

PEEK Slurry Reservoir 2.1mm ID Column Packing Hardware Information - Tips & Suggestions

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Hardware Information:

Users packing their own short-length, 2.1 mm internal diameter All-PEEK HPLC columns often require a properly sized slurry reservoir to achieve consistent, uniform packing. WE confirm that the PEEK Slurry Reservoir (Cat. No. 49330-SR1) is fully compatible with the 3 cm, 2.1 mm ID PEEK column hardware set, making it suitable for small-volume packing applications.

Choosing the Correct Reservoir Volume

To achieve optimal packing density and avoid voids or inconsistent bed formation, we recommend that the slurry reservoir volume should be at least three times the volume of the column being packed.

This ensures there is enough slurry headspace for uniform distribution and proper flow through the column body.

What the 2.1 mm PEEK Slurry Reservoir Includes

A complete slurry reservoir assembly for 2.1 mm ID column packing contains:

- A reservoir column body
 - Made of black PEEK
 - 4.6 mm internal diameter (ID)
 - Ideally the same length as the column to be packed
 - Used as the slurry chamber during packing
- A standard PEEK end fitting
 - Used to close the top of the reservoir (no frit installed)
- A 4.6 mm-to-1/4-28 adapter
 - Connects the reservoir to the smaller-ID 2.1 mm column
- PEEK sealing rings
 - Provide leak-free connections at both reservoir ends
- Complete hardware set

- All adapters and sealing rings needed for packing are included; no additional components are required

This reservoir kit is engineered specifically for All-PEEK packing workflows, ensuring clean, metal-free packing from start to finish.

How the Assembly Is Used During Packing

1. Prepare the 2.1 mm column (typically 3 cm in length) for packing.
2. Attach the adapter to connect the 4.6 mm ID reservoir body to the 1/4-28 threaded inlet of the column.
3. Install the appropriate PEEK sealing rings to ensure a tight connection.
4. Fill the reservoir with the slurry, ensuring excess capacity for proper mixing and settling.
5. Close the reservoir using the standard PEEK end fitting (without a frit).
6. Begin packing using your HPLC packing pump, ensuring stable pressure and flow through the system.

The use of PEEK throughout ensures full biocompatibility and prevents metal contamination of sensitive packing materials or analytes.

Recommended Use Cases

The 2.1 mm ID slurry reservoir is ideal for:

- Packing short All-PEEK HPLC columns
- Preparing bioinert columns for LC-MS or biological analytes
- Situations requiring metal-free flow paths
- Low-volume work where precise bed geometry is critical

Its small volume and matching length design make it particularly useful for precision packing of short analytical or microbore columns.

Additional Notes

- Always ensure the reservoir length matches the ordered column length for best performance.
 - Never install a frit in the reservoir top—free flow is required during slurry filling and packing.
 - The included components are designed specifically for All-PEEK systems and should not be used with stainless-steel packing setups.
 - (Compatibility restrictions also noted by product listings.)
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Ordering Information

To order the 2.1 mm ID slurry reservoir, adapters, or All-PEEK column hardware sets:

Visit: [PEEK HPLC column hardware ordering information page](#)

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