

Certificate of Analysis



Agilent Technologies, Inc. acquired Polymer Standards Service GmbH (PSS) on August 01st, 2022.

The Quality Certificate / Certificate of Analysis generated by PSS attached to this Letter is valid for the Product stated in the Certificate sold to You by Agilent Technologies, Inc or its subsidiaries.

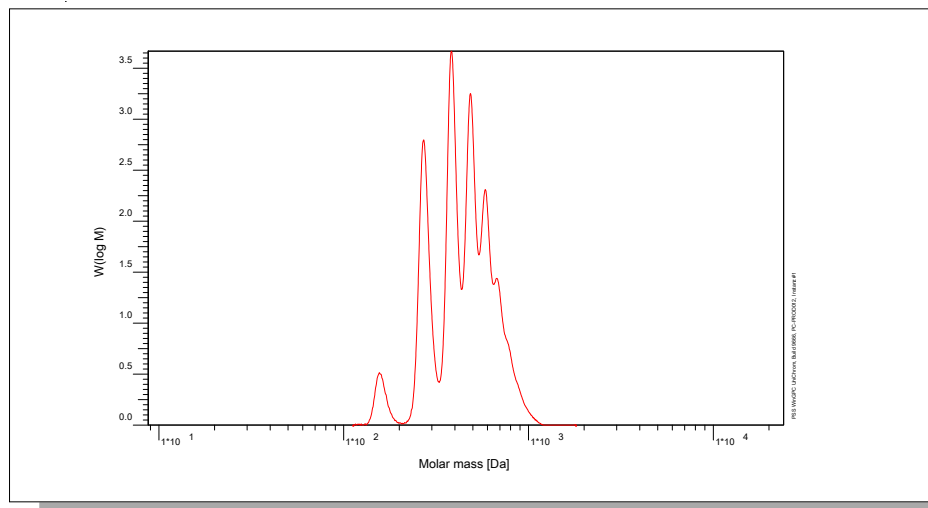
Patrick Kunzweiler

Quality Manager
Liquid Phase Separation Division

Certificate of Analysis

Polymer type: Poly(styrene)
 Part No: PSS-PS500
 Lot No: PS140221

Molar Mass Distribution



GPC/SEC - Conditions

Sample concentration	1,00 g/l	Inject volume	5 µl
Solvent	Tetrahydrofuran	Flow rate	0,33 ml/min
Precolumn [4.6 x 30 mm]	PSS SDV 3µm	Temperature	23 °C
Columns [analytical, each 4.6 x 250 mm]	PSS SDV 3µm 1 000Å / 1 000Å / 1 000Å		
Data Acquisition Software	PSS WinGPC	Operator	A.Klein

GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [Mw/Mn]
PSS SECcurity RI	459	395	370	1,16

Additional Methods - Results


Method	Mn [Da]
Nuclear Magnetic Resonance spectroscopy	432

1H-NMR (400MHz,CD2Cl2)

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: 2033/02/28 (See also product label.)
Date of approval: 2023/02/15

Manufacture and control according to PSS method of analysis


 Dr. J. Preis
 production manager

