

EPA Method 3620C Cleanup of Chlorinated Pesticide Extracts Using Resprep Florisil SPE Cartridges*

Cartridge

The following instructions are for 1000 mg Florisil SPE cartridges. For cartridges with different adsorbent bed weights, adjust the solvent volumes appropriately.

Conditioning

- Add 4 mL hexane; do not allow top frit or Florisil bed to go dry.
- Allow the cartridge to soak for 5 minutes.

Sample Load

Add 1 mL of pesticide sample in hexane.

Elution

- Pull the sample through the Florisil SPE cartridge at a dropwise rate until the hexane level reaches the top of the top frit. Stop the flow.
- Fill the cartridge with a 90:10 hexane:acetone solution. Restart the dropwise flow.
- Collect the effluent from the cartridge in a 10 mL volumetric flask until 10 mL has been collected. Stop the flow.

Note: The cartridge will need to have additional 90:10 hexane:acetone solution added throughout elution in order to collect a complete 10 mL sample.

Concentration

Remove the collection flask and concentrate the sample to a final volume of slightly less than 1 mL. Use hexane to bring the sample back to a volume of 1 mL. Transfer the sample to a 2 mL GC autosampler vial for analysis.

Precautions: Successful results require both uncompromised cartridge quality and careful technique.

To ensure cartridge quality:

- Unopened packages should be stored in a clean, dry location and used promptly.
- Opened packages should be carefully resealed and stored in a desiccated container until the next use.
- Cartridges should not be removed from the packaging prematurely or exposed to the air for prolonged periods before use because Florisil material is hygroscopic and will be deactivated by ambient moisture, resulting in poor performance.

To ensure optimum performance:

- Do not use any plastic or plastic-containing device for sample or solvent handling or transfer.
- Maintain a dropwise flow rate. A steady stream will negatively affect results and should be avoided.



*Resprep Florisil SPE cartridges are silica-based and can be used for many other cleanup procedures in addition to EPA Method 3620C. General-use instructions for all Restek SPE cartridges are available at www.restek.com on the product pages. If you need assistance, contact Restek Technical Service or your local Restek representative.



Questions about this or any other Restek product? Contact us or your local Restek representative (www.restek.com/contact-us).

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