

Customized SPE Solutions for Pharmaceutical Samples

Your samples aren't created the same, so don't settle for general solid phase extraction solutions. Finding the right SPE sorbent provides high recoveries, clean injections, and gains in sensitivity.

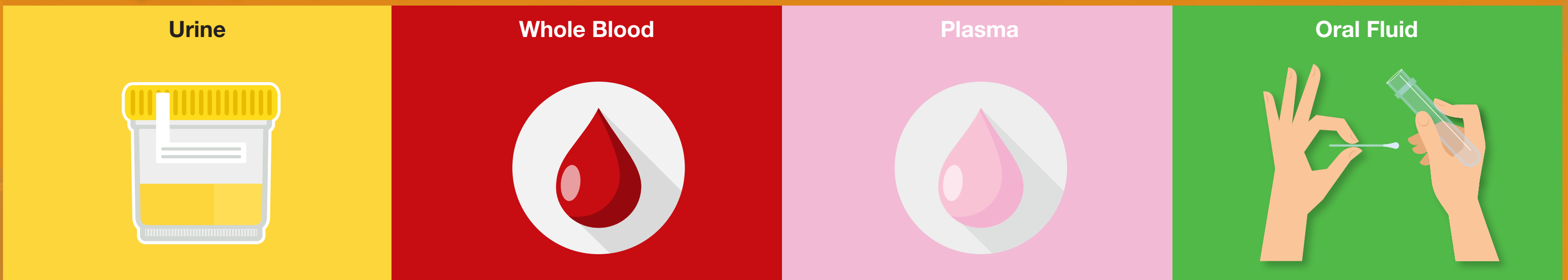


Polymeric SPE Options

Target Analyte	Strong Acids ($pK_a < 2$)	Weak Acids ($pK_a 2-4$)	Neutral Compounds	Weak Bases ($pK_a 8-10$)	Strong Bases ($pK_a > 10$)
	Reversed Phase & Weak Anion-Exchange	Reversed Phase & Strong Anion-Exchange	Reversed Phase	Reversed Phase & Strong Cation-Exchange	Reversed Phase & Weak Cation-Exchange
	Strata-X-AW	Strata-X-A	Strata-X	Strata-X-C	Strata-X-CW
Retention Mechanism	Di-amino	Quaternary Amine	N-Vinylpyrrolidone	Sulfonic Acid	Carboxylic Acid
Recommended Methods	<p>Condition: 1 mL Methanol</p> <p>Equilibrate: 1 mL Acidified Water</p> <p>Load: 2 mL Diluted Sample (pH 6-7)</p> <p>Wash: 1 mL 25 mM Ammonium Acetate* (pH 6-7)</p> <p>Elute Neutrals/Bases: 2 x 500 μL Methanol</p> <p>Elute Any Acid: 2x 500 μL 5% NH_4OH in Methanol</p> <p>Elute Weak Acids: 2x 500 μL 5% Formic Acid in Methanol</p>	<p>Condition: 1 mL Methanol</p> <p>Equilibrate: 1 mL Water</p> <p>Load: 2 mL Diluted Sample (pH 6-7)</p> <p>Wash: 1 mL 25 mM Ammonium Acetate* (pH 6-7)</p> <p>Elute Neutrals/Bases: 2x 500 μL Methanol*</p> <p>Wash: 1 mL Methanol*</p> <p>Elute Acids: 2x 500 μL 5% Formic Acid in Methanol</p>	<p>Condition: 1 mL Methanol</p> <p>Equilibrate: 1 mL Water</p> <p>Load: 2 mL Diluted Sample</p> <p>Wash: 1 mL 5-60% Methanol*</p> <p>Elute: 2x 500 μL 2% Formic Acid in Methanol or Acetonitrile</p>	<p>Condition: 1 mL Methanol</p> <p>Equilibrate: 1 mL Acidified Water</p> <p>Load: 2 mL Diluted Acidified Sample (pH 6-7)</p> <p>Wash: 1 mL 0.1 N HCl in Water</p> <p>Elute Neutrals/Acids: 2x 500 μL 0.1 N HCl in Methanol*</p> <p>Wash: 1 mL 0.1 N HCl in Methanol*</p> <p>Elute Bases: 2x 500 μL 5% NH_4OH in Methanol</p>	<p>Condition: 1 mL Methanol</p> <p>Equilibrate: 1 mL Water</p> <p>Load: 2 mL Diluted Sample (pH 6-7)</p> <p>Wash: 1 mL Water</p> <p>Elute Neutrals/Acids: 2 x 500 μL Methanol</p> <p>Elute Any Base: 2x 500 μL 5% Formic Acid in Methanol</p> <p>Elute Weak Bases: 2x 500 μL 5% NH_4OH in Methanol</p>

* Dry cartridge 5 - 10 mins prior to elution to remove residual solvents.

Matrix Options (Not limited to pictures below)



Recommended Loading Capacity

Strata-X Phase	Plasma/Serum/Blood	Urine	Filtered Tissue Homogenates	Oral Fluid	Mass (mg in tube)
Strata-X, X-C, X-CW, X-A, X-AW	100 μ L	250 μ L	10 mg	N.A.	10 mg
	250 μ L	1 mL	50 mg	500 μ L	30 mg
	500 μ L	2 mL	100 mg	1 mL	60 mg
	1 mL	4 mL	150 mg	2 mL	100 mg
	N.A.	8 mL	300 mg	N.A.	200 mg
Strata-XL, XL-C, XL-CW, XL-A, XL-AW	50 μ L	125 μ L	5 mg	N.A.	10 mg
	125 μ L	500 μ L	25 mg	250 μ L	30 mg
	250 μ L	1 mL	50 mg	500 μ L	60 mg
	500 μ L	2 mL	75 mg	1 mL	100 mg
	N.A.	4 mL	150 mg	N.A.	200 mg
N.A.	10 mL	250 mg	N.A.	500 mg	

N.A. = Not Applicable (not commonly used)
N.R. = Not Recommended (may not provide expected results)

Wash and Elution Solvent Volumes

strata [®] Sorbent Mass	10mg	30mg	60mg	100mg	150mg	200mg	500mg	2 mg Microelution Plates
Practical Minimum Wash and Elution Volume 4 bed volumes	100 μ L	300 μ L	600 μ L	1 mL	1.5 mL	2 mL	5 mL	Recommended Wash Volume: 200 μ L
Recommended Wash and Elution Volume 6 bed volumes	200 μ L	600 μ L	1.2 mL	2 mL	3 mL	4 mL	10 mL	Recommended Elution Volume: 50 μ L

Available Formats for Strata-X or Strata SPE

96-Well Plates	Microelution 96-Well Plates	Tubes	On-Line Columns and Cartridges
For a high throughput, automatable SPE option	A high throughput option to increase sensitivity of small volume samples	Excellent for most common extractions and available in a large variety of different volumes	Run samples in parallel with LC analysis for further time savings

Additional Strata Silica Based Phases for Your Analytes

- C18-E** for extraction of hydrophobic or polar organic analytes from aqueous matrices
- RP** an on-line SPE format ideal for quick clean-up for large panels of analytes
- SCX** targeting weak basic compounds in a strong cation-exchange mechanism
- SAX** targeting weak acidic compounds in a strong anion-exchange mechanism of retention
- ABW** for a strong cation-exchange group and a weak anion-exchange group for the extraction or fractionation of complex mixtures
- NH₂** for strong polar selectivity and hydrogen bonding under normal phase conditions or it can be used as a weak anion-exchange sorbent



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Questions?
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