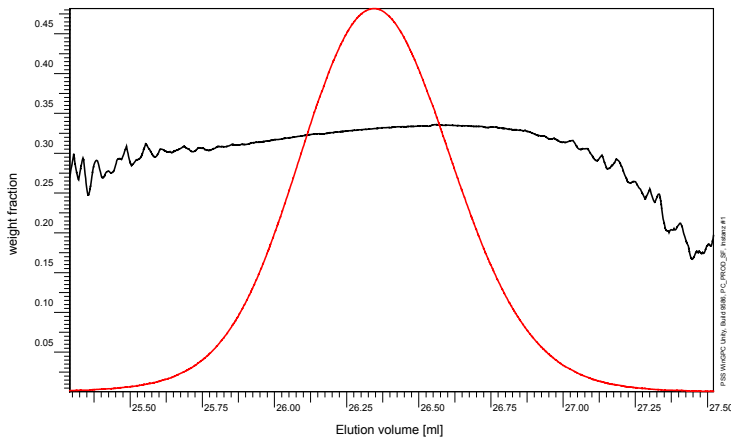


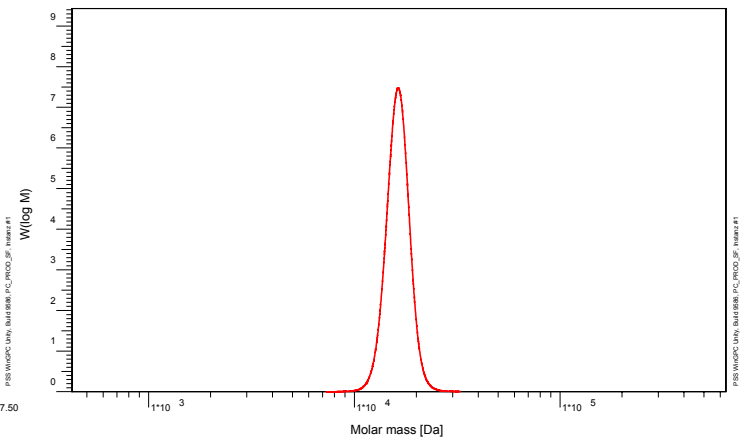
Certificate of Analysis

Polymer type: Poly(styrene-b-isoprene-1.4)
 Part No: PSS-pspio13.3k
 Lot No: ist14103n

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] ¹	Mn (ps) [Da] ²	Mn (pio) [Da] ³	PDI (total) [Mw/Mn] ¹
Agilent RID	13300	3350	9950	1.03

¹ Measured vs a Poly(styrene) - Poly(isoprene-1.4) calibration curve using module for copolymer analysis
² Precursor Poly(styrene) measured vs a Poly(styrene) calibration curve
³ Calculated from ¹ and ²

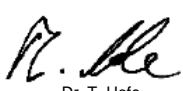
Copolymer – Composition, calculated by UV254nm / RI	[w %]
Poly(styrene)	25* (30 **)
Poly(isoprene-1.4)	75* (70 **)

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

