



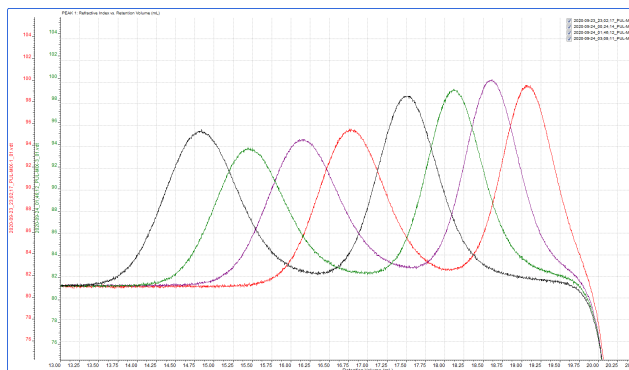
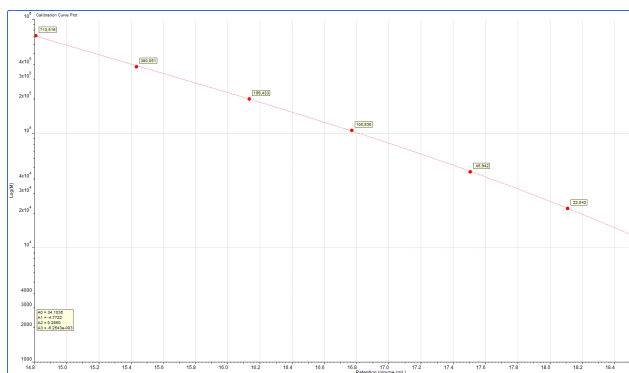
CCS-PUL Application Note #16

Pullulan Conventional Calibration Standards (CCS-PUL)

CCS-PUL is a new class of GPC standards designed for quick and reproducible column calibration work. The preparation procedure is similar to Triple Detection Standards (TDS) where an aliquot (2 to 5 mL) of solvent is added to the pre-weighed Mixes. The resulting standard solutions will be very consistent from calibration to calibration which is important for MWD results consistency. The 8 Pullulan fractions are grouped into 4 mixes that can be easily resolved by a set of high resolution linear column. The following are the experiment conditions.

Solvent	0.05M Sodium Sulfate
Samples	All 4 Mixes are diluted with 2 mL solvent
Columns	2 X LB-806M
Flow Rate	1 mL/min
Column Temp	30C

The following is an example Conventional Calibration Curve using the CCS-PUL Mixes.



Mixes	PUL Stds	Mp	mg/Vial
1	PUL-5K	5,651	3.0
1	PUL-100K	105,830	3.0
2	PUL-10K	11,251	3.0
2	PUL-200K	199,433	3.0
3	PUL-20K	22,042	3.0
3	PUL-400K	380,051	3.0
4	PUL-50K	45,942	3.0
4	PUL-800K	710,516	3.0