

**SPE**Solid Phase  
Extraction

# Application Note

World Leaders in Sample Preparation

**SPE135****ISOLATION OF VITAMINS A, D, E, K AND BETA  
CAROTENE FROM CENTRUM TABLETS****Spe-ed™ Cartridge**

Cat. No. 2003- Octadecyl C18/14%, 500mg/3mL.  
Process with *Spe-ed Mate*.

**Sample Preparation**

Dissolve ground tablet powder (1 tablet weight) in 10mL of 85% absolute ethanol/ 10% distilled water / 5% acetic acid. Then heat solution at 50°C for 20 minutes. Cool, and then dilute the 1.5mL of supernatant with 1mL of water.

**Cartridge  
Conditioning**

2 x 3mL of methanol, followed immediately by 3mL of distilled water.

**DO NOT ALLOW CARTRIDGE TO RUN DRY!**

**Sample Addition**

Add up to 2.5mL of prepared sample. Aspirate sample completely from cartridge.

**Cartridge Wash**

2 sequential 0.5mL volumes of 50% acetonitrile / 50% distilled water.

**Analyte Elution**

3 sequential 0.5mL volumes of methylene chloride. It may be necessary to stabilize the solution with 0.2% BHT.

**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.*

The logo for Applied Separations, featuring the company name in a bold, italicized sans-serif font with horizontal lines above the word "Applied".

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