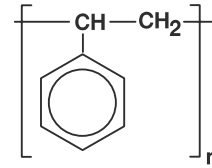
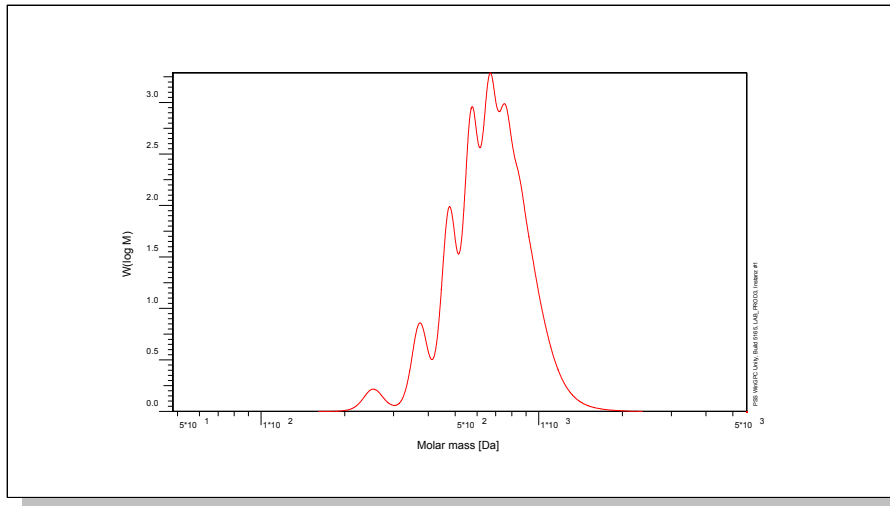


Certificate of Analysis

Polymer type: DIN-Poly(styrene)
 Part No: PSS-dps700
 Lot No: ps3082di



Molar Mass Distribution



GPC/SEC - Conditions

Sample concentration	1,00 g/l	Inject volume	20 µl
Solvent	THF	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 100Å / 1 000Å	Operator	S. Fugmann
Data Acquisition Software	PSS WinGPC		

GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [Mw/Mn]
Shodex RI 71	690	630	685	1,09

Additional Methods - Results

Method	Mw [Da]	Mn [Da]
Light Scattering	-	-
Vapour Pressure Osmometry	-	618
Nuclear Magnetic Resonance	-	-

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).

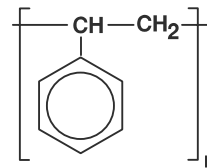
Date of expiry: See product label.

Manufacture and control according to PSS method of analysis



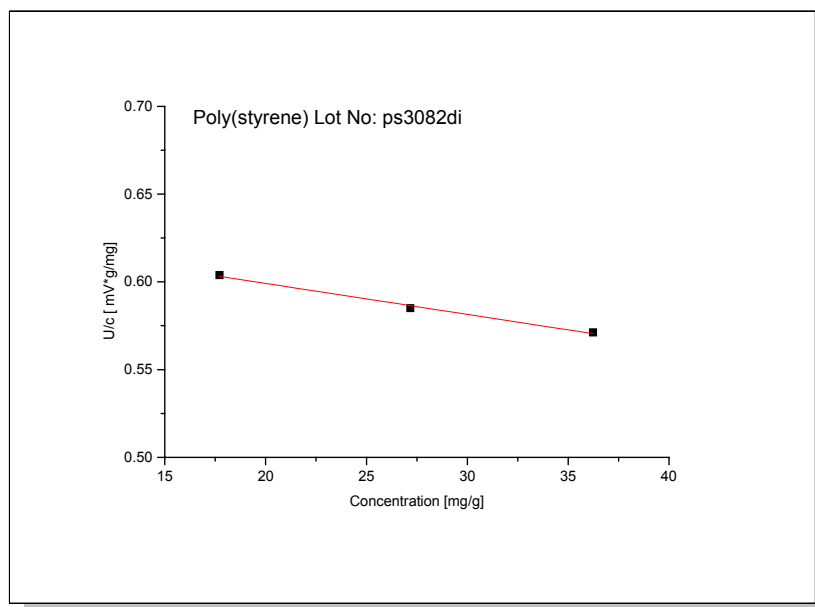
Dr. T. Hofe
 production director

Polymer type: DIN-Poly(styrene)
 Part No: PSS-dps700
 Lot No: ps3082di



Vapor Pressure Osmometry - Conditions

Instrument: Knauer Vapour Pressure Osmometer
 Calibration: Benzil p.A.
 Solvent: Toluene for HPLC
 Temperature: 70 °C
 Sample: 3 sample concentrations between 5 - 30 mg/g



Linear Regression: $Y = A + B \cdot X$

Parameter	Value	Error
A	0.634394	0.003805
B	-0.001764	1.35479E-4

R	SD	N	P
-0.997065	0.001774	3	0.048787