



Fluorine-free sealing disks not just for PFS analysis

In the spring of 2006, perfluorinated surfactants (PFSs) from contaminated biological waste on agricultural areas were washed into the rivers Möhne and Ruhr and also into the public eye. Since then, the responsible administrative bodies and analytical institutes heavily investigated best practices for analyzing PFSs in wastewater, sewage sludge, potable water and ground water. Problems quickly arose due to the large number of fluorinated parts used in standard HPLC devices, from the PTFE tubing supplying the pump with solvent, over injector, pump, detector and column seals all the way to the sealing disks of sample vials. These components cause a high baseline noise requiring remediation. In cooperation with a large wastewater laboratory, a number of alternatives were tested and a silicone sealing disk with polyethylene coating was determined as the best alternative.

| P/N | Description | Sealing disk made of | Image |
|-------------|---|--|---|
| 301394-BLAU | Screw cap G 9-L-Blue/Sil-PE | Silicone/white - PE/transp. 1.0 mm, fluorine-free |  |
| 301394-B/GS | Screw cap G 9-L-Blue/Sil-PE, slotted | Silicone/white - PE/transp. 1.0 mm, fluorine-free, slotted |  |