

SPESolid Phase
Extraction

Application Note

World Leaders in Sample Preparation

SPE182**ISOLATION OF AMPHETAMINES FROM URINE**

Spe-ed™ Cartridge	Cat. No. 2713- <i>Spe-ed</i> Scan ABN, 3mL; or Cat. No. 2714- <i>Spe-ed</i> Scan ABN, 6mL; or Cat. No. 3713- <i>Spe-ed</i> Scan ABN, LRC, 15mL; or Cat. No. 3723- <i>Spe-ed</i> Scan ABN LRC w/ cap, 15mL. Process with <i>Spe-ed Mate</i> .
Sample Preparation	Add 2mL of 0.1 M Phosphate buffer (pH 6.0) to a 4mL sample of urine. Sample pH should be 6.0**
Cartridge Conditioning	2mL of methanol. 2mL of water. 2mL of 0.1 M phosphate buffer (pH 6.0) DO NOT ALLOW CARTRIDGE TO RUN DRY!
Sample Addition	Add to cartridge. Aspirate samples through the cartridge at 1mL per minute.
Cartridge Wash	2mL of water. 1mL of 1 N acetic acid. 2mL of methanol. Air dry cartridge under vacuum for 10 minutes At 15in. Hg.
Elute Analyte(s)	3mL of 2% ammonium hydroxide in 80/20 methylene chloride / isopropanol*.
Evaporation	Add 50uL of DMF to the 2mLs of eluate. Slowly evaporate to 50uL under N ₂ and < 40°C.

The logo for Applied Separations, featuring the company name in a bold, italicized sans-serif font with horizontal lines above the word "Applied".930 Hamilton Street · Allentown, PA 18101
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Derivatization

Add 50uL of derivatization agent PFAA or PFPA to the DMF residue under N₂ and cap. Heat for 15 minutes at 60°C-70°C. Evaporate to dryness at < 40°C. Re-dissolve in 100uL ethyl acetate. Inject 1 to 2uL

*Make new elution solvent daily.

**Adjust sample pH with 0.1 N HCl or 0.1 NaOH as necessary.

Note: *Since sample matrix interferences and concentrations may vary from sample to sample, it may be necessary to adjust the wash and elution solvent/solution strength and/or volume to optimize isolation.*

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