

The Wrench

Vol.4 Issue 1

Material Solvent Compatibility

When it comes to fittings & seals we have several options to choose from. Fittings are typically made of stainless steel, Teflon, or PEEK. Plunger seals are often made of a Teflon or graphitized Teflon material or a UHMWPE material. Autosampler and column switching rotor seals are available in Tefzel, PEEK, or Vespel varieties.

The reasons for the various options to ensure compatibility of wetted materials in the system they contact. The following chart lists the chemical compatibility of these materials in a variety of HPLC solvents.

	<u>PEEK</u>	<u>UHMWPE</u>	<u>Tefzel</u>	<u>Vespel</u>	<u>Teflon</u>
Acetic Acid	Excellent	Excellent	Excellent	Excellent	Excellent
Acetone	Excellent	Good	Fair	Excellent	Excellent
Acetonitrile	Excellent	Excellent	Excellent		Excellent
Chloroform	Excellent	Fair	Excellent	Excellent	Excellent
Diethyl ether	Excellent	Good	Excellent		Excellent
Ethyl Acetate	Excellent	Poor	Excellent	Excellent	Excellent
Formic Acid	Excellent	Poor	Excellent	Excellent	Excellent
Hexane	Excellent	Poor	Excellent	Excellent	Excellent
Isopropanol	Excellent	Excellent	Excellent	Excellent	Excellent
Methanol	Excellent	Excellent	Excellent		Excellent
Methylene Chloride	Fair	Fair	Excellent	Excellent	Excellent
Tetrahydrofuran	Fair	Good	Fair		Excellent
Toluene	Excellent	Good	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent	Good	Excellent

Call 952-895-8292 or 800-670-4667 (8:00 AM - 5:00 PM CT)
www.ctshplc.com

Product or company names mentioned on this site may be trademarks of their respective owners.
Copyright © 2006 Chromatography Technology Services Corp.

This business is dedicated to the LORD!