



Technical Tip

Gravity Flow or Viscous Samples: Large Particle SPE Alleviates the Pressure

Solid-phase extraction is the most selective form of sample preparation available.

The Strata-X suite of polymeric solid-phase extraction solutions spans the range of selectivity and uses from reversed phase to ion exchange.

Nearly any compound from very polar and ionic, with a very negative logP value, all the way to neutral, very hydrophobic analytes with very large, positive logP values can be extracted from any matrix, including aqueous or strong organic solvents. (For more information or support please contact a Sample Preparation Specialist at Phenomenex or the SamplePrepSupport email group.)

Method development is often required, or to save time, applications or methods can be recommended or shared when requested from Sample Preparation Specialists at Phenomenex.

It may appear that this is all that is needed to know for SPE... What happens if the sample is too viscous to flow through Strata-X 33um media; or the customer cannot or will not purchase a vacuum manifold?

The answer is Strata-X 100um media... It's called **Strata-XL**:

Strata-XL – same neutral, polar and non polar selectivity as Strata-X (33um) but with a 100um particle

Strata XL-C – same sulfonic acid selectivity for cationic analytes like with Strata X-C (33um) but with a 100um particle

Strata XL-CW – same carboxylic acid selectivity for strongly cationic compounds like with Strata X-CW but with a 100um particle

Strata XL-AW (coming soon) – same diamino ligand selectivity for anionic compounds like with Strata X-AW but with a 100um particle

This media has been designed and engineered specifically for viscous samples and for customers who do not use vacuum manifolds.

A vacuum manifold can still be used to complete each step of the extraction for recovering the last few drops at the end of each SPE step but a vacuum manifold is not required.

The same usage conditions and steps can be used for Strata-X or Strata-XL phases, the only difference is the particle size and flow rate. So when in doubt, try both Strata-X and Strata-XL!

Suggested mass conversions based on surface area for X and ion exchange capacity for the ion exchangers:

60mg Strata-X (800 m²/g) = **100mg** Strata-XL (500 m²/g)

60mg Strata X-C (1.0 meq/g) = 60mg Strata XL-C (1.0 meq/g)

60mg Strata X-CW = 60mg Strata XL-CW

60mg Strata X-AW = 60mg Strata XL-AW

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