

# Certificate of Analysis

Product: ReadyVLS-Kit Poly(styrene)  
 Part No: PSS-vlskitr1ps20  
 Lot No: vlskitr1ps20-01a  
 Colour code: blue, ps2088  
 Mass Polymer per Vial: 2.11mg

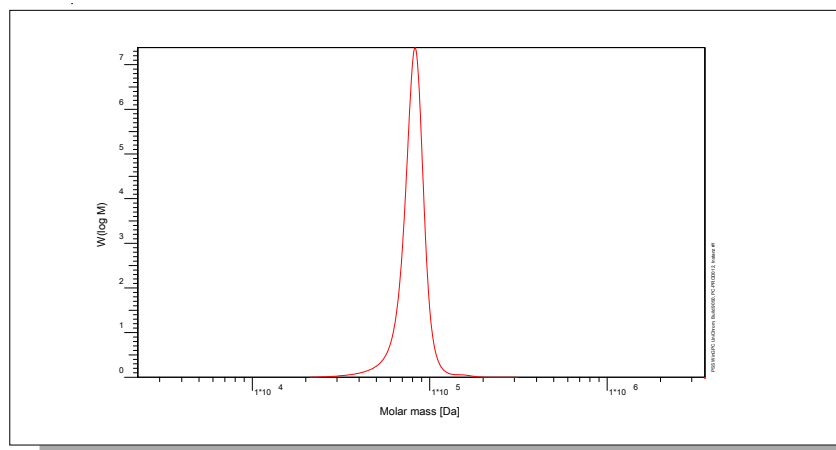
## Light Scattering Mw and Intrinsic Viscosity

Method	Mw [Da]	[ml/g]
Light Scattering, on-line (SLD7x00)*	87600	-
Intrinsic Viscosity (DVD1260)**	-	42.4

Sample concentration 1.4442 g/L  
 Inject volume 100µL  
 Sample dn/dc 0.187mL/g (Tetrahydrofuran, 637nm)

\*Light Scattering run on-line.  
 System and instrument validation based on Poly(styrene) Lot No. ERM-FA001  
 \*\*Tetrahydrofuran, 30°C

## Molar Mass Distribution



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

## 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 pc	Temperature	23 °C
Columns [analytical, each 8 x 300 mm]	PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å	Operator	A.Klein
Data Acquisition Software	PSS WinGPC		

## GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [Mw/Mn]
PSS SECcurity RI	79600	74000	82800	1,08

**Storage:** Store the tightly recapped polymer standard in a dry, dark, cool area; e.g. a refrigerator (4 °C).  
**Date of expiry:** yyyy/mm/dd (See also product label.)  
**Date of approval:** yyyy/mm/dd

Manufacture and control according to PSS method of analysis

  
 Dr. T. Hofe  
 production director

# Certificate of Analysis

Product: ReadyVLS-Kit Poly(styrene)  
 Part No: PSS-vlskitr1ps20  
 Lot No: vlskitr1ps20-01a  
 Colour code: red, psbs180k  
 Mass Polymer per Vial: 4.41mg

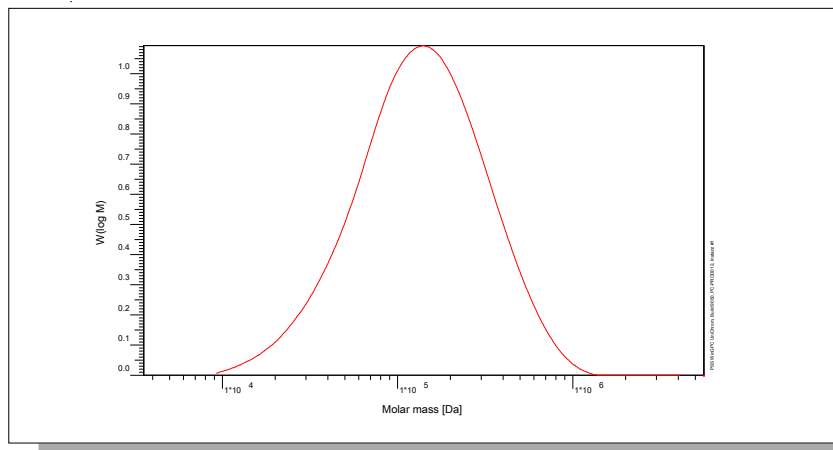
### Light Scattering Mw and Intrinsic Viscosity

Method	Mw [Da]	[ml/g]
Light Scattering, on-line (SLD7x00)*	206000	-
Intrinsic Viscosity (DVD1260)**	-	68.4

Sample concentration 2.9714 g/L  
 Inject volume 100µL  
 Sample dn/dc 0.187mL/g (Tetrahydrofuran, 637nm)

\*Light Scattering run on-line.  
 System and instrument validation based on Poly(styrene) Lot No. ERM-FA001  
 \*\*Tetrahydrofuran, 30°C

### Molar Mass Distribution



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

### GPC/SEC - Conditions

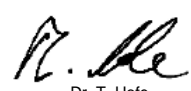
Sample concentration	3,00 g/l	Inject volume	20 µl
Solvent	Tetrahydrofuran	Flow rate	1,00 ml/min
Precolumn [8 x 50 mm]	PSS SDV 5µm pc	Temperature	23 °C
Columns [analytical, each 8 x 300 mm]	PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å	Operator	A.Klein
Data Acquisition Software	PSS WinGPC		

### GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [Mw/Mn]
PSS SECcurity RI	181000	81100	-	2,23

**Storage:** Store the tightly recapped polymer standard in a dry, dark, cool area; e.g. a refrigerator (4 °C).  
**Date of expiry:** yyyy/mm/dd (See also product label.)  
**Date of approval:** yyyy/mm/dd

Manufacture and control according to PSS method of analysis

  
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