

## Column regeneration

Exposure of a column to samples or solvents containing highly adsorptive components will result in increased back-pressure and a change in selectivity. Often the column can be restored to original performance by suitable wash protocols. When performing solvent rinse regeneration, the column should be reversed and transferred from the analytical HPLC system to a simple, inexpensive pump. Alternatively, disconnect the column from the detector and rinse directly to waste. Each solvent should be rinsed with a minimum of 20, preferably 30, column volumes.

Separation mode	Phases	Wash sequence	Comments
RP [reversed-phase]	<ul style="list-style-type: none"> <li>• LiChrosorb® RP-8, RP-18, (Diol, CN, NH<sub>2</sub>)*</li> <li>• LiChrospher® RP-8, RP-18, (Diol, CN, NH<sub>2</sub>)*</li> <li>• Purospher® STAR RP-8e, RP-18e, (NH<sub>2</sub>)*</li> </ul>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Acetonitrile</li> <li>• 2-Propanol + 0.1% formic acid</li> <li>• Heptane</li> <li>• 2-Propanol + 0.1% formic acid</li> <li>• Acetonitrile</li> <li>• Mobile phase</li> </ul>	* When used in RP mode.
NP [normal phase]	<ul style="list-style-type: none"> <li>• LiChrosorb® Si, Diol, CN, NH<sub>2</sub></li> <li>• LiChrospher® Si, Diol, CN, NH<sub>2</sub></li> <li>• Purospher® STAR Si, NH<sub>2</sub></li> <li>• Chromolith® Si</li> </ul>	<ul style="list-style-type: none"> <li>• Heptane</li> <li>• Chloroform</li> <li>• Ethanol or 2-propanol</li> <li>• Chloroform</li> <li>• Heptane</li> <li>• Mobile phase</li> </ul>	Sequence of dry solvents
HILIC [hydrophilic interaction]	<ul style="list-style-type: none"> <li>• SeQuant® ZIC®-HILIC</li> <li>• SeQuant® ZIC®-pHILIC</li> </ul>	<ul style="list-style-type: none"> <li>• Water**</li> <li>• 0.5 M NaCl or another salt</li> <li>• Water</li> <li>• Mobile phase</li> </ul>	** Double the initial water rinse