

# SPE

Solid Phase  
Extraction

# Application Note

World Leaders in Sample Preparation

## SPE114

### ISOLATION OF DIAZEPAM FROM SERUM

<b>Spe-ed™ Cartridge</b>	Cat. No. 2001- Octadecyl C18/14%, 100mg/1mL. Process with <i>Spe-ed Mate</i> .
<b>Sample Preparation</b>	Adjust pH to 9.6 with 0.1 M sodium borate buffer (pH 9.6).
<b>Cartridge Conditioning</b>	2 x 1mL of methanol, followed immediately by 1mL of 0.1 M sodium borate buffer (pH 9.6). <b>DO NOT ALLOW CARTRIDGE TO RUN DRY!</b>
<b>Sample Addition</b>	Add up to 2mL of prepared sample. Aspirate sample completely from cartridge.
<b>Cartridge Wash</b>	2 sequential 0.25mL volumes of 90% 0.1 M sodium borate buffer (pH 9.6)/ 10% acetonitrile. Air-dry cartridge under vacuum for 3 minutes.
<b>Analyte Elution</b>	2 sequential 0.2mL volumes of methanol. It may be necessary to evaporate sample and reconstitute in an analytically suitable solvent/ solution.

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

Applied  
Separations

930 Hamilton Street · Allentown, PA 18101  
610-770-0900 · 610-740-5520 (fax)  
[www.appliedseparations.com](http://www.appliedseparations.com)