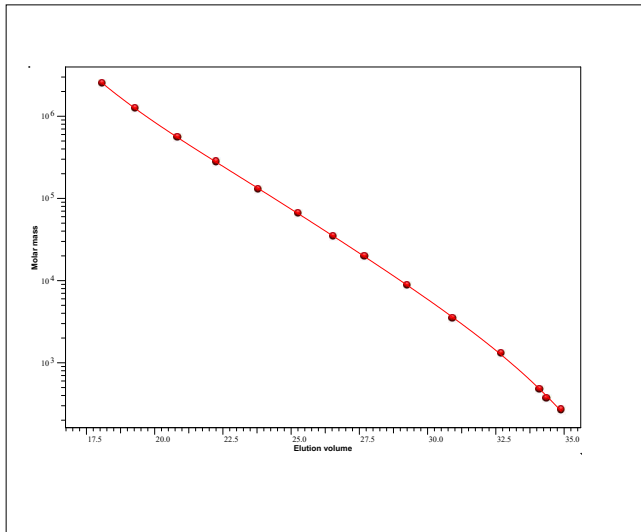


# Certificate of Analysis

Product: ReadyCal-Kit Poly(styrene)  
 Part No: PSS-pskitr4  
 Lot No: pskitr4-11

## GPC/SEC - Calibration Curve



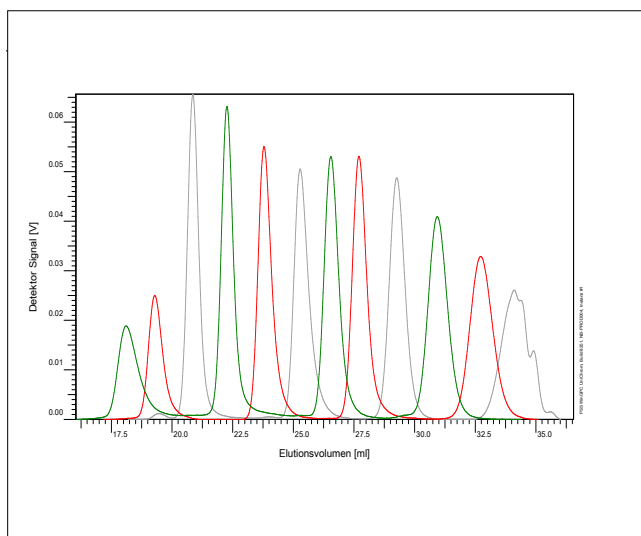
## GPC/SEC - Calibration Table

Elution volume [ml]	Mp [Da]	Polymer Lot No:
18,10	2520000	ps090705
19,30	1240000	ps090715
20,86	552000	ps200311
22,26	277000	ps31059
23,80	130000	ps5124
25,27	66000	ps14057
26,55	34800	ps9029n
27,71	19700	ps211114
29,26	8680	ps050215
30,93	3470	ps6126
32,71	1306	ps080116
34,11	474	ps031215
34,38	370	ps031215
34,90	266	ps031215

**Note:**

Mp = Molar mass at the peak maximum

## GPC/SEC - Polymer Overlay

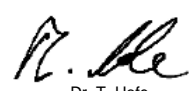


## GPC/SEC - Calibration Conditions

Solvent: Tetrahydrofuran  
 Flow rate: 1,00 ml/min  
 Precolumn [8 x 50 mm]: PSS SDV 5µm  
 Columns [8 x 300 mm]: PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å  
 Temperature: 23 °C  
 Inject volume: 20 µl  
 Internal standard: Toluene at 37,68 ml  
 Data Acquisition Software: PSS WinGPC  
 Calibration by: J.Preis  
 Fit quality: Polynomial 5  
 R: 0,999967

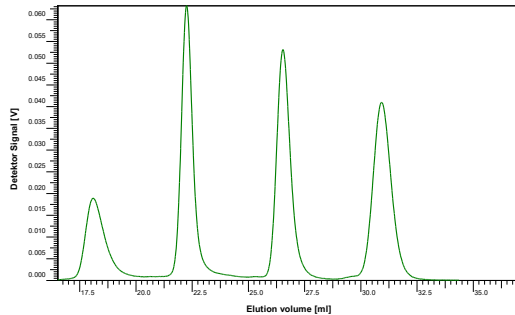
Storage: Store the tightly recapped polymer standards in a dry, dark, cool area; e.g. a refrigerator (4 °C).  
 Date of expiry: yyyy/mm/dd (See also product label.)  
 Date of approval: yyyy/mm/dd

Manufacture and control according to PSS method of analysis



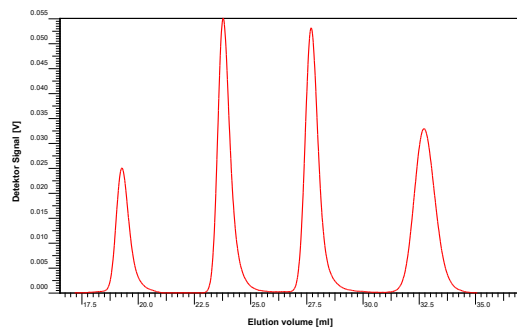
Dr. T. Hofe  
production director

Product: ReadyCal-Kit Poly(styrene)  
 Part No: PSS-pskitr4  
 Lot No: pskitr4-11



Colour code: Vial – clear / without label Cap – green

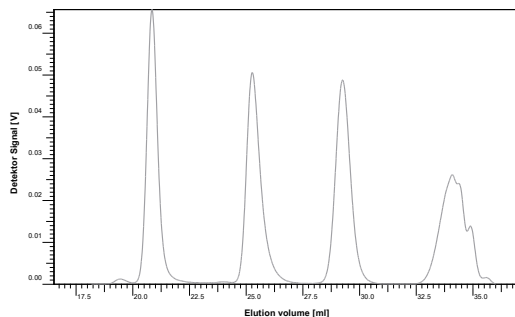
Mp [Da]	Mw [Da]	Mn [Da]	Mass [mg]	Lot No:
2 520 000	2 460 000	2 300 000	2.0*	ps090705
277 000	271 000	265 000	4.0	ps31059
34 800	34 000	32 700	4.0	ps9029n
3 470	3 460	3 260	4.0	ps6126



Colour code: Vial – clear / without label Cap – red

Mp [Da]	Mw [Da]	Mn [Da]	Mass [mg]	Lot No:
1 240 000	1 170 000	1 100 000	2.0*	ps090715
130 000	125 000	120 000	4.0	ps5124
19 700	19 100	18 200	4.0	ps211114
1 306	1 220	1 120	4.0	ps080116**

\*\* Poly(styrene) (Lot No. ps080116): Mp 1306 = highest peak according to GPC/SEC conditions on PSS SDV 3µm columns in THF (oligomer – mixture with Mp 1306, 1202, 1098, 994, 890, 786, 682, 578, 474, 370, 266 Da. Due to a possible lack of resolution the highest Mp value can shift to the next smaller oligomer (1202 Da or 1098Da).



Colour code: Vial – clear / without label Cap – white

Mp [Da]	Mw [Da]	Mn [Da]	Mass [mg]	Lot No:
552 000	554 000	532 000	4.0	ps200311
66 000	62 500	59 300	4.0	ps14057
8 680	8 670	8 420	4.0	ps050215
370	498	435	4.0	ps031215***

\*\*\* Poly(styrene) (Lot No. ps031215): Mp 370 = highest peak according to GPC/SEC conditions on PSS SDV 3µm columns in THF (oligomer – mixture with Mp 474, 370, 266 Da).

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

Level of eluent	full	half	quarter
Volume of eluent	4.0 ml	2.0 ml	1.0 ml
Concentration	1 g/l resp. 0,5 g/l*	2 g/l resp. 1 g/l*	4 g/l resp. 2 g/l*

**Note:** Please use suitable caps and septa for high-temperature applications.