

# Certificate of Analysis

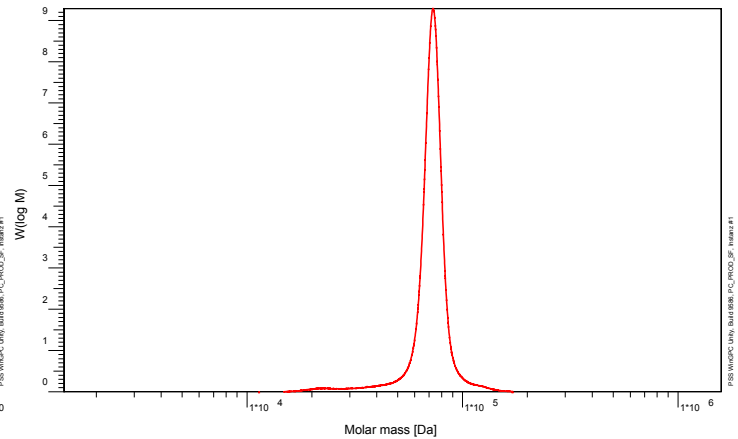
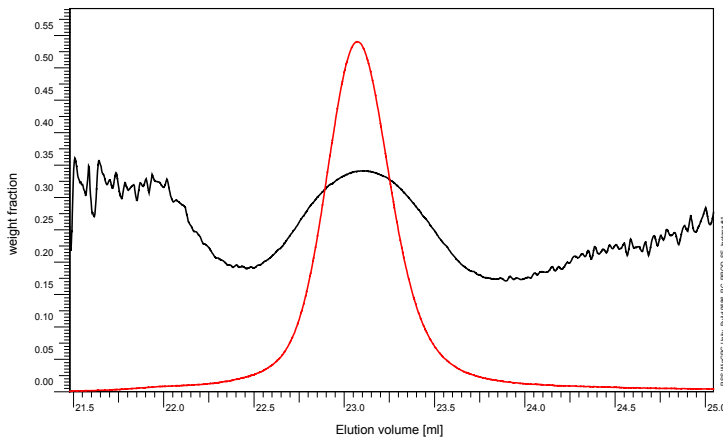
Polymer type: Poly(styrene-b-isoprene-1.4)

Part No: PSS-pspio55.3k

Lot No: ist30054n

## Copolymer – Composition Drift of Poly(styrene)

## Molar Mass Distribution of Copolymer



### GPC/SEC – Conditions

Sample concentration	1,00 g/l	Inject volume	20 µl
Solvent	Tetrahydrofuran	Flow rate	1.00 ml/min
Temperature	23 °C		
Precolumn [8 x 50 mm]	PSS SDV 5 µm		
Columns [analytical, each 8 x 300 mm]	PSS SDV 5 µm 10e3Å / 10e5Å / 10e6Å		
Data Acquisition Software	PSS WinGPC	Operator	S.Fugmann

### GPC/SEC – Results

Detector	Mn (total) [Da] <sup>1</sup>	Mn (ps) [Da] <sup>2</sup>	Mn (pio) [Da] <sup>3</sup>	PDI (total) [Mw/Mn] <sup>1</sup>
Agilent RID	55300	17700	37600	1.04

<sup>1</sup> Measured vs a Poly(styrene) - Poly(isoprene-1.4) calibration curve using module for copolymer analysis

<sup>2</sup> Precursor Poly(styrene) measured vs a Poly(styrene) calibration curve

<sup>3</sup> Calculated from <sup>1</sup> and <sup>2</sup>

Copolymer – Composition, calculated by UV254nm / RI	[w %]
Poly(styrene)	32 * (28 **)
Poly(isoprene-1.4)	68 * (72 **)

**Note:**

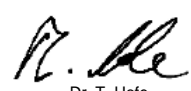
Mw = Weight Average Molecular Weight  
Mn = Number Average Molecular Weight  
PDI = Polydispersity Index

\* based on Mn (total) and Mn Poly(styrene)  
\*\* based on gravimetric monomer consumption

**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

