purification of basic molecules from organic solvents
SiliaBond SCX-2	No	512	"Catch and Release" purification of basic molecules from organic solvents
<b>Fluorinated Phases</b>			
SiliaBond Fluorochrom	No	637	Separation of fluorinated molecules from non-fluorinated ones.
SiliaBond Tridecafluoro	Yes	635	
<b>Mixed-Mode Phases</b>			
SiliaBond C8/SAX	Yes	0228	Isolation of acidic drugs and metabolites from physiological fluids, anionic and non-polar sorbent
SiliaBond C8/SCX	Yes	0238	Isolation of basic drugs and metabolites from physiological fluids, cationic and non-polar sorbent
SiliaBond C8/SCX-2	Yes	0280	Isolation of basic drugs and metabolites from physiological fluids, cationic and non-polar sorbent
SiliaBond C18/SAX	Yes	0128	See SiliaBond C8/SAX
SiliaBond C18/SCX	Yes	0138	See SiliaBond C8/SCX
SiliaBond C18/SCX-2	Yes	0180	See SiliaBond C8/SCX-2
SiliaBond SCX-2/SAX	Yes	8028	Separation of acidic and basic molecules from non-ionizable molecules, anionic and cationic sorbent
SiliaBond C8/SCX-2/SAX	Yes	028028	Tri-mode isolation and fractionation of drugs and metabolites from physiological fluids
<b>Speciality Phases</b>			
SiliaBond Carbonate	Yes	660	Applications available in the corresponding section of SiliaBond silica gels
SiliaBond Carbodiimide	Yes	705	
SiliaBond Dichlorotriazine	Yes	522	
SiliaBond Isocyanate	Yes	500	
SiliaBond Thiol	Yes	510	



SiliCycle UltraPure SiliaFlash & SiliaBond SPE cartridges				
Volume	1 mL		3 mL	
Sorbent mass	50 mg	100 mg	200 mg	500 mg
Quantity per box	100	100	50	50
<b>POLAR PHASES</b>				
SiliaFlash	SPE-R10030B-01B	SPE-R10030B-01C	SPE-R10030B-03G	SPE-R10030B-03P
Florisol	SPE-AUT-0014-01B	SPE-AUT-0014-01C	SPE-AUT-0014-03G	SPE-AUT-0014-03P
SiliaBond Amine	SPE-R52030B-01B	SPE-R52030B-01C	SPE-R52030B-03G	SPE-R52030B-03P
SiliaBond Cyano	SPE-R38030B-01B	SPE-R38030B-01C	SPE-R38030B-03G	SPE-R38030B-03P
SiliaBond Diol	SPE-R35030B-01B	SPE-R35030B-01C	SPE-R35030B-03G	SPE-R35030B-03P
<b>NON-POLAR PHASES</b>				
SiliaBond C8	SPE-R31030B-01B	SPE-R31030B-01C	SPE-R31030B-03G	SPE-R31030B-03P
SiliaBond C8 ne	SPE-R31130B-01B	SPE-R31130B-01C	SPE-R31130B-03G	SPE-R31130B-03P
SiliaBond C18 ne (23%)	SPE-R30130B-01B	SPE-R30130B-01C	SPE-R30130B-03G	SPE-R30130B-03P
SiliaBond C18 (17%)	SPE-R30230B-01B	SPE-R30230B-01C	SPE-R30230B-03G	SPE-R30230B-03P
SiliaBond Cyclohexyl	SPE-R61530B-01B	SPE-R61530B-01C	SPE-R61530B-03G	SPE-R61530B-03P
SiliaBond Phenyl	SPE-R34030B-01B	SPE-R34030B-01C	SPE-R34030B-03G	SPE-R34030B-03P
<b>ION EXCHANGE PHASES</b>				
SiliaBond WCX	SPE-R70030B-01B	SPE-R70030B-01C	SPE-R70030B-03G	SPE-R70030B-03P
SiliaBond SAX	SPE-R66530B-01B	SPE-R66530B-01C	SPE-R66530B-03G	SPE-R66530B-03P
SiliaBond SCX	SPE-R60530B-01B	SPE-R60530B-01C	SPE-R60530B-03G	SPE-R60530B-03P
SiliaBond SCX-2 ne	SPE-R51230B-01B	SPE-R51230B-01C	SPE-R51230B-03G	SPE-R51230B-03P
<b>FLUORINATED PHASES</b>				
SiliaBond Fluorochrom ne	SPE-R63730B-01B	SPE-R63730B-01C	SPE-R63730B-03G	SPE-R63730B-03P
SiliaBond Tridecafluoro	SPE-R63530B-01B	SPE-R63530B-01C	SPE-R63530B-03G	SPE-R63530B-03P
<b>SPECIALITY PHASES</b>				
SiliaBond Carbonate	SPE-R66030B-01B	SPE-R66030B-01C	SPE-R66030B-03G	SPE-R66030B-03P
SiliaBond Isocyanate	SPE-R50030B-01B	SPE-R50030B-01C	SPE-R50030B-03G	SPE-R50030B-03P
SiliaBond Thiol	SPE-R51030B-01B	SPE-R51030B-01C	SPE-R51030B-03G	SPE-R51030B-03P
<b>COUPLING REAGENTS</b>				
SiliaBond Carbodiimide	SPE-R70530B-01B	SPE-R70530B-01C	SPE-R70530B-03G	SPE-R70530B-03P
SiliaBond Dichlorotriazine	SPE-R52230B-01B	SPE-R52230B-01C	SPE-R52230B-03G	SPE-R52230B-03P
<b>MIXED-MODE PHASES</b>				
SiliaBond C8/SAX	SPM-R022830B-01B	SPM-R022830B-01C	SPM-R022830B-03G	SPM-R022830B-03P
SiliaBond C8/SCX	SPM-R023830B-01B	SPM-R023830B-01C	SPM-R023830B-03G	SPM-R023830B-03P
SiliaBond C8/SCX-2	SPM-R028030B-01B	SPM-R028030B-01C	SPM-R028030B-03G	SPM-R028030B-03P
SiliaBond C18/SAX	SPM-R012830B-01B	SPM-R012830B-01C	SPM-R012830B-03G	SPM-R012830B-03P
SiliaBond C18/SCX	SPM-R013830B-01B	SPM-R013830B-01C	SPM-R013830B-03G	SPM-R013830B-03P
SiliaBond C18/SCX-2	SPM-R018030B-01B	SPM-R018030B-01C	SPM-R018030B-03G	SPM-R018030B-03P
SiliaBond SCX-2/SAX	SPM-R802830B-01B	SPM-R802830B-01C	SPM-R802830B-03G	SPM-R802830B-03P
SiliaBond C8/SCX-2/SAX	SPM-R02802830B-01B	SPM-R02802830B-01C	SPM-R02802830B-03G	SPM-R02802830B-03P



**SiliCycle UltraPure SiliaFlash & SiliaBond SPE cartridges**

Volume	6 mL			12 mL	25 mL
Silica mass	500 mg	1 g	2 g	2 g	5 g
Quantity per box	50	50	50	20	20
<b>POLAR PHASES</b>					
SiliaFlash	SPE-R10030B-06P	SPE-R10030B-06S	SPE-R10030B-06U	SPE-R10030B-15U	SPE-R10030B-25X
Florisol	SPE-AUT-0014-06P	SPE-AUT-0014-06S	SPE-AUT-0014-06U	SPE-AUT-0014-12U	SPE-AUT-0014-20X
SiliaBond Amine	SPE-R52030B-06P	SPE-R52030B-06S	SPE-R52030B-06U	SPE-R52030B-12U	SPE-R52030B-20X
SiliaBond Cyano	SPE-R38030B-06P	SPE-R38030B-06S	SPE-R38030B-06U	SPE-R38030B-12U	SPE-R38030B-20X
SiliaBond Diol	SPE-R35030B-06P	SPE-R35030B-06S	SPE-R35030B-06U	SPE-R35030B-12U	SPE-R35030B-20X
<b>NON-POLAR PHASES</b>					
SiliaBond C8	SPE-R31030B-06P	SPE-R31030B-06S	SPE-R31030B-06U	SPE-R31030B-12U	SPE-R31030B-20X
SiliaBond C8 ne	SPE-R31130B-06P	SPE-R31130B-06S	SPE-R31130B-06U	SPE-R31130B-12U	SPE-R31130B-20X
SiliaBond C18 ne (23%)	SPE-R30130B-06P	SPE-R30130B-06S	SPE-R30130B-06U	SPE-R30130B-12U	SPE-R30130B-20X
SiliaBond C18 (17%)	SPE-R30230B-06P	SPE-R30230B-06S	SPE-R30230B-06U	SPE-R30230B-12U	SPE-R30230B-20X
SiliaBond Cyclohexyl	SPE-R61530B-06P	SPE-R61530B-06S	SPE-R61530B-06U	SPE-R61530B-12U	SPE-R61530B-20X
SiliaBond Phenyl	SPE-R34030B-06P	SPE-R34030B-06S	SPE-R34030B-06U	SPE-R34030B-12U	SPE-R34030B-20X
<b>ION EXCHANGE PHASES</b>					
SiliaBond WCX	SPE-R70030B-06P	SPE-R70030B-06S	SPE-R70030B-06U	SPE-R70030B-12U	SPE-R70030B-20X
SiliaBond SAX	SPE-R66530B-06P	SPE-R66530B-06S	SPE-R66530B-06U	SPE-R66530B-12U	SPE-R66530B-20X
SiliaBond SCX	SPE-R60530B-06P	SPE-R60530B-06S	SPE-R60530B-06U	SPE-R60530B-12U	SPE-R60530B-20X
SiliaBond SCX-2 ne	SPE-R51230B-06P	SPE-R51230B-06S	SPE-R51230B-06U	SPE-R51230B-12U	SPE-R51230B-20X
<b>FLUORINATED PHASES</b>					
SiliaBond Fluorochrom ne	SPE-R63730B-06P	SPE-R63730B-06S	SPE-R63730B-06U	SPE-R63730B-12U	SPE-R63730B-20X
SiliaBond Tridecafluoro	SPE-R63530B-06P	SPE-R63530B-06S	SPE-R63530B-06U	SPE-R63530B-12U	SPE-R63530B-20X
<b>SPECIALITY PHASES</b>					
SiliaBond Carbonate	SPE-R66030B-06P	SPE-R66030B-06S	SPE-R66030B-06U	SPE-R66030B-12U	SPE-R66030B-20X
SiliaBond Isocyanate	SPE-R50030B-06P	SPE-R50030B-06S	SPE-R50030B-06U	SPE-R50030B-12U	SPE-R50030B-20X
SiliaBond Thiol	SPE-R51030B-06P	SPE-R51030B-06S	SPE-R51030B-06U	SPE-R51030B-12U	SPE-R51030B-20X
<b>COUPLING REAGENTS</b>					
SiliaBond Carbodiimide	SPE-R70530B-06P	SPE-R70530B-06S	SPE-R70530B-06U	SPE-R70530B-12U	SPE-R70530B-20X
SiliaBond Dichlorotriazine	SPE-R52230B-06P	SPE-R52230B-06S	SPE-R52230B-06U	SPE-R52230B-12U	SPE-R52230B-20X
<b>MIXED-MODE PHASES</b>					
SiliaBond C8/SAX	SPM-R022830B-06P	SPM-R022830B-06S	SPM-R022830B-06U	SPM-R022830B-12U	SPM-R022830B-20X
SiliaBond C8/SCX	SPM-R023830B-06P	SPM-R023830B-06S	SPM-R023830B-06U	SPM-R023830B-12U	SPM-R023830B-20X
SiliaBond C8/SCX-2	SPM-R028030B-06P	SPM-R028030B-06S	SPM-R028030B-06U	SPM-R028030B-12U	SPM-R028030B-20X
SiliaBond C18/SAX	SPM-R012830B-06P	SPM-R012830B-06S	SPM-R012830B-06U	SPM-R012830B-12U	SPM-R012830B-20X
SiliaBond C18/SCX	SPM-R013830B-06P	SPM-R013830B-06S	SPM-R013830B-06U	SPM-R013830B-12U	SPM-R013830B-20X
SiliaBond C18/SCX-2	SPM-R018030B-06P	SPM-R018030B-06S	SPM-R018030B-06U	SPM-R018030B-12U	SPM-R018030B-20X
SiliaBond SCX-2/SAX	SPM-R802830B-06P	SPM-R802830B-06S	SPM-R802830B-06U	SPM-R802830B-12U	SPM-R802830B-20X
SiliaBond C8/SCX-2/SAX	SPM-R02802830B-06P	SPM-R02802830B-06S	SPM-R02802830B-06U	SPM-R02802830B-12U	SPM-R02802830B-20X



### Empty tubes

Empty 1 mL SPE tube with 2 frits (100 per box)	SIM-0007-001
Empty 3 mL SPE tube with 2 frits (100 per box)	SIM-0008-003
Empty 6 mL SPE tube with 2 frits (100 per box)	SIM-0002-006
Empty 12 mL SPE tube with 2 frits (100 per box)	SIM-0003-012
Empty 25 mL SPE tube with 2 frits (100 per box)	SIM-0004-020
Empty 60 mL SPE tube with 2 frits (100 per box)	SIM-0006-060
Empty 150 mL SPE tube with 2 frits (20 per box)	SIM-0009-150

### SiliCycle UltraPure SiliaFlash & SiliaBond 96 well plates

Volume	2 mL		
Sorbent mass	50 mg	100 mg	200 mg
Quantity per box	1	1	1
<b>POLAR PHASES</b>			
SiliaFlash	96W-R10030B-B	96W-R10030B-C	96W-R10030B-G
SiliaBond Amine	96W-R52030B-B	96W-R52030B-C	96W-R52030B-G
SiliaBond Cyano	96W-R38030B-B	96W-R38030B-C	96W-R38030B-G
SiliaBond Diol	96W-R35030B-B	96W-R35030B-C	96W-R35030B-G
<b>NON-POLAR PHASES</b>			
SiliaBond C8	96W-R31030B-B	96W-R31030B-C	96W-R31030B-G
SiliaBond C8 ne	96W-R31130B-B	96W-R31130B-C	96W-R31130B-G
SiliaBond C18 ne (23%)	96W-R30130B-B	96W-R30130B-C	96W-R30130B-G
SiliaBond C18 (17%)	96W-R30230B-B	96W-R30230B-C	96W-R30230B-G
SiliaBond Phenyl	96W-R34030B-B	96W-R34030B-C	96W-R34030B-G
<b>ION EXCHANGE PHASES</b>			
SiliaBond WCX	96W-R70030B-B	96W-R70030B-C	96W-R70030B-G
SiliaBond SAX	96W-R66530B-B	96W-R66530B-C	96W-R66530B-G
SiliaBond SCX	96W-R60530B-B	96W-R60530B-C	96W-R60530B-G
SiliaBond SCX-2	96W-R51230B-B	96W-R51230B-C	96W-R51230B-G
<b>MIXED-MODE PHASES</b>			
SiliaBond C8/SAX	96W-R022830B-B	96W-R022830B-C	96W-R022830B-G
SiliaBond C8/SCX-2	96W-R028030B-B	96W-R028030B-C	96W-R028030B-G
SiliaBond SCX-2/SAX	96W-R802830B-B	96W-R802830B-C	96W-R802830B-G
SiliaBond C8/SCX-2/SAX	96W-R02802830B-B	96W-R02802830B-C	96W-R02802830B-G