

Errata Notice

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10273 - Column Application Note Stability test of POLEFIN columns with a broad Poly(ethylene)

Poly(ethylene) (PE) is available as low density (LDPE) and high density (HDPE) PE. LDPE shows a very low density in the range of 0.915 - 0.925 g/cc, a crystallinity between 40-50%, and is highly branched. HDPE shows a high density greater or equal to 0.941 g/cc, a high crystallinity (60-80%), and is mainly linear. PE is commercially available as ultra high molar mass polymer (UHMWPE, M up to 6 000 000 g/mol).

Experimental Setup

Mobile Phase:	Trichlorobenzene
Stationary Phase:	PSS POLEFIN
Flow rate [mL/min]:	1,00
Temperature [°C]:	145
Detection:	Water 150C RI
Calibration:	Kit Poly(ethylene)
Data processing:	PSS WinGPC

Recommendations for Sample Concentration

narrow PDI	
M 100 Da - 10 000 Da:	2 g/L
M 10 000 Da - 1 000 000 Da:	1-2 g/L
M > 1 000 000 Da:	0.5 g/L or less
broad PDI (>1.5)	
all molar masses:	3.0 - 5.0 g/L
Injection volume [µL]:	100

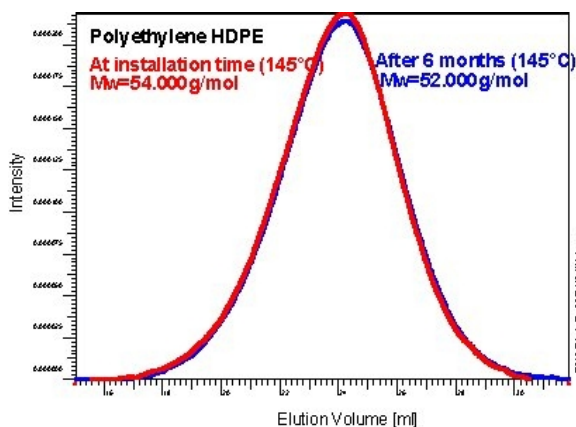


Suitable Columns

low molecular weights:	P/N 210-0001 (set of 3)
medium molecular weights:	P/N 210-0002 (set of 2) OR poa083010lim (1 linear)
high molecular weights:	P/N 210-0003 (set of 3) OR poa083010xl (1 linear)
ultrahigh molecular weights:	P/N 210-0004 (set of 3) OR poa083020luh

Stability test PSS POLEFIN columns separation on PSS POLEFIN

separation on PSS POLEFIN



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