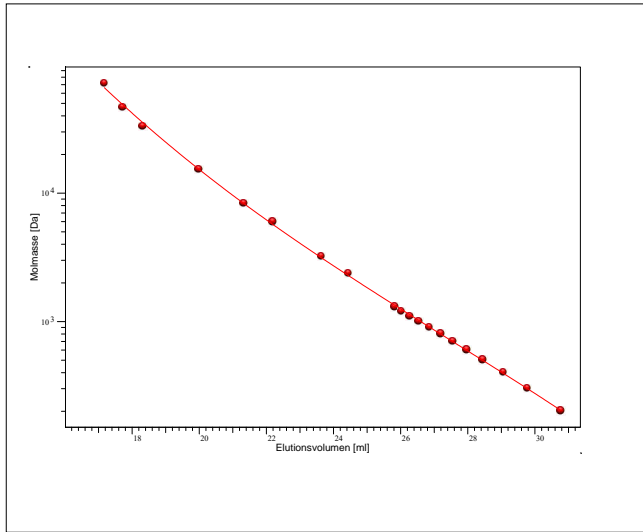


# Certificate of Analysis

Product: ReadyCal-Kit Poly(methyl methacrylate) low  
 Part No: PSS-mmkitr1I  
 Lot No: mmkitr1I-02

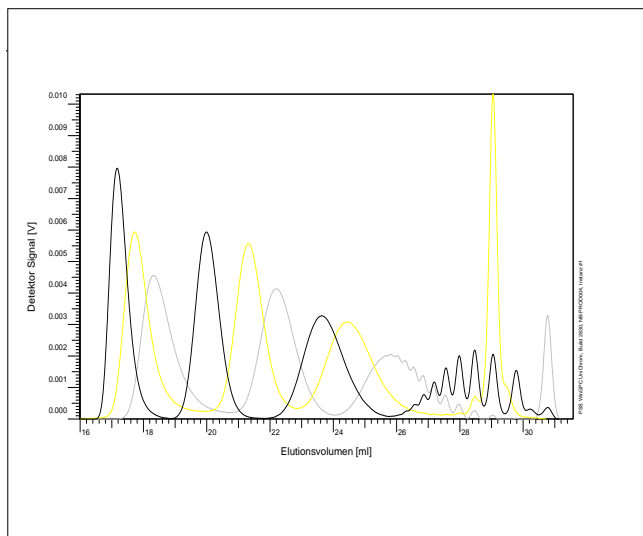
## GPC/SEC - Calibration Curve



## GPC/SEC - Calibration Table

Elution volume [ml]	Mp [Da]	Polymer Lot No:
17,17	71800	mmg071013
17,72	46800	mmg091013
18,32	33000	mmg300415
19,99	15400	mmg29069
21,32	8350	mmg22111
22,19	5980	mmg110913
23,64	3210	mmg191102
24,44	2380	mmg300413
25,82	1302	mmg191013
26,02	1202	mmg191013
26,27	1102	mmg191013
26,54	1002	mmg191013
26,86	902	mmg050314
27,20	802	mmg050314
27,56	702	mmg050314
27,98	602	mmg050314
28,46	502	mmg050314
29,06	402	mmgp4-3
29,78	302	mmg050314
30,77	202	mmmp2

## GPC/SEC - Polymer Overlay



### Note:

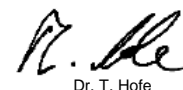
Mp = Molar mass at the peak maximum

### GPC/SEC - Calibration Conditions

Solvent: Tetrahydrofuran  
 Flow rate: 1,00 ml/min  
 Precolumn [8 x 50 mm]: PSS SDV 3µm  
 Columns [8 x 300 mm]: PSS SDV 3µm 1000Å / 1000Å / 1000Å  
 Temperature: 23 °C  
 Inject volume: 20 µl  
 Internal standard: Toluene at 34,14 ml  
 Data Acquisition Software: PSS WinGPC  
 Calibration by: J.Preis

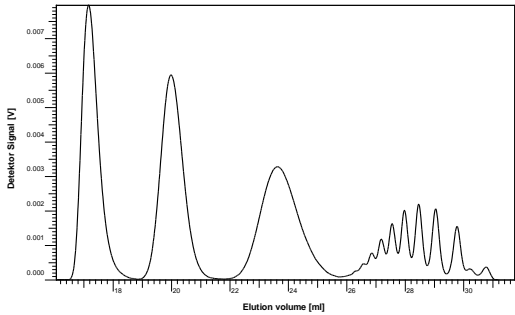
Storage: Store the tightly recapped polymer standards in a dry, dark, cool area; e.g. a refrigerator (4 °C).  
 Date of expiry: yyyy/mm/dd (See also product label.)  
 Date of approval: yyyy/mm/dd

Manufacture and control according to PSS method of analysis



Dr. T. Hofe  
 production director

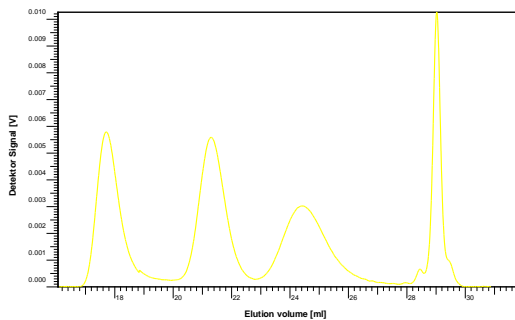
Product: ReadyCal-Kit Poly(methyl methacrylate) low  
 Part No: PSS-mmkitr11  
 Lot No: mmkitr11-02



Colour code: Vial – clear / white label Cap – black

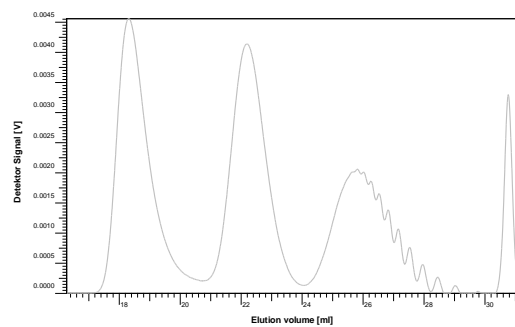
Mp [Da]	Mw [Da]	Mn [Da]	Mass [mg]	Lot No:
71 800	69 000	66 000	2.25	mmg071013
15 400	15 200	14 500	2.25	mmg29069
3 210	3 150	2 860	2.25	mmg191102
602	573	464	2.25	mmg050314*

\* Poly(methyl methacrylate) (Lot No. mmg050314): Mp 602 = highest peak according to GPC/SEC conditions on PSS SDV 3µm columns in THF (oligomer – mixture with Mp 902, 802, 702, 602, 502, 402, 302, 202)



Colour code: Vial – clear / white label Cap – yellow

Mp [Da]	Mw [Da]	Mn [Da]	Mass [mg]	Lot No:
46 800	45 800	42 900	2.25	mmg091013
8 350	8 290	7 910	2.25	mmg22111
2 380	2 260	1 860	2.25	mmg300413
402	402	402	2.25	mmgp4-3



Colour code: Vial – clear / white label Cap – white

Mp [Da]	Mw [Da]	Mn [Da]	Mass [mg]	Lot No:
33 000	31 400	28 500	2.25	mmg300415
5 980	5 930	5 590	2.25	mmg110913
1 310	1 220	1 050	2.25	mmg191013**
202	202	202	2.25	mmp2

\*\* Poly(methyl methacrylate) (Lot No. mmg191013): Mp 1310 = highest peak according to GPC/SEC conditions on PSS SDV 5µm columns in THF (oligomer – mixture with Mp 1102, 1002, 902, 802, 702, 602, 502, 402)

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

Level of eluent	full	half	quarter
Volume of eluent	1.50 ml	0.75 ml	0.375 ml
Concentration	1.5 g/l	3.0 g/l	6.0 g/l

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