

SeQuant[®] ZIC[®]-pHILIC

Polymeric columns with extended pH stability for demanding separations of hydrophilic compounds

Ordering information – SeQuant[®] ZIC[®]-pHILIC analytical PEEK columns

| Product | Ordering No. | Particle size | Beads | Dimension length | Dimension i.d. | Contents of one package |
|---|--------------|---------------|-----------|------------------|----------------|-------------------------|
| ZIC [®] -pHILIC PEEK HPLC column | 1.50459.0001 | 5 µm | polymeric | 50 mm | 2.1 mm | 1 piece |
| ZIC [®] -pHILIC PEEK HPLC column | 1.50462.0001 | 5 µm | polymeric | 100 mm | 2.1 mm | 1 piece |
| ZIC [®] -pHILIC PEEK HPLC column | 1.50460.0001 | 5 µm | polymeric | 150 mm | 2.1 mm | 1 piece |
| ZIC [®] -pHILIC PEEK HPLC column | 1.50463.0001 | 5 µm | polymeric | 50 mm | 4.6 mm | 1 piece |
| ZIC [®] -pHILIC PEEK HPLC column | 1.50464.0001 | 5 µm | polymeric | 100 mm | 4.6 mm | 1 piece |
| ZIC [®] -pHILIC PEEK HPLC column | 1.50461.0001 | 5 µm | polymeric | 150 mm | 4.6 mm | 1 piece |
| ZIC [®] -pHILIC Guard column (1-pak) | 1.50437.0001 | 5 µm | polymeric | 20 mm | 2.1 mm | 1 piece |
| ZIC [®] -pHILIC Guard column incl. column coupler (3-pak) | 1.50438.0001 | 5 µm | polymeric | 20 mm | 2.1 mm | 3 pieces |

For more information please visit www.merckmillipore.com/zicphilic

Separation example on ZIC[®]-pHILIC

LC-MS of dithiocarbamates

| | | | |
|-------------------------|---|----------|-----|
| Column | ZIC [®] -pHILIC 150 x 4.6 mm, 5 µm, 100 Å [Ord. No. 1.50461.0001] | | |
| Mobile phase | A: acetonitrile B: 10 mM ammonia | | |
| Gradient | Time [min] | % A | % B |
| | 0.0-5.0 | 90 | 10 |
| | 5.0-13.0 | 60 | 40 |
| | 13.0-16.0 | 40 | 60 |
| Flow rate | 0.7 mL/min | | |
| Detection | Electrospray-MS in negative mode. Single ion monitoring (SIM) at m/z 120, 126, 211, 215 and 191 | | |
| Temperature | ambient | | |
| Injection volume | 5 µL | | |
| Diluent | 10 mM each of NaHCO ₃ and DL-Penicillamine pH 12 with NaOH | | |
| Sample | DMD, d6-DMD, EBD, d4-EBD and PBD (20 mg/L for UV and 0.4 mg/L for MS) | | |
| | Void volume (t ₀) | 2.0 min | – |
| | 1. DMD (Ziram) | 2.2 min | 0.1 |
| | 2. PBD (Propineb) | 12.4 min | 5.2 |
| | 3. EBD (Zineb) | 12.8 min | 5.4 |

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