



## SiliaSep™

## Recommended Storage Condition for Functionalized SiliaSep Cartridges

A single use (1 injection run) of Amine, Cyano, Diol, SAX, SCX, WCX and reversed-phases cartridges is usually recommended as the results of a reused cartridge cannot be guaranteed. Indeed, while it is possible to elute “*nearly all the product*” from silica, some impurities may remain at the end of each separation. If the cartridge is not fully cleaned, this remaining material may reduce the purification effectiveness and / or these impurities may elute in a subsequent run. In some cases, proper storage could allow functionalized silica gel cartridge to be reused. A proper storage for each column is described in this Application Note.

### Storage Procedure

1. Do not allow the column to dry out after first use. Turn off the air purge on instrument.
2. If run solvents are immiscible with storage solvents, wash the column with an intermediate solvent.
3. Remove all organic modifiers or strong organic solvents as described below:

3.1 For Amine, Diol, Cyano and reversed-phases columns:

Flush the column with minimally 3 column volumes of:

- **Amine or Diol columns:** 80 % acetonitrile in water or 100 % isopropanol.
- **Cyano columns:** 80 % methanol or acetonitrile in water or 100 % isopropanol.
- **Reversed-phases columns:** 50 % methanol or acetonitrile in water.

3.2 For SAX, SCX and WCX columns:

Flush the column with:

- **SAX column:** minimally 10 column volumes of 5 % NH<sub>4</sub>OH in methanol.
- **SCX column:** minimally 10 column volumes of 1 M acetic acid in methanol. Then, flush with minimally 10 column volumes of 80 % methanol in water or 100 % isopropanol.
- **WCX column:** minimally 3 column volumes of an aqueous solution of 90/10 water/methanol or 90/10 water/acetonitrile. Then, flush the column with minimally 10 column volumes of a solution of formic acid in methanol followed by 10 column volumes of 100 % methanol or acetonitrile.

4. Store the column:

4.1 **Amine, Diol, Cyano, SAX, SCX or WCX columns:** in flush solvent with end caps in place.

4.2 **Reversed-phases columns:** in 70 - 90 % methanol or acetonitrile in water with end caps in place.

