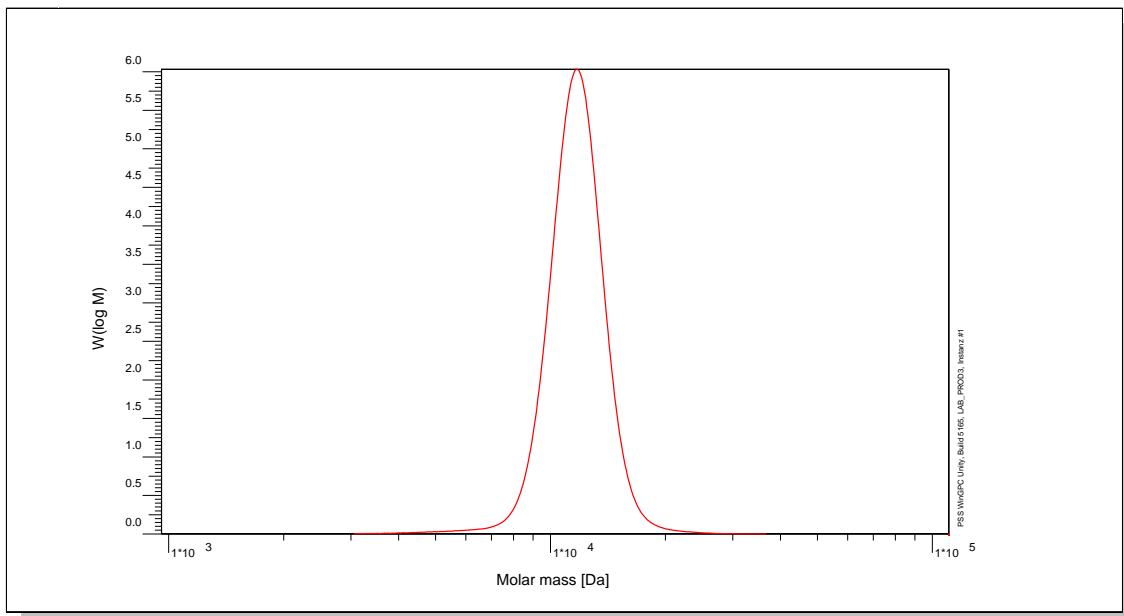


Certificate of Analysis

Polymer type: Poly(styrene-d8)
 Part No: PSS-psde12k
 Lot No: psd811121n

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 | 23,0° 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 | 12300 | 11800 | 12300 | 1,05 |

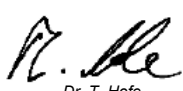
Note:

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

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

