

**SPE**Solid Phase  
Extraction

# Application Note

World Leaders in Sample Preparation

**SPE109****ISOLATION OF PHENOXY ACID HERBICIDES  
FROM AQUEOUS SAMPLES**

<b>Spe-ed™ Cartridge</b>	Cat. NO. 2006- Octadecyl C18/14%, 500mg/6mL. Process with <i>Spe-ed Mate</i>
<b>Sample Preparation</b>	Adjust sample solution with concentrated HCl to pH2
<b>Cartridge Conditioning</b>	10mL of methanol, followed by 5mL of distilled water adjusted to pH2 with concentrated HCl. <b>DO NOT ALLOW CARTRIDGE TO RUN DRY!</b>
<b>Sample Addition</b>	Fill cartridge 2/3 full with sample solution. Insert universal adaptor on top of cartridge. Insert 75mL reservoir on top of adaptor. Fill reservoir with sample solution and aspirate through cartridge at 5-8mL/minute. Add remaining sample solution to reservoir and do not allow the reservoir to empty until the last volume of sample solution is added. Aspirate all sample solution from cartridge.
<b>Cartridge Wash</b>	1mL of distilled water adjusted to pH2 with concentrated HCl. Air-dry column under vacuum for 5-6 minutes.
<b>Analyte Elution</b>	2 sequential 0.5mL volumes of methanol. For GC-ECD analysis, esterify with 0.5mL of boron trifluoride- methanol reagent (14% w/v) @ 50° C. for 20 minutes.

**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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