

## SPE Columns



Solid phase extraction (SPE) is a powerful method for sample preparation and is used by most chromatographers today. About 25 years ago MACHEREY-NAGEL designed and introduced CHROMABOND® SPE cartridges containing silica-based adsorbents. Since then we developed the widest range of phases and products for SPE based on silica and polymeric materials.

### **SPE has capabilities in a broad range of applications**

- Environmental analyses
- Pharmaceutical and biochemical analyses
- Organic chemistry
- Food analysis

SPE is a form of digital (step-wise) chromatography designed to extract, partition, and/or adsorb one or more components from a liquid phase (sample) onto a stationary phase (adsorbent or resin). An adsorbed substance can be removed from the adsorbent by stepwise increase of elution strength of the eluent (step gradient technique). SPE extends a chromatographic system's lifetime, improves qualitative and quantitative analysis, and the demand placed on an analytical instrument is considerably lessened.

CHROMABOND® phases for solid phase extraction (SPE):

- [the HR-Xpert concept](#)
- [Reversed phases](#)
- [Normal phases](#)
- [Ion exchange phases](#)
- [Phases for special applications](#)
- [SPE method development kits](#)