

## Procedure for CarboPrep® 90 SPE cleanup of chlorinated pesticide extracts\*

Cartridge:	250 mg CarboPrep <sup>®</sup> 90 (cat.#26091)**
Conditioning:	Add 3 mL hexane/dichloromethane (80:20); do not allow top frit or
	CarboPrep <sup>®</sup> bed to go dry. Allow the cartridge to soak for 5 minutes.
Sample:	Add 1 mL of pesticide sample in hexane.

## Elution:

- Pull the sample through the CarboPrep<sup>®</sup> 90 SPE cartridge at a drop-wise rate until the solution level reaches the top of the top frit. Stop the flow.
- Fill the cartridge with an 80:20 hexane/dichloromethane solution. Restart the drop-wise flow.
- Collect the effluent from the cartridge in a 20 mL volumetric flask until 20 mL has been collected. Stop the flow.

Note: The cartridge will need to have additional 80:20 hexane/dichloromethane solution added throughout elution in order to collect a complete 20 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, as the CarboPrep<sup>®</sup> material is a strong adsorbent and will collect contaminants from the air, resulting in poor performance.
- If the packing bed has shifted during transport or storage, tap tube to resettle the bed and press the top frit firmly into contact with the top of the CarboPrep® bed.

To ensure optimum performance:

- Do not use any plastic or plastic-containing device for sample or solvent handling or transfer.
- Maintain a drop-wise flow rate. A steady stream will negatively affect results and should be avoided.
- If recovery problems arise, the concentration step may be the source. Optimizing or even eliminating concentration may help solve some issues of low recovery.

\* CarboPrep® SPE cartridges can be used for numerous other cleanup procedures. If you need assistance, contact Restek Technical Service or your local Restek representative.

\*\* For cartridges with different adsorbent bed weights, these instructions are still appropriate; however, solvent volumes should be adjusted.

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Contact Technical Service at 1-800-356-1688, 1-814-353-1300, ext. 4, or support@restek.com (or contact your Restek representative) if you have any questions about this product or any other Restek product.



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