

SiliaPrepX™

Polymeric Functionalized
SPE Cartridges & Well Plates



Available
January 2012

SiliCycle proudly introduces its new SiliaPrepX™ family of polymeric SPE cartridges & well plates that will provide you with the complete solution to your solid phase extraction needs.

SILICYCLE 
UltraPure **SILICA GELS**

SiliaPrepX™ Polymeric Functionalized SPE Cartridges & Well Plates

Advantages of Using SiliaPrepX Polymeric SPE Cartridges From SiliCycle Over Competitive Products

- High quality products covering a broad spectrum of applications for a wide range of complexe matrices
- Exceptional lot-to-lot reproducibility
- High recovery and yield
- Very good separation and flow characteristics (*high loadability and great elution properties allowing low solvent consumption and economical analysis*)
- No contamination from the matrix (*Clean extract reducing the ionic suppression and increasing the selectivity for LC-MS/MS applications*)



SiliaPrepX Polymeric Phases

SiliCycle offers a complete family of polymeric phases designed for purification treatments. Here is a list of the SiliaPrepX polymeric phases including description, typical applications, properties and cross reference with competitive product brands.

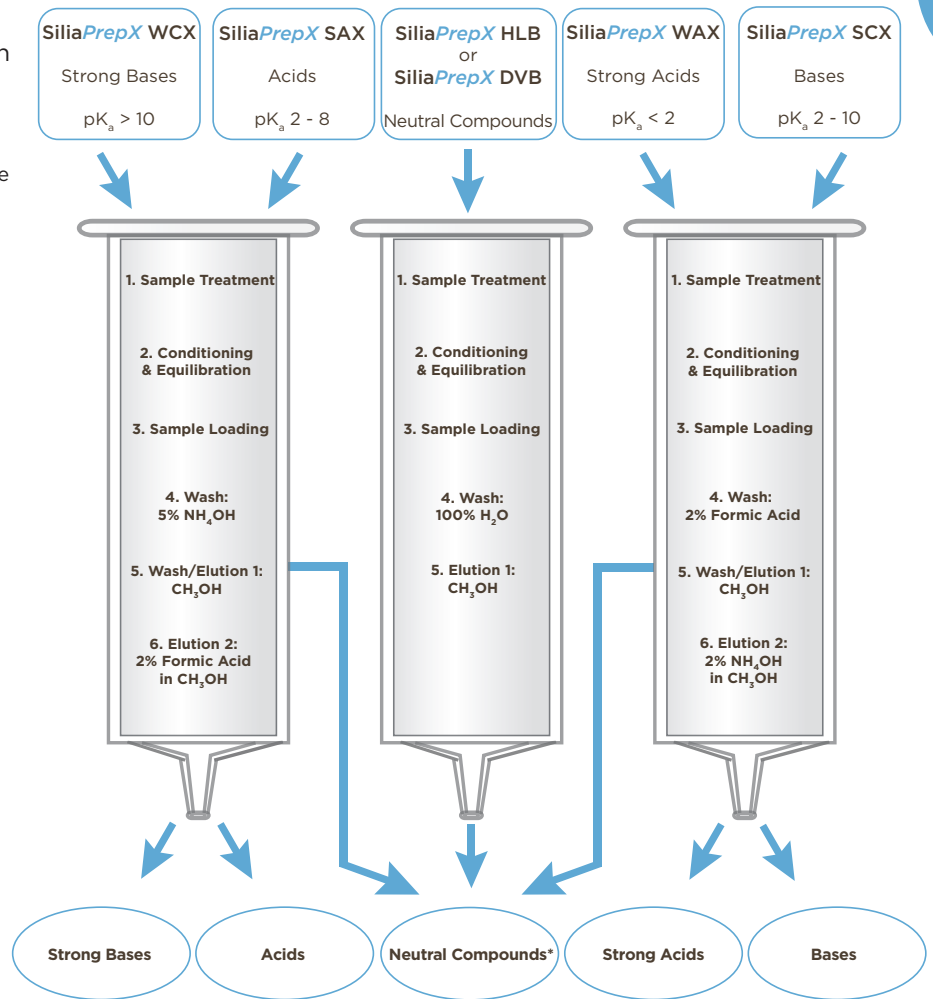
SiliaPrepX Polymeric Phases

SiliaPrepX Phases	Description	Typical Applications	Properties	Competitive Brands
SiliaPrepX HLB PN: P0002	The SiliaPrepX HLB is a wettable copolymer presenting a Hydrophilic-Lipophilic Balance (HLB) permitting a strong retention for neutral, acidic and basic compounds and a high stability in organic solvents.	<ul style="list-style-type: none"> •Drugs & metabolites in biological fluids •API from tablets, creams, in waste water & drinking water •Environmental analysis: trace of PAHs, pesticides, herbicides, phenols & PCB in water •Antibiotics and pesticides in food & beverage 	Particle size: 40 µm Pore size: 110 Å Surface area: 850 m ² /g pH stability: 0 to 14	Waters Oasis® HLB, Phenomenex Strata™-X, Agilent Bond Elut Plexa, Agilent Nexus, Biotage Evolute® ABN
SiliaPrepX DVB PN: P0001	The SiliaPrepX DVB is a polystyrene-divinylbenzene copolymer presenting a high hydrophobicity used as a reversed-phase for the extraction of neutral, acidic and basic compounds in viscous matrices.	<ul style="list-style-type: none"> •Drugs & metabolites in biological fluids •API from tablets, creams, water & waste drinking water •Environmental analysis: trace of PAHs, pesticides, herbicides, phenols & PCB in water 	Particle size: 85 µm Pore size: 60 Å Surface area: 1000 m ² /g pH stability: 0 to 14	Waters Oasis® HLB, Phenomenex Strata™-X, Agilent Bond Elut Plexa, Agilent SimpliQ DVB, Biotage Evolute® ABN
SiliaPrepX SCX PN: P0005	The SiliaPrepX SCX is a polystyrene-divinylbenzene copolymer functionalized by a strong cation exchanger presenting a high selectivity for bases (pK _a 2 - 10). Highly stable in organic solvent.	<ul style="list-style-type: none"> •Basic drugs from biological fluids & tissues •Pesticides, herbicides, fungicides & melamine from food & beverage 	Particle size: 85 µm Pore size: 60 Å Surface area: 800 m ² /g pH stability: 0 to 14 Ionic capacity: 0.85 meq/g	Waters Oasis® MCX, Phenomenex Strata™-X-C, Agilent Bond Elut Plexa PCX, Agilent SimpliQ SCX, Biotage Evolute® CX
SiliaPrepX SAX PN: P0010	The SiliaPrepX SAX is a polystyrene-divinylbenzene copolymer functionalized by a strong anion exchanger presenting a high selectivity for acids (pK _a 2 - 8). Highly stable in organic solvents.	<ul style="list-style-type: none"> •Acidic compounds & metabolites from biological fluids & tissues •Food additives & contaminants •Phenolic acids •Acidic herbicides 	Particle size: 85 µm Pore size: 60 Å Surface area: 900 m ² /g pH stability: 1 to 14 Ionic capacity: 0.25 meq/g	Waters Oasis® MAX, Agilent SimpliQ SAX, Biotage Evolute® AX
SiliaPrepX WCX PN: P0015	The SiliaPrepX WCX is a polystyrene-divinylbenzene copolymer functionalized by a weak cation exchanger used to catch and release strong basic compounds (pK _a >10). Highly stable in organic solvents.	<ul style="list-style-type: none"> •Strong basic compounds from biological fluids & tissues •Streptomycin from food 	Particle size: 85 µm Pore size: 60 Å Surface area: 800 m ² /g pH stability: 0 to 14 Ionic capacity: 0.70 meq/g	Waters Oasis® WCX, Phenomenex Strata™-X-CW, Agilent SimpliQ WCX, Biotage Evolute® WCX
SiliaPrepX WAX PN: P0020	The SiliaPrepX WAX is a polystyrene-divinylbenzene copolymer functionalized by a weak anion exchanger used to catch and release strong acidic compounds (pK _a <2). Highly stable in organic solvents.	<ul style="list-style-type: none"> •Strong acidic compounds & metabolites from biological fluids & tissues •Sulfonates & perfluorinated surfactants 	Particle size: 85 µm Pore size: 60 Å Surface area: 800 m ² /g pH stability: 1 to 14 Ionic capacity: 0.50 meq/g	Waters Oasis® WAX, Phenomenex Strata™-X-AW, Agilent SimpliQ WAX, Biotage Evolute® WAX

Determination of the Optimal SiliaPrepX Polymeric Phase by a Simple & Logical Method

Follow the simple and logical steps outlined in the flow chart to achieve high recovery, clean extract and determine the optimal SiliaPrepX polymeric phase:

- Determine the classification of the analyte (*neutral, acidic or basic compound*)
- Determine the pK_a of the analytes
- Select the SiliaPrepX phases
- Apply the indicated treatment
- Determine the SPE recovery by LC analysis



*Polar compounds as organic acids and bases can also be eluted after the Wash/Elution 1.

Ordering Information

SiliaPrepX Polymeric Formats

Formats	Qty/Box	SiliaPrepX HLB	SiliaPrepX DVB	SiliaPrepX SCX	SiliaPrepX SAX	SiliaPrepX WCX	SiliaPrepX WAX
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SiliaPrepX SPE Cartridges

1 mL/30 mg	100	SPE-P0002-01AA	SPE-P0001-01AA	SPE-P0005-01AA	SPE-P0010-01AA	SPE-P0015-01AA	SPE-P0020-01AA
3 mL/60 mg	50	SPE-P0002-03BB	SPE-P0001-03BB	SPE-P0005-03BB	SPE-P0010-03BB	SPE-P0015-03BB	SPE-P0020-03BB
6 mL/100 mg	50	SPE-P0002-06C	SPE-P0001-06C	SPE-P0005-06C	SPE-P0010-06C	SPE-P0015-06C	SPE-P0020-06C
6 mL/200 mg	50	SPE-P0002-06G	SPE-P0001-06G	SPE-P0005-06G	SPE-P0010-06G	SPE-P0015-06G	SPE-P0020-06G
6 mL/500 mg	30	SPE-P0002-06P	SPE-P0001-06P	SPE-P0005-06P	SPE-P0010-06P	SPE-P0015-06P	SPE-P0020-06P

Custom formats available on request

SiliaPrepX 96-Well Plates

2 mL/10 mg	1	96W-P0002-1A	96W-P0001-1A	96W-P0005-1A	96W-P0010-1A	96W-P0015-1A	96W-P0020-1A
2 mL/30 mg	1	96W-P0002-AA	96W-P0001-AA	96W-P0005-AA	96W-P0010-AA	96W-P0015-AA	96W-P0020-AA
2 mL/60 mg	1	96W-P0002-BB	96W-P0001-BB	96W-P0005-BB	96W-P0010-BB	96W-P0015-BB	96W-P0020-BB



As a recognized industry leader in the development, manufacturing and commercialization of innovative silica gel products, and with multi-ton manufacturing capability, SiliCycle® is your partner of choice for all your metal removal, catalysis, synthesis, and purification requirements.

SiliaMets®
Metal Scavengers



- No leaching: no API contamination
- High selectivity: total recovery of the API
- Very good metal affinity: efficient for a wide range of metal catalysts
- Solvent compatibility: can be used in any solvents (pH 2 to 12)
- Fast kinetic even at room temperature
 - Easily scalable
 - Thermally and mechanically stable
 - Ease of use and flexible formats
- Cost efficient: low cost per gram of metal scavenged
- Available in large quantities (multi-ton scale)

SiliaCat®
Heterogeneous Catalysts



- Wide range of organic coupling and hydrogenation reactions (Suzuki, Sonogashira, Heck, and Stille)
- SiliaCat silica-supported catalysts for cleaner products and cleaner waste streams
 - Ideal for batch or flowthrough applications
 - Cost efficient and highly stable
- Reusable and leach proof
- Available in sizes ranging from grams to multi-kilograms quantities

SiliaBond® C18
Chromatographic Phase



- Unmatched quality and performance
- Very highly hydrophobic C18 phase
 - A homogeneous functionalized layer
 - A unique grafting method ensuring reproducible results
 - An unprecedented endcapping efficiency
- Incomparable lot-to-lot reproducibility
 - The quality of a monofunctional C18
 - Available in large quantities (multi-ton scale)

SiliaBond®
Functionalized Silica Gels



- No leaching (chemical stability)
- Selective nucleophile and electrophile scavengers
 - High resolution chromatographic phases
- Supported reagents for organic synthesis
 - Thermally stable and microwave compatible
 - Available in large quantities (multi-ton scale)

SiliaChrom®
HPLC Columns



- Broad pH range (0,8-12,0)
 - High surface coverage
- Wide variety of chemistries available
- Excellent column efficiency
 - Long column lifetime
 - Low bleed

SiliaPlate™
TLC Plates



- Analytical and preparative TLC plates
- Different sizes and choice of backings
- Normal, reversed and specialty phases

SiliaFlash®
Irregular Silica Gels



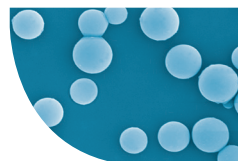
- High purity irregular Gel
 - Tight particle size distribution
- Very low level of fines
- Neutral pH, low metal content, and controlled water level content
- Lot-to-lot reproducibility

SiliaSep™
Flash Cartridges



- High resolution & reproducibility
- Ultra high performance cartridges available (SiliaSep HP)
- Compatible with all commercial systems
- Reversed and specialty phases available

SiliaSphere™
Spherical Silica Gels



- Very high purity & tight particle size distribution
 - Low metal content
- High mechanical stability
- Wide choice of phases available (normal, reversed & specialty)

SiliaPrep™
Solid Phase Extraction



- SiliaPrepX™ polymeric SPE (HLB, DVB, SCX, SAX, WCX & WAX)
 - Wide choice of SPE cartridge formats, 96-well plates
 - Normal, reversed, fluorinated, ion exchange, and mixed-mode phases

