



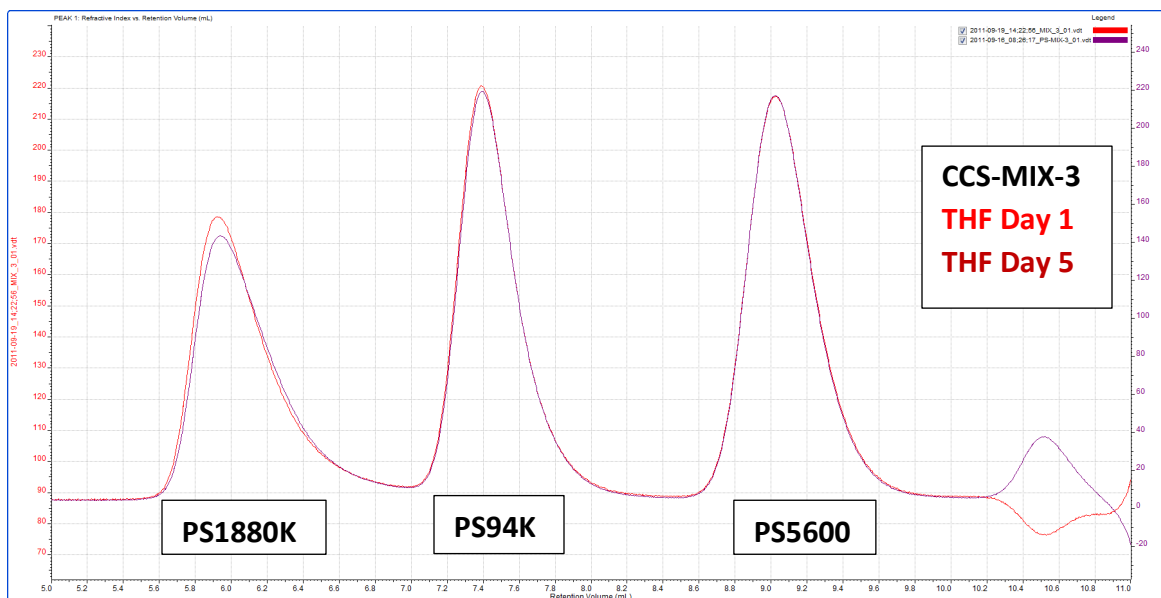
HM GPC Column App Note #13

HMJ Hydrocarbon Multi-Solvent (HM-Series) GPC Columns

HM-Series is a new class of GPC columns that are designed to work with a wide variety of hydrocarbon (organic) solvents. These columns are packed with highly cross-linked DVB resins so that the user can change mobile phase regularly without switching between dedicated columns. This App Note shows how well such a column (HM-MBMMW-3078) can withstand several solvent changes and show basically no degradation of resolution or pressure drops. The following table describes the experimental conditions. Please note the column pressure drops agreed fairly well with the individual solvent viscosity. This indicates that there were no column structural damages during this 5 day experiment. Furthermore, the THF pressure drop returned to the original level at the end of this procedure.

Solvent Change every 24 hours	THF to CHCl ₃ to DMF to Toluene to THF
Pressure drop (psi) with each Solvent	550 – 680 – 900 – 660 - 560
Columns	1 X HM--MBMMW-3078
Flow Rate	1 mL/min
Column Temp	30C

The following THF solvent RI Overlay showed that there were no resolution changes from day1 to day 5.



The results show that the HM-Series columns can be used for a wide variety of organic solvents.