

**This Data Sheet Contains Important Information About This Product.**

**96-well SPE MD (Method Development) Plate - BAN\*, 25 mg/well**  
**\* For extracting basic, acidic, and neutral compounds (BAN)**

**Product Description**

Supelco 96-well SPE Method Development Plates contain an assortment of SPE phase chemistries ideally suited for method development. The mix of phase chemistries contained within this 96-well SPE plate allows researchers to screen for analyte retention, recovery, and selectivity when achieving one's sample prep objectives.

**Product Template:** 96-well SPE MD Plate-BAN, 25 mg/well (Cat. No. 577522-U)

	1	2	3	4	5	6	7	8	9	10	11	12
<b>A</b>	<b>Discovery<sup>®</sup> DSC-PS/DVB (polystyrene divinyl benzene)<sup>1</sup></b>											
<b>B</b>	<b>Discovery DSC-18 (tC18)<sup>1</sup></b>											
<b>C</b>	<b>Discovery DSC-8 (C8)<sup>1</sup></b>											
<b>D</b>	<b>Discovery DSC-CN (cyanopropyl)<sup>1</sup></b>											
<b>E</b>	<b>Discovery DSC-MCAX (mixed-mode cation exchange)<sup>2</sup></b>											
<b>F</b>	<b>Discovery DSC-WCX (weak cation exchange)<sup>2</sup></b>											
<b>G</b>	<b>Discovery DSC-SAX (strong anion exchange)<sup>3</sup></b>											
<b>H</b>	<b>Discovery DSC-NH<sub>2</sub> (aminopropyl weak anion exchange)<sup>3</sup></b>											

<sup>1</sup> Reversed-phase; <sup>2</sup> Cation-exchange; <sup>3</sup> Anion-exchange

**Generic Protocols:**

The generic protocols described below offer users a starting point for method development. SPE conditions may require further refinement to offer optimal recovery, selectivity, and precision/accuracy. For additional technical support, please contact Supelco Technical Service at 800-359-3041/814-359-3041, or email: [techservice@sial.com](mailto:techservice@sial.com)

<b>SPE Step:</b>	<b><sup>1</sup> Reversed-phase</b>	<b><sup>2</sup> Cation-exchange</b>	<b><sup>3</sup> Anion-exchange</b>
1. Sample Pre-Treatment	Dilute biological sample 1:1 with 10-50 mM buffer (phosphate, ammonium acetate, or ammonium formate) at 2 pH units above analytes' pKa for basic analytes, or 2 pH units below pKa for acidic analytes.	Dilute biological sample 1:1 with 10-50 mM buffer (phosphate, ammonium acetate, or ammonium formate), pH 3 for basic analytes.	Dilute biological sample 1:1 with 10-50 mM buffer (phosphate, ammonium acetate, or ammonium formate), pH 10 for acidic analytes.
2. Condition / Equilibrate	Condition with methanol. Equilibrate with DI water or buffer used in sample pre-treatment.	Condition with methanol. Equilibrate with DI water or buffer used in sample pre-treatment.	Condition with methanol. Equilibrate with DI water or buffer used in sample pre-treatment.
3. Sample Load	Load pre-treated sample from step 1.	Load pre-treated sample from step 1.	Load pre-treated sample from step 1.
4. Wash	Wash off co-retained interferences with 5-20% methanol diluted in DI water or buffer used in sample pre-treatment.	Wash off co-retained interferences with low pH buffer used in sample pre-treatment, followed by 1M acetic acid and 100% methanol.	Wash off co-retained interferences with high pH buffer used in sample pre-treatment, followed by 100% methanol.
5. Elution	Elute with methanol or acetonitrile. pH modification may be necessary to facilitate elution. Use 2% acetic acid in methanol or acetonitrile for basic analytes; or 2% ammonium hydroxide in methanol or acetonitrile for acidic analytes.	Elute basic analytes with 2-5% ammonium hydroxide in methanol or acetonitrile.	Elute acidic analytes with 2-5% acetic acid in methanol or acetonitrile.
6. Evaporate / Reconstitute	Evaporate SPE eluate, and reconstitute with analytical mobile phase		

**Product Information**

Description	25 mg/well	50 mg/well	100 mg/well
<b>96-well SPE MD Plates</b>			
96-well SPE MD Plate-BAN (Basic, Acidic, Neutral Compounds)	577522-U	Inquire	Inquire
<b>Standard 96-well SPE Plates</b>			
Discovery DSC-18	575601-U	575602-U	575603-U
Discovery DSC-18Lt	575604-U	575605-U	575606-U
Discovery DSC-8	Inquire	575628-U	575627-U
Discovery DSC-Ph	575632-U	575631-U	575630-U
Discovery DSC-CN	575626-U	575625-U	575624-U
Discovery DPA-6S (polyamide)	Inquire	Inquire	----
Discovery PS/DVB	575610-U	575611-U	----
Discovery DSC-MCAX (C8/SCX)	575639-U	575640-U	575641-U
Discovery DSC-SCX	575623-U	575622-U	575621-U
Discovery DSC-WCX	575635-U	575634-U	575633-U
Discovery DSC-MANX (C8/SAX)	Inquire	Inquire	Inquire
Discovery DSC-SAX	575620-U	575619-U	575618-U
Discovery DSC-NH2	575617-U	575616-U	575615-U
Supelclean PSA	Inquire	Inquire	Inquire
Supelclean LC-4 (wide pore)	Inquire	Inquire	Inquire

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