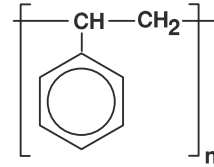
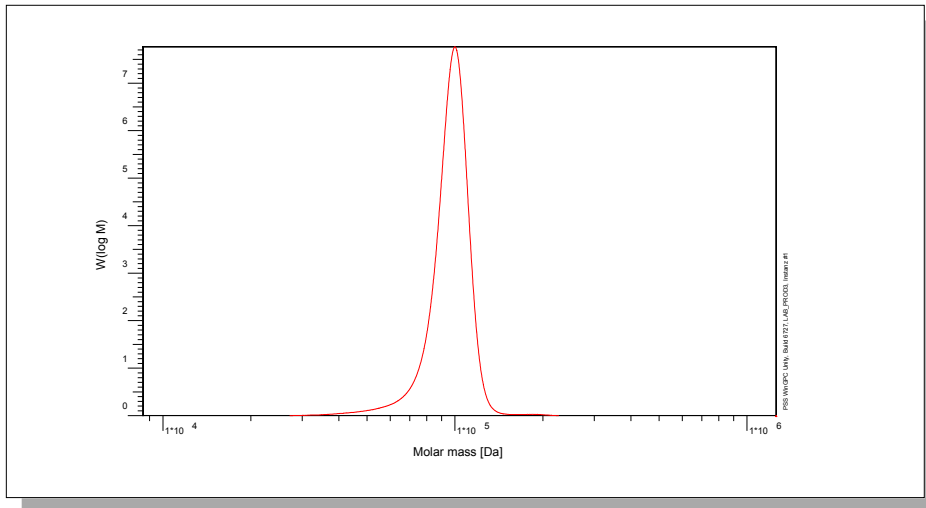


# Certificate of Analysis

Polymer type: DIN-Poly(styrene)  
 Part No: PSS-dps100k  
 Lot No: ps10068di



## Molar Mass Distribution



## GPC/SEC - Conditions

Sample concentration	1,00 g/l	Inject volume	20 µl
Solvent	Tetrahydrofuran	Flow rate	1,00 ml/min
Precolumn [8 x 50 mm]	PSS SDV 5µm	Temperature	25 °C
Columns [analytical, each 8 x 300 mm]	PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å	Operator	S. Fugmann
Data Acquisition Software	PSS WinGPC		

## GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [Mw/Mn]
Shodex RI 71	96000	92000	100000	1,04

## Additional Methods - Results

Method	Mw [Da]	Mn [Da]
Light Scattering	97 000	-
Vapor Pressure Osmometry	-	-
Nuclear Magnetic Resonance	-	-
MALDI-ToF	-	-

**Note:**


Mw = Weight average molecular weight  
 Mn = Number average molecular weight  
 Mp = Molar mass at the peak maximum  
 PDI = Polydispersity Index

All analysis run according to ISO EN 13885 and DIN 55672

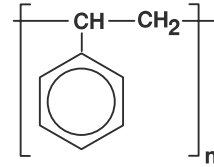
**Storage:** Store the tightly recapped polymer standard in a dry, dark, cool area; e.g. a refrigerator (4 °C).

**Date of expiry:** See product label.

Manufacture and control according to PSS method of analysis

  
 Dr. T. Hofe  
 production director

Polymer type: DIN-Poly(styrene)  
Part No: PSS-dps100k  
Lot No: ps10068di



Light Scattering run on-line, based on Toluene Rayleigh Ratio  $R_{\theta} = 1.404 \cdot 10^{-5} \text{ cm}^{-1}$  at 633 nm.

Instrument	Wyatt Tech DAWN-F, 488 nm (using 15 angles: 31°, 38°, 45°, 53°, 61°, 70°, 80°, 90°, 99°, 109°, 119°, 129°, 138°, 147°, 155°)
Solvent	Tetrahydrofuran
Temperature	25 °C
Flow rate	1,00 ml/min
Precolumn [8 x 50 mm]	PSS SDV 5µm
Columns [analytical, each 8 x 300 mm]	PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å
Sample concentration	2.5740 g/l
Inject volume	100 µl
Sample dn/dc	0.200 ml/g