

LiChropur[®] reagents for analytical HPLC

Ion pair reagents – what are they?

These are strongly hydrophobic ionic compounds, which form neutral ion pairs with oppositely charged sample molecules. In this way, the simultaneous separation of charged and non-charged molecules is possible. LiChropur[®] reagents are manufactured to ensure high UV-transmittance even at low detection wavelengths.

What concentrations are recommended?

In practice, a concentration of 5×10^{-3} mol/L has proved suitable for most applications using short-chain ion pair reagents and 5×10^{-4} mol/L for long-chain ion pair reagents.

How can buffers be prepared?

Instructions for preparing buffer solutions with LiChropur[®] ion pair reagents are included in the product packaging (these instructions may be modified as required by the specific chromatographic method).

Which columns and eluents can be used with these reagents?

They can be used basically with all stationary phases; the eluent should contain at least 10 % water as otherwise there is a danger of precipitation (especially if acetonitrile is the organic component).

When using long-chain ion pair reagents such as cetyltrimethylammonium hydrogen sulfate or the sodium salt of dodecanesulfonic acid, the column used for the separation should be reserved for this exclusive purpose as irreversible adsorption can take place on the stationary phase leading to changes in separation behaviour.

Ordering information – Ion pair reagents for analytical HPLC LiChropur[®]

Product	Ordering No.	Package	Quantity
1-Butanesulfonic acid sodium salt	1.18303.0025	Glass	25 g
1-Pentanesulfonic acid sodium salt	1.18304.0025	Glass	25 g
1-Hexanesulfonic acid sodium salt	1.18305.0025	Glass	25 g
1-Heptanesulfonic acid sodium salt	1.18306.0025	Glass	25 g
1-Octanesulfonic acid sodium salt	1.18307.0025	Glass	25 g
1-Dodecanesulfonic acid sodium salt	1.18308.0025	Glass	25 g
1-Dodecylhydrogensulfate sodium salt	1.18309.0025	Glass	25 g
Tetramethylammonium hydrogen sulfate	1.18310.0025	Glass	25 g
Tetrabutylammonium hydrogen sulfate	1.18312.0025	Glass	25 g
Cetyltrimethylammonium hydrogen sulfate	1.18313.0025	Glass	25 g

Ordering information – Buffer salts for HPLC LiChropur[®]

Product	Ordering No.	Package	Quantity
di-Potassium hydrogen phosphate trihydrate	1.19754.0250	Glass	250 g
di-Sodium hydrogen phosphate dihydrate	1.19753.0250	Glass	250 g