

# CarboPrep 90 SPE Cartridge

cat.# 26091, 26092

The following instructions are for 250 mg CarboPrep SPE cartridges. For cartridges with different adsorbent bed weights, adjust the solvent volumes appropriately.

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

**Cartridge:** 250 mg CarboPrep 90 (cat.#26091)\*\*

**Conditioning:** Add 3 mL hexane/dichloromethane (80:20); do not allow top frit or CarboPrepbed 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 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 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.



## Questions about this or any other Restek product?

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