

SWEDISH EXCELLENCE IN NANOPORUS SILICA (U)HPLC Columns

SVEA™ PFP

SVEA™ PFP is made of fully porous Type B Silica with a dimethylpentafluorophenylpropylsilane bonded phase. Due to the highly electron rich nature of the aromatic rings of SVEA™ PFP, the stationary phase interacts strongly with analytes containing polar aprotic and electron deficient aromatic moieties. Additionally, the highly electronegative surface of the aromatic ring provides strong hydrogen bonding with analytes with protic moieties, such as hydroxyl groups and carboxylic acids. The delocalized charge over the fluorine-carbon bond will interact with analytes containing dipole moments. The polar nature of SVEA™ PFP ensures a fully wettable stationary phase, making it suitable for analyzing very polar compounds.

TYPICAL VALUES

| Property | Method of Analysis | Value | Unit |
|---------------------------------------|------------------------------|-----------------|---------|
| Available particle size | Coulter counter (Elzone) | 5, 3.5 | μm |
| Particle size distribution d90/d10 | Coulter counter (Elzone) | See table below | N/A |
| Pore volume | Nitrogen adsorption (BET) | 0.85 | ml/g |
| Surface area | Nitrogen adsorption (BET) | 300 | m²/g |
| Pore size | Nitrogen adsorption (BET) | 110 | Å |
| Carbon load | SS-EN 15407:2011 | 11 | % |
| Ligand density | Calculated | 1.9 | μmol/m² |

| Particle size (μm) | Particle size distribution |
|--------------------|----------------------------|
| 5 | ≤ 1.5 |
| 3.5 | ≤1.5 |

ADDITIONAL INFORMATION

Storage: Flush out all buffers from the columns and store the column in an organic solvent mixture (e.g. 70/30 acetonitrile/water). Ensure that the end-fittings of the column are properly sealed to avoid drying of the column bed. Store at the ambient temperature.

