

# Strata™-X Polymeric SPE

U.S. Patent No. 7,119,145

## Strata-X



### Benefits of Strata-X SPE vs. Traditional SPE

	Strata-X Polymeric SPE	Traditional SPE
<b>Increase Detection Sensitivity</b> by removing matrix contaminants	X	X
<b>Increase Column Lifetime</b> by removing matrix contaminants	X	X
<b>Quality Guaranteed</b> by more than 20 QA and QC measures	X	X
<b>Increase Reproducibility</b> with robust methods	X	X
<b>Save Time</b> by processing multiple samples simultaneously or automating method	X	X
<b>Specific Selectivity</b> for your target analytes	X	X
<b>Decreased Solvent Consumption</b> with the highest loadability	X	
<b>Decreased Blow-down Time</b> with smaller elution volumes	X	
<b>Decreased Sample Variation</b> with deconditioning resistant sorbent	X	
<b>pH Stable from 1-14</b>	X	

### Strata-X Method Development Kits

#### Ordering Information

##### Sample Preparation Method Development Kits

Part No.	Description	Unit	Price
<b>Strata-X Method Development Kit</b>			
KS0-7908	Strata-X 200 mg/3 mL tubes (10 ea) Strata-X-C 200 mg/3 mL tubes (10 ea) Strata-X-CW 200 mg/3 mL tubes (10 ea) Strata-X-A 200 mg/3 mL tubes (10 ea) Strata-X-AW 200 mg/3 mL tubes (10 ea)	ea	

##### Strata-X Method Development 96-Well Plate Kit for High-Throughput Screening

KS0-8241	Strata-X 10 mg/well (3 rows) Strata-X-C 10 mg/well (3 rows) Strata-X-CW 10 mg/well (3 rows) Strata-X-AW 10 mg/well (3 rows)	ea	
KS0-8209	Strata-X 30 mg/well (3 rows) Strata-X-C 30 mg/well (3 rows) Strata-X-CW 30 mg/well (3 rows) Strata-X-AW 30 mg/well (3 rows)	ea	



### Create Your Own Method Development Plate

96-well tab-less tube holders allow you to arrange multiple SPE sorbents within the holder.

#### Ordering Information

##### 96-Well Tab-less Tube Holders

Part No.	Description	Unit	Price
AH0-9054	96-Well 1 mL Tab-less Tube Holder for vacuum manifolds	ea	
AH0-9055	96-Well 1 mL Tab-less Tube Holder for positive pressure manifolds	ea	



For phase structures, turn to the phase product pages, found on pp. 57-61 and 66-72

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## Strata-X

### Step 1. Select a Sorbent Compound-Directed Phase Selection

Analyte $pK_a$	0	1	2	3	4	5	6	Neutral	8	9	10	11	12	13	14
<b>Strata-X</b> <b>Strata-XL</b>	<b>Neutral Analyte or Analyte with <math>\log P &gt; -0.5</math></b> Modified N-Vinylpyrrolidone functional group results in multiple mechanisms of retention for the widest range of selectivity. Strong retention of neutral compounds allows for aggressive washes for increased sensitivity and method reproducibility.														
<b>Strata-X-A</b> <b>Strata-XL-A</b>	<b>Acidic Analyte <math>pK_a \geq 2</math></b> Dimethyl butyl quaternary amine functional group provides strong retention of weakly acidic analytes and allows for 100 % organic washes, increasing sensitivity and method reproducibility.														
<b>Strata-X-AW</b> <b>Strata-XL-AW</b>	<b>Acidic Analyte <math>pK_a \leq 5</math></b> Di-amino functional group is highly selective for charged acidic compounds and allows for 100 % organic washes, increasing sensitivity and method reproducibility.														
<b>Strata-X-C</b> <b>Strata-XL-C</b>	<b>Basic Analyte <math>pK_a \leq 10.5</math></b> Sulfonic acid functional group is highly selective for weakly basic compounds and allows for 100 % organic washes, increasing sensitivity and method reproducibility.														
<b>Strata-X-CW</b> <b>Strata-XL-CW</b>	<b>Basic Analyte <math>pK_a \geq 8</math></b> Carboxylic acid functional group allows for reversible binding of strong bases and quaternary amines. High selectivity for all basic compounds allows for 100 % organic washes, increasing sensitivity and method reproducibility.														
Specialty Sorbents	Application							Phase Description							

#### Strata-X-Drug B

#### Basic Drugs of Abuse

Proprietary strong cation-exchange sorbent that eliminates the need to condition / equilibrate the sorbent.

#### Strata-X-Drug N

#### Neutral Drugs of Abuse

Proprietary reversed phase sorbent that eliminates the need to condition / equilibrate the sorbent.

### Step 2. Select a Sorbent Mass Loading Capacity Chart

Strata-X Phase	Plasma /Serum	Urine	Filtered Tissue Homogenates	Water (particulate free)	Water (particulate-laden)	Mass (mg in tube)
<b>Strata-X, X-C, X-CW, X-A, X-AW</b>	100 $\mu$ L	250 $\mu$ L	10 mg	N.A.	N.A.	10 mg
	250 $\mu$ L	1 mL	50 mg	N.R.	N.R.	30 mg
	500 $\mu$ L	2 mL	100 mg	N.R.	N.R.	60 mg
	1 mL	4 mL	150 mg	50 mL	25 mL	100 mg
	N.A.	8 mL	300 mg	100 mL	50 mL	200 mg
	N.A.	20 mL	500 mg	500 mL	100 mL	500 mg
<b>Strata-XL, XL-C, XL-CW, XL-A, XL-AW</b>	50 $\mu$ L	125 $\mu$ L	5 mg	N.A.	N.A.	10 mg
	125 $\mu$ L	500 $\mu$ L	25 mg	N.R.	N.R.	30 mg
	250 $\mu$ L	1 mL	50 mg	N.R.	N.R.	60 mg
	500 $\mu$ L	2 mL	75 mg	25 mL	13 mL	100 mg
	N.A.	4 mL	150 mg	50 mL	25 mL	200 mg
	N.A.	10 mL	250 mg	250 mL	50 mL	500 mg

N.A. = Not Applicable (not commonly used)

N.R. = Not Recommended (may not provide expected results)



See the following pages for specific phase details and general extraction protocols.

# Strata™-X Polymeric SPE

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U.S. Patent No. 7,119,145

## Strata-X and Strata-XL

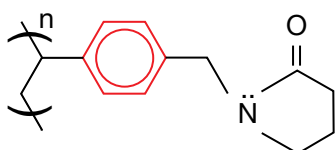
A reversed phase functionalized polymeric sorbent that gives strong retention of neutral, acidic, or basic compounds under aggressive, high organic wash conditions.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

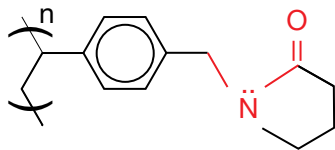
	Strata-X, 33 µm, 85 Å	Strata-XL, 100 µm, 300 Å
High Concentration Samples	✓	
Small Target Analytes (< 10 kDa)	✓	
Large Target Analytes (> 10 kDa)		✓
Large Volume Samples		✓
Viscous Samples		✓

### 3 Mechanisms of Retention

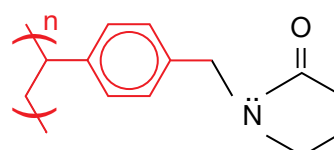
$\pi$ - $\pi$  Bonding



Hydrogen Bonding Dipole-Dipole Interactions







Hydrophobic Interaction



## Strata-X

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S100-TAK**	1 mL (100/box)	
	30 mg	8B-S100-TBJ	3 mL (50/box)	
	60 mg	8B-S100-UBJ**	3 mL (50/box)	
	100 mg	8B-S100-EBJ	3 mL (50/box)	
	100 mg	8B-S100-ECH	6 mL (30/box)	
	200 mg	8B-S100-FBJ	3 mL (50/box)	
	200 mg	8B-S100-FCH	6 mL (30/box)	
	500 mg	8B-S100-HBJ	3 mL (50/box)	
	500 mg	8B-S100-HCH	6 mL (30/box)	
<b>Giga™ Tube</b>				
	500 mg	8B-S100-HDG	12 mL (20/box)	
	1 g	8B-S100-JDG	12 mL (20/box)	
	1 g	8B-S100-JEG	20 mL (20/box)	
	2 g	8B-S100-KEG	20 mL (20/box)	
	5 g	8B-S100-LFF	60 mL (16/box)	
<b>Teflon® Tube</b>				
	200 mg	8B-S100-FBJ-T	3 mL (50/box)	
	200 mg	8B-S100-FDG-T	12 mL (20/box)	
<b>96-Well Plate</b>				
	10 mg	8E-S100-AGB	2 Plates/Box	
	30 mg	8E-S100-TGB	2 Plates/Box	
	60 mg	8E-S100-UGB	2 Plates/Box	

### On-line Extraction Cartridge

Description	Part Number	Unit/Box	Price
Strata-X on-line extraction cartridge, 20 x 2.0 mm	OOM-S033-B0-CB	ea	
Cartridge holder, 20 mm	CHO-5845	ea	

\*\*Tab-less tubes available. Contact Phenomenex for details.






For Large Volume Cleanup/Flash Analysis, use Giga Tubes  
For SPE Vacuum Manifolds and Accessories, see pp. 73-75



The General Extraction Protocol is a convenient starting point for SPE method development. Further optimization may be required to tailor the method to your specific needs.

## Strata-XL

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S043-TAK	1 mL (100/box)	
	60 mg	8B-S043-UBJ	3 mL (50/box)	
	100 mg	8B-S043-EBJ	3 mL (50/box)	
	200 mg	8B-S043-FBJ	3 mL (50/box)	
	200 mg	8B-S043-FCH	6 mL (30/box)	
	500 mg	8B-S043-HCH	6 mL (30/box)	
<b>Giga Tube</b>				
	2 g	8B-S043-KDG	12 mL (20/box)	
	2 g	8B-S043-KEG	20 mL (20/box)	
	5 g	8B-S043-LEG	20 mL (20/box)	
	5 g	8B-S043-LFF	60 mL (16/box)	
	10 g	8B-S043-MFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	30 mg	8E-S043-TGB	2 Plates/Box	

\* To control flow rate with Strata-XL, use a stopcock (AH0-6048) when processing samples with a vacuum manifold.

## General Extraction Protocol

Method written for a 30 mg/1 mL tube

### Condition

1 mL Methanol followed by 1 mL D.I. Water

### Load

Recommended volume of sample (see page 56)

### Wash

1 mL 5-60 % Methanol in D.I. Water. Allow sorbent to dry for 30 seconds

### Elute

2x 500 µL 2 % Formic acid in Methanol or Acetonitrile

# Strata™ -X Polymeric SPE

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U.S. Patent No. 7,119,145

## Strata-X-C and Strata-XL-C

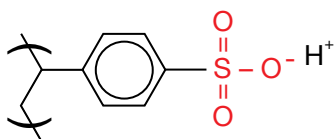
A strong cation-exchange functionalized polymeric sorbent that allows for complete retention of basic compounds with a  $pK_a$  less than 10.5, making 100 % organic wash conditions possible.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

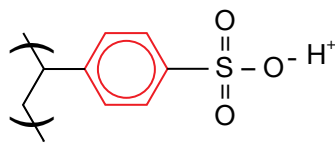
	Strata-X-C, 33 $\mu$ m, 85 Å	Strata-XL-C, 100 $\mu$ m, 300 Å
High Concentration Samples	✓	
Small Target Analytes (< 10 kDa)	✓	
Large Target Analytes (> 10 kDa)		✓
Large Volume Samples		✓
Viscous Samples		✓

### 3 Mechanisms of Retention

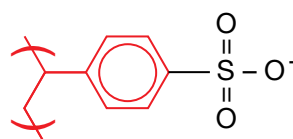
Strong Cation-Exchange



$\pi$ - $\pi$  Bonding






Hydrophobic Interaction



## Strata-X-C

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S029-TAK**	1 mL (100/box)	
	30 mg	8B-S029-TBJ	3 mL (50/box)	
	60 mg	8B-S029-UBJ**	3 mL (50/box)	
	100 mg	8B-S029-EBJ	3 mL (50/box)	
	100 mg	8B-S029-ECH	6 mL (30/box)	
	200 mg	8B-S029-FBJ	3 mL (50/box)	
	200 mg	8B-S029-FCH	6 mL (30/box)	
	500 mg	8B-S029-HBJ	3 mL (50/box)	
	500 mg	8B-S029-HCH	6 mL (30/box)	
<b>Giga™ Tube</b>				
	500 mg	8B-S029-HDG	12 mL (20/box)	
	1 g	8B-S029-JDG	12 mL (20/box)	
	1 g	8B-S029-JEG	20 mL (20/box)	
	2 g	8B-S029-KEG	20 mL (20/box)	
	5 g	8B-S029-LFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	10 mg	8E-S029-AGB	2 Plates/Box	
	30 mg	8E-S029-TGB	2 Plates/Box	
	60 mg	8E-S029-UGB	2 Plates/Box	




### On-line Extraction Cartridge

Description	Part Number	Unit/Box	Price
Strata-X-C on-line extraction cartridge, 20 x 2.0 mm	00M-S048-B0-CB	ea	
Cartridge holder, 20 mm	CH0-5845	ea	

\*\*Tab-less tubes available. Contact Phenomenex for details.

## Strata-XL-C

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S044-TAK	1 mL (100/box)	
	60 mg	8B-S044-UBJ	3 mL (50/box)	
	100 mg	8B-S044-EBJ	3 mL (50/box)	
	100 mg	8B-S044-ECH	6 mL (30/box)	
	200 mg	8B-S044-FBJ	3 mL (50/box)	
	200 mg	8B-S044-FCH**	6 mL (30/box)	
	500 mg	8B-S044-HCH	6 mL (30/box)	
<b>Giga Tube</b>				
	2 g	8B-S044-KDG	12 mL (20/box)	
	2 g	8B-S044-KEG	20 mL (20/box)	
	5 g	8B-S044-LEG	20 mL (20/box)	
	5 g	8B-S044-LFF	60 mL (16/box)	
	10 g	8B-S044-MFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	30 mg	8E-S044-TGB	2 Plates/Box	

## General Extraction Protocol

Method written for a 30 mg/1 mL tube

### Condition

1 mL Methanol followed by 1 mL D.I. Water

### Load

Recommended volume of sample (pH 6-7) (see page 56)

### Wash

1 mL 0.1 N Hydrochloric acid in D.I. Water followed by 1 mL 0.1 N Hydrochloric acid in Methanol

### Elute

2x 500  $\mu$ L 5 % Ammonium hydroxide in Methanol or Acetonitrile



For Large Volume Cleanup/Flash Analysis, use Giga Tubes  
For SPE Vacuum Manifolds and Accessories, see pp. 73-75



The General Extraction Protocol is a convenient starting point for SPE method development. Further optimization may be required to tailor the method to your specific needs.

# Strata™-X Polymeric SPE

guarantee

U.S. Patent No. 7,119,145

## Strata-X-CW and Strata-XL-CW

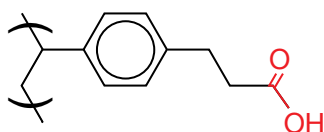
A weak cation-exchange functionalized polymeric sorbent that allows for complete retention of basic compounds with a  $pK_a$  greater than 8, including quaternary amines, making 100 % organic wash conditions possible.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

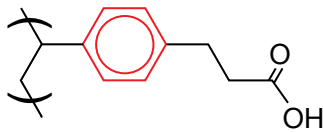
	Strata-X-CW, 33 $\mu$ m, 85 Å	Strata-XL-CW, 100 $\mu$ m, 300 Å
High Concentration Samples	✓	
Small Target Analytes (< 10 kDa)	✓	
Large Target Analytes (> 10 kDa)		✓
Large Volume Samples		✓
Viscous Samples		✓

### 3 Mechanisms of Retention

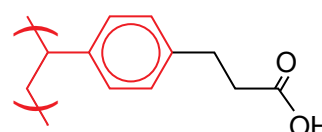
Weak Cation-Exchange



$\pi$ - $\pi$  Bonding






Hydrophobic Interaction



## Strata-X-CW

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S035-TAK**	1 mL (100/box)	
	30 mg	8B-S035-TBJ	3 mL (50/box)	
	60 mg	8B-S035-UBJ**	3 mL (50/box)	
	100 mg	8B-S035-ECH	6 mL (30/box)	
	200 mg	8B-S035-FBJ	3 mL (50/box)	
	200 mg	8B-S035-FCH	6 mL (30/box)	
	500 mg	8B-S035-HBJ	3 mL (50/box)	
	500 mg	8B-S035-HCH	6 mL (30/box)	
<b>Giga™ Tube</b>				
	500 mg	8B-S035-HDG	12 mL (20/box)	
	1 g	8B-S035-JDG	12 mL (20/box)	
	1 g	8B-S035-JEG	20 mL (20/box)	
	2 g	8B-S035-KEG	20 mL (20/box)	
	5 g	8B-S035-LFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	10 mg	8E-S035-AGB	2 Plates/Box	
	30 mg	8E-S035-TGB	2 Plates/Box	
	60 mg	8E-S035-UGB	2 Plates/Box	

### On-line Extraction Cartridge

Description	Part Number	Unit/Box	Price
Strata-X-CW on-line extraction cartridge, 20 x 2.0 mm	00M-S036-B0-CB	ea	
Cartridge holder, 20 mm	CHO-5845	ea	

\*\*Tab-less tubes available. Contact Phenomenex for details.




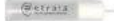

For Large Volume Cleanup/Flash Analysis, use Giga Tubes  
For SPE Vacuum Manifolds and Accessories, see pp. 73-75



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## Strata-XL-CW

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S052-TAK	1 mL (100/box)	
	60 mg	8B-S052-UBJ	3 mL (50/box)	
	100 mg	8B-S052-EBJ	3 mL (50/box)	
	100 mg	8B-S052-ECH	6 mL (30/box)	
	200 mg	8B-S052-FBJ	3 mL (50/box)	
	200 mg	8B-S052-FCH	6 mL (30/box)	
	500 mg	8B-S052-HCH	6 mL (30/box)	
<b>Giga Tube</b>				
	2 g	8B-S052-KDG	12 mL (20/box)	
	2 g	8B-S052-KEG	20 mL (20/box)	
	5 g	8B-S052-LEG	20 mL (20/box)	
	5 g	8B-S052-LFF	60 mL (16/box)	
	10 g	8B-S052-MFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	30 mg	8E-S052-TGB	2 Plates/Box	

## General Extraction Protocol

Method written for a 30 mg/1 mL tube

### Condition

1 mL Methanol followed by 1 mL D.I. Water

### Load

Recommended volume of sample (pH 6-7) (see page 56)

### Wash

1 mL D.I. Water followed by 1 mL Methanol

### Elute

2x 500  $\mu$ L 5 % Formic acid in Methanol or Acetonitrile

# Strata™-X Polymeric SPE

guarantee

U.S. Patent No. 7,119,145

## Strata-X-A and Strata-XL-A

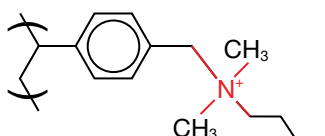
A strong anion-exchange functionalized polymeric sorbent that allows for complete retention of weakly acidic compounds with  $pK_a$  greater than 2, making 100 % organic wash conditions possible.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

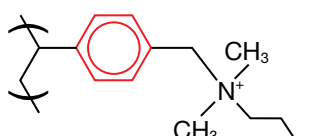
	Strata-X-A, 33 $\mu$ m, 85 Å	Strata-XL-A, 100 $\mu$ m, 300 Å
High Concentration Samples	✓	
Small Target Analytes (< 10 kDa)	✓	
Large Target Analytes (> 10 kDa)		✓
Large Volume Samples		✓
Viscous Samples		✓

### 3 Mechanisms of Retention

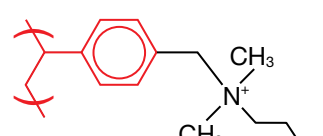
Strong Anion-Exchange



$\pi$ - $\pi$  Bonding






Hydrophobic Interaction






## Strata-X-A

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S123-TAK**	1 mL (100/box)	
	30 mg	8B-S123-TBJ	3 mL (50/box)	
	60 mg	8B-S123-UBJ	3 mL (50/box)	
	100 mg	8B-S123-EBJ	3 mL (50/box)	
	100 mg	8B-S123-ECH	6 mL (30/box)	
	200 mg	8B-S123-FBJ	3 mL (50/box)	
	200 mg	8B-S123-FCH	6 mL (30/box)	
	500 mg	8B-S123-HBJ	3 mL (50/box)	
	500 mg	8B-S123-HCH	6 mL (30/box)	
<b>Giga™ Tube</b>				
	500 mg	8B-S123-HDG	12 mL (20/box)	
	1 g	8B-S123-JDG	12 mL (20/box)	
	1 g	8B-S123-JEG	20 mL (20/box)	
	2 g	8B-S123-KEG	20 mL (20/box)	
	5 g	8B-S123-LFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	10 mg	8E-S123-AGB	2 Plates/Box	
	30 mg	8E-S123-TGB	2 Plates/Box	
	60 mg	8E-S123-UGB	2 Plates/Box	

## Strata-XL-A

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S053-TAK	1 mL (100/box)	
	60 mg	8B-S053-UBJ	3 mL (50/box)	
	100 mg	8B-S053-EBJ	3 mL (50/box)	
	100 mg	8B-S053-ECH	6 mL (30/box)	
	200 mg	8B-S053-FBJ	3 mL (50/box)	
	200 mg	8B-S053-FCH	6 mL (30/box)	
	500 mg	8B-S053-HCH	6 mL (30/box)	
<b>Giga Tube</b>				
	2 g	8B-S053-KDG	12 mL (20/box)	
	2 g	8B-S053-KEG	20 mL (20/box)	
	5 g	8B-S053-LEG	20 mL (20/box)	
	5 g	8B-S053-LFF	60 mL (16/box)	
	10 g	8B-S053-MFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	30 mg	8E-S053-TGB	2 Plates/Box	

## General Extraction Protocol

Method written for a 30 mg/1 mL tube

### Condition

1 mL Methanol followed by 1 mL D.I. Water

### Load

Recommended volume of sample (pH 6-7) (see page 56)

### Wash

1 mL 25 mM Ammonium acetate (pH 6-7) followed by 1 mL Methanol

### Elute

2x 500  $\mu$ L 5 % Formic acid in Methanol or Acetonitrile

\*\*Tab-less tubes available. Contact Phenomenex for details.



For Large Volume Cleanup/Flash Analysis, use Giga Tubes  
For SPE Vacuum Manifolds and Accessories, see pp. 73-75



The General Extraction Protocol is a convenient starting point for SPE method development. Further optimization may be required to tailor the method to your specific needs.

# Strata™-X Polymeric SPE

guarantee

U.S. Patent No. 7,119,145

## Strata-X-AW and Strata-XL-AW

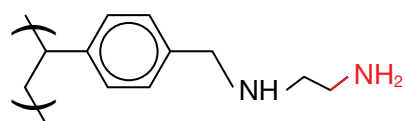
A weak anion-exchange functionalized polymeric sorbent that allows for complete retention of acidic compounds with  $pK_a$  less than 5, making 100 % organic wash conditions possible.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

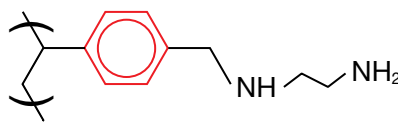
	Strata-X-AW, 33 $\mu$ m, 85 Å	Strata-XL-AW, 100 $\mu$ m, 300 Å
High Concentration Samples	✓	
Small Target Analytes (< 10 kDa)	✓	
Large Target Analytes (> 10 kDa)		✓
Large Volume Samples		✓
Viscous Samples		✓

### 3 Mechanisms of Retention

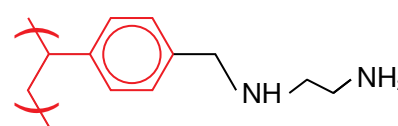
Weak Anion-Exchange



$\pi$ - $\pi$  Bonding



Hydrophobic Interaction



## Strata-X-AW

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S038-TAK**	1 mL (100/box)	
	30 mg	8B-S038-TBJ	3 mL (50/box)	
	60 mg	8B-S038-UBJ	3 mL (50/box)	
	100 mg	8B-S038-EBJ	3 mL (50/box)	
	100 mg	8B-S038-ECH	6 mL (30/box)	
	200 mg	8B-S038-FBJ	3 mL (50/box)	
	200 mg	8B-S038-FCH	6 mL (30/box)	
	500 mg	8B-S038-HBJ	3 mL (50/box)	
	500 mg	8B-S038-HCH	6 mL (30/box)	
	<b>Giga™ Tube</b>			
	500 mg	8B-S038-HDG	12 mL (20/box)	
	1 g	8B-S038-JDG	12 mL (20/box)	
	1 g	8B-S038-JEG	20 mL (20/box)	
	2 g	8B-S038-KEG	20 mL (20/box)	
	5 g	8B-S038-LFF	60 mL (16/box)	
	<b>96-Well Plate</b>			
	10 mg	8E-S038-AGB	2 Plates/Box	
	30 mg	8E-S038-TGB	2 Plates/Box	
	60 mg	8E-S038-UGB	2 Plates/Box	

\*\*Tab-less tubes available. Contact Phenomenex for details.



For Large Volume Cleanup/Flash Analysis, use Giga Tubes  
For SPE Vacuum Manifolds and Accessories, see pp. 73-75



The General Extraction Protocol is a convenient starting point for SPE method development. Further optimization may be required to tailor the method to your specific needs.

## Strata-XL-AW

### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	30 mg	8B-S051-TAK	1 mL (100/box)	
	60 mg	8B-S051-UBJ	3 mL (50/box)	
	100 mg	8B-S051-EBJ	3 mL (50/box)	
	100 mg	8B-S051-ECH	6 mL (30/box)	
	200 mg	8B-S051-FBJ	3 mL (50/box)	
	200 mg	8B-S051-FCH	6 mL (30/box)	
	500 mg	8B-S051-HCH	6 mL (30/box)	
	<b>Giga Tube</b>			
	2 g	8B-S051-KDG	12 mL (20/box)	
	2 g	8B-S051-KEG	20 mL (20/box)	
	5 g	8B-S051-LEG	20 mL (20/box)	
	5 g	8B-S051-LFF	60 mL (16/box)	
	10 g	8B-S051-MFF	60 mL (16/box)	
<b>96-Well Plate</b>				
	30 mg	8E-S051-TGB	2 Plates/Box	

## General Extraction Protocol

Method written for a 30 mg/1 mL tube

### Condition

1 mL Methanol followed by 1 mL D.I. Water

### Load

Recommended volume of sample (pH 6-7) (see page 56)

### Wash

1 mL 25 mM Ammonium acetate (pH 6-7) followed by 1 mL Methanol

### Elute

2x 500  $\mu$ L 5 % Ammonium hydroxide in Methanol or Acetonitrile



# Strata™-X Polymeric SPE

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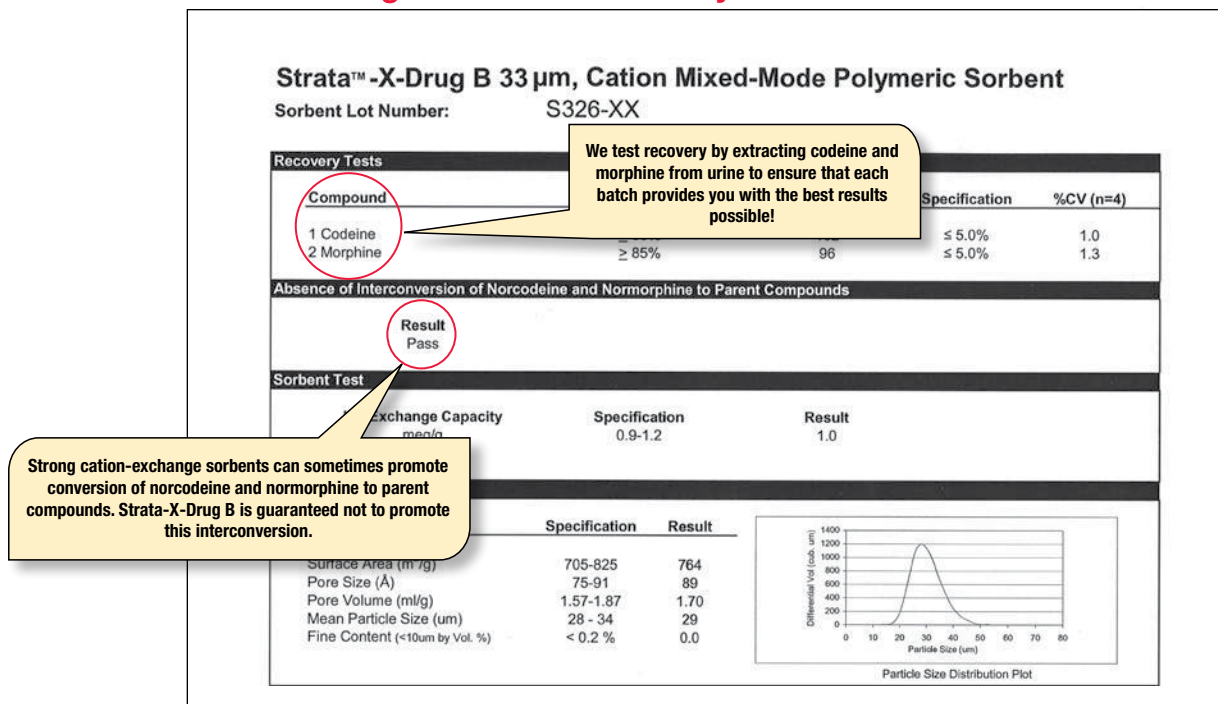
U.S. Patent No. 7,119,145

## Strata-X-Drug B


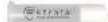

A proprietary strong cation-exchange sorbent that is designed and quality controlled for basic drugs of abuse analysis. This sorbent does not require a conditioning/equilibrating step.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

### Strata-X-Drug B Certificate of Analysis



#### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	10 mg	8B-S128-AAK	1 mL (100/box)	
	10 mg	8L-S128-AAK†	1 mL (100/box)	
	30 mg	8B-S128-TAK	1 mL (100/box)	
	30 mg	8L-S128-TAK†	1 mL (100/box)	
	30 mg	8B-S128-TBJ	3 mL (50/box)	
	60 mg	8B-S128-UBJ	3 mL (50/box)	
	60 mg	8B-S128-UCL	6 mL (200/box)	
<b>Giga™ Tube</b>				
	100 mg	8B-S128-EDG	12 mL (20/box)	
<b>96-Well Plate</b>				
	10 mg	8E-S128-AGB	2 Plates/box	
	30 mg	8E-S128-TGB	2 Plates/box	
	60 mg	8E-S128-UGB	2 Plates/box	

†Tab-less tube

### Strata-X-Drug B Extraction Protocols

	1 Opiates, 6-MAM, PCP, Amphetamines, Methadone, Healthcare Opiates, and Propoxyphene*	2 Marijuana Metabolites	3 Cocaine Metabolites
<b>Condition</b>	<b>Not Required</b>		
<b>Load</b>	Pre-treated urine sample	Pre-treated urine sample	Pre-treated urine sample
<b>Wash 1</b>	2 mL of 100 mM Sodium acetate buffer (pH 5.0)	2 mL of 100 mM Sodium acetate buffer (pH 5.0)	2 mL of 0.1 N Hydrochloric acid
<b>Wash 2</b>	2 mL Methanol	2 mL of Acetonitrile:100 mM Sodium acetate buffer (pH 5.0) (30:70)	2 mL Methanol
<b>Dry</b>	10 minutes under full vacuum	15 minutes under full vacuum	10 minutes under full vacuum
<b>Elute</b>	2 mL of Ethyl acetate: Isopropanol: Ammonium hydroxide (70:20:10)	2 mL of Ethyl acetate: Isopropanol (85:15)	2 mL of Ethyl acetate: Isopropanol: Ammonium hydroxide (70:20:10)

\* Opiates, 6-MAM, PCP, Amphetamines, Methadone, Healthcare Opiates, and Propoxyphene can be extracted simultaneously or separately using the same SPE methodology. Methods are written for 60 mg/6 mL Strata-X-Drug B; however they can be scaled to accommodate smaller or larger sample sizes and sorbent masses.



# Strata™-X Polymeric SPE

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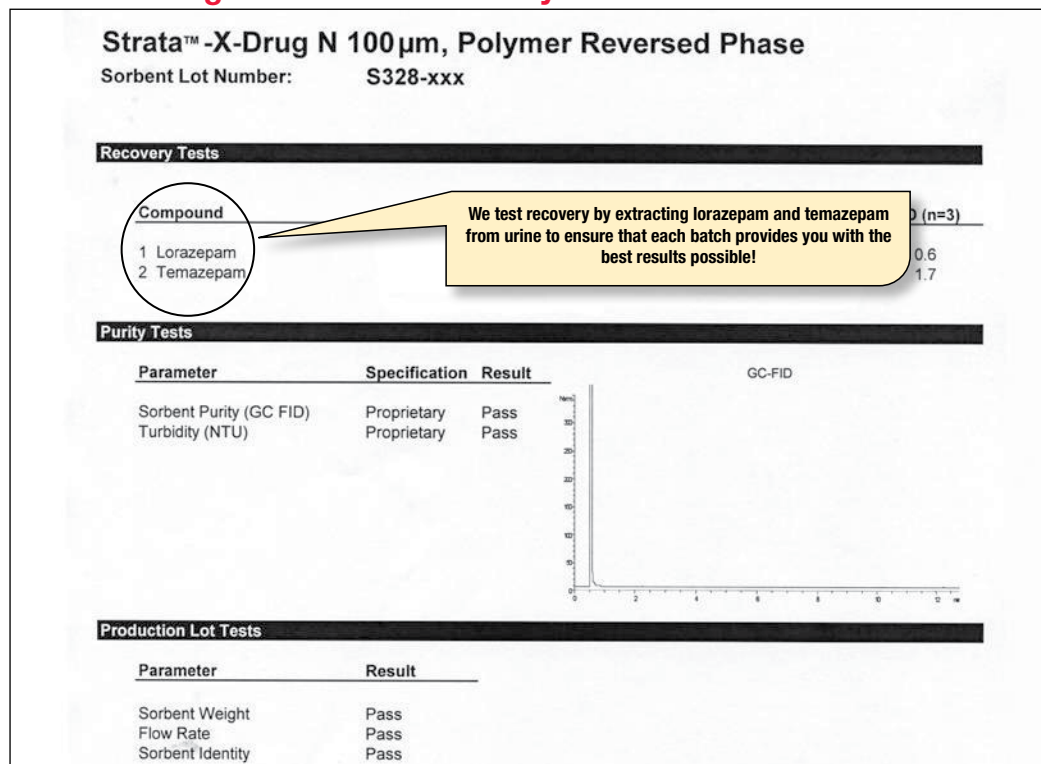
U.S. Patent No. 7,119,145

## Strata-X-Drug N




A proprietary reversed phase sorbent that is designed and quality controlled for neutral drugs of abuse analysis. This sorbent does not require a conditioning/equilibrating step.

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the Strata SPE product for FREE!

### Strata-X-Drug N Certificate of Analysis



### Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
<b>Tube</b>				
	10 mg	8B-S129-AAK	1 mL (100/box)	
	10 mg	8L-S129-AAK†	1 mL (100/box)	
	30 mg	8B-S129-TAK	1 mL (100/box)	
	30 mg	8L-S129-TAK†	1 mL (100/box)	
	30 mg	8B-S129-TBJ	3 mL (50/box)	
	60 mg	8B-S129-UBJ	3 mL (50/box)	
	60 mg	8B-S129-UCH	6 mL (30/box)	
	60 mg	8B-S129-UCL	6 mL (200/box)	
	100 mg	8B-S129-ECH	6 mL (30/box)	
<b>Giga™ Tube</b>				
	100 mg	8B-S129-EDG	12 mL (20/box)	
<b>96-Well Plate</b>				
	10 mg	8E-S129-AGB	2 Plates/box	
	30 mg	8E-S129-TGB	2 Plates/box	
	60 mg	8E-S129-UGB	2 Plates/box	

†Tab-less tube

### Strata-X-Drug N Extraction Protocols

	1	2
	Barbiturates	Benzodiazepines
<b>Condition</b>	Not Required	
<b>Load</b>	Pre-treated urine sample	Pre-treated urine sample
<b>Wash 1</b>	2 mL of 0.1 N Hydrochloric acid (HCl)	2 mL of Acetonitrile:Water (20:80)
<b>Wash 2</b>	2x 2 mL of Methanol: 0.1 N HCl (30:70)	—
<b>Dry</b>	10 minutes under full vacuum	10 minutes under full vacuum
<b>Elute</b>	2 mL of Ethyl acetate: Isopropanol (85:15)	2 mL of Ethyl acetate: Isopropanol (85:15)

Methods are written for 100 mg/6 mL Strata-X-Drug N; however they can be scaled to accommodate smaller or larger sample sizes and sorbent masses.