

Store and maintain Cogent Diamond Hydride HPLC columns – How To

Before the first use of the Diamond Hydride column:

1. Condition it with 50:50 methanol / DI water for 30 minutes.

Conditioning steps - depends on your samples:

1. When using urine, plasma, or other biological samples etc:

- A. Conditioning the column with 80% acetonitrile / 20% DI water/ 0.2% acetic acid (*or 0.1% formic acid*) is recommended for 20 minutes.
- B. Cleaning with 50% MeOH / 50% DI water is recommended for every 10 injections for 5 minutes.

2. Using Standard Samples:

- A: Conditioning with 80% acetonitrile / 20% DI water / 0.2% acetic acid (*or 0.1% formic acid*) is recommended for 20 minutes.
- B. Cleaning with 50% MeOH / 50% DI water is recommended for every 100 injections or sooner if change in performance is noticed, for 5 minutes.

Storing the column:

1. For long term storage, 100% acetonitrile is best. Rinse with 10 column volumes.
2. For moderate length of time, 90:10 acetonitrile / DI water with 0.1% formic or acetic acid. Rinse with six column volumes.

Washing the column to remove adsorbed compounds:

The best method for washing a Diamond Hydride column is to use 50:50 Methanol / water with 0.1% formic acid as rinse solvent. Wash for 60 minutes using a slower flow rate than for your regular runs. Return to acetonitrile / DI water.

If the performance can still be improved, wash your column overnight using 50:50 isopropyl alcohol / DI water with 0.1% formic acid at a low flow rate.

If needed, uninstall the column and reinstall in a reverse direction and wash it with 50:50 methanol / DI water with 0.1% formic acid for 60 minutes.

Never let the column dry out.