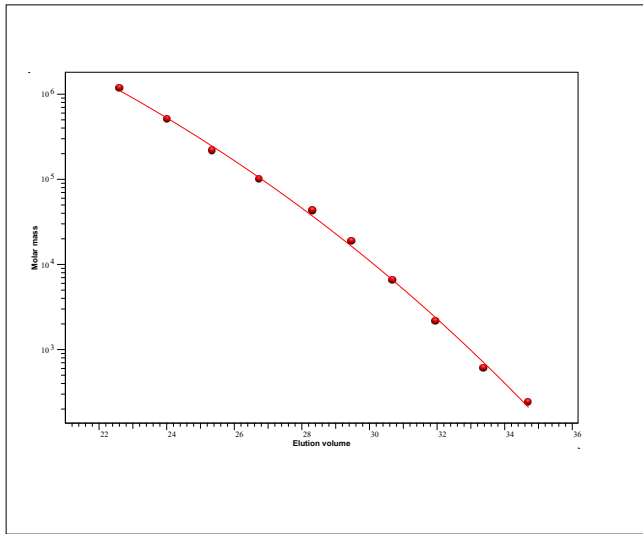


Certificate of Analysis

Product: ReadyCal-Kit PEO/PEG
 Part No: PSS-peokitr1
 Lot No: peokitr1-15

GPC/SEC - Calibration Curve



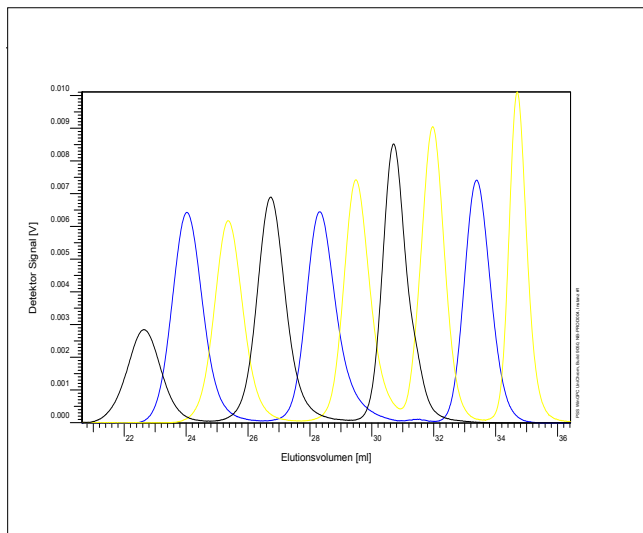
GPC/SEC - Calibration Table

Elution volume [ml]	Mp [Da]	Polymer Lot No:
22,62	1180000	peo120520
24,02	504000	peo270417
25,35	217000	peo120515
26,75	99000	peo061212
28,32	42700	peo130810
29,48	18600	peg160-2
30,70	6530	peg2128
31,97	2130	peg080818
33,39	599	peg06-4
34,70	238	peg160317

Note:

Mp = Molar mass at the peak maximum

GPC/SEC - Polymer Overlay

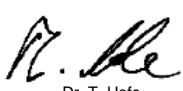


GPC/SEC - Calibration Conditions

Solvent: Water, Sodium azide 0.2g/L
 Flow rate: 1,00 ml/min
 Precolumn [8 x 50 mm]: PSS SUPREMA 10µm
 Columns [8 x 300 mm]: PSS SUPREMA 10µm ultrahigh / ultrahigh / ultrahigh
 Temperature: 23 °C
 Inject volume: 20 µl
 Internal standard: none
 Data Acquisition Software: PSS WinGPC
 Calibration by: A.Klein
 Fit quality: Polynomial 3
 R: 0,999242

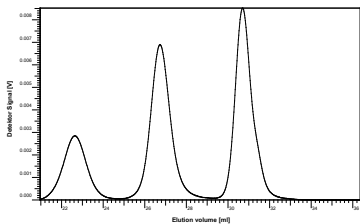
Storage: Store the tightly recapped polymer standards in a dry, dark, cool area; e.g. a refrigerator (4 °C).
 Date of expiry: yyyy/mm/dd (See also product label.)
 Date of approval: yyyy/mm/dd

Manufacture and control according to PSS method of analysis


 Dr. T. Hofe
 production director

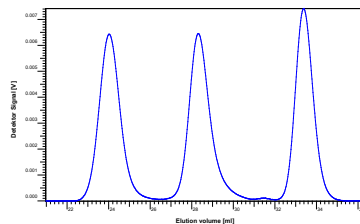
Product: ReadyCal-Kit PEO/PEG
 Part No: PSS-peokitr1
 Lot No: peokitr1-15

Colour code: Cap – black



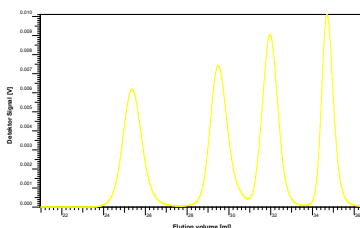
Mp [Da]	Mw [Da]	Mn [Da]	Mw (LS) ^a / Mn (NMR) ^b [Da]	Mass [mg]	Lot No:
1 180 000	1 200 000	1 110 000	1 200 000 ^a	1.125*	peo120520
99 000	103 000	91 800	93 200 ^a	2.25	peo061212
6 530	6 200	5 860	6 250 ^a	2.25	peg2128

Colour code: Cap – blue



Mp [Da]	Mw [Da]	Mn [Da]	Mw (LS) ^a / Mn (NMR) ^b [Da]	Mass [mg]	Lot No:
504 000	504 000	461 000	457 000 ^a	2.25	peo270417
42 700	40 100	30 700	36 500 ^a	2.25	peo130810
599	601	560	604 ^b	2.25	peg06-4

Colour code: Cap – yellow



Mp [Da]	Mw [Da]	Mn [Da]	Mw (LS) ^a / Mn (NMR) ^b [Da]	Mass [mg]	Lot No:
217 000	220 000	196 000	203 000 ^a	2.25	peo120515
18 600	17 900	14 900	16 000 ^a	2.25	peg160-2
2 130	2 130	2 070	2 230 ^a	2.25	peg080818
238	238	238	238 ^b	2.25	peg160317

For exact determination of sample concentration, we recommend to add the solvent volume precisely.

Level of eluent	full	half	quarter
Volume of eluent	1.5 ml	0.75 ml	0.375 ml
Concentration	1.5 g/l resp. 0,75 g/l*	3 g/l resp. 1.5 g/l*	6 g/l resp. 3 g/l*