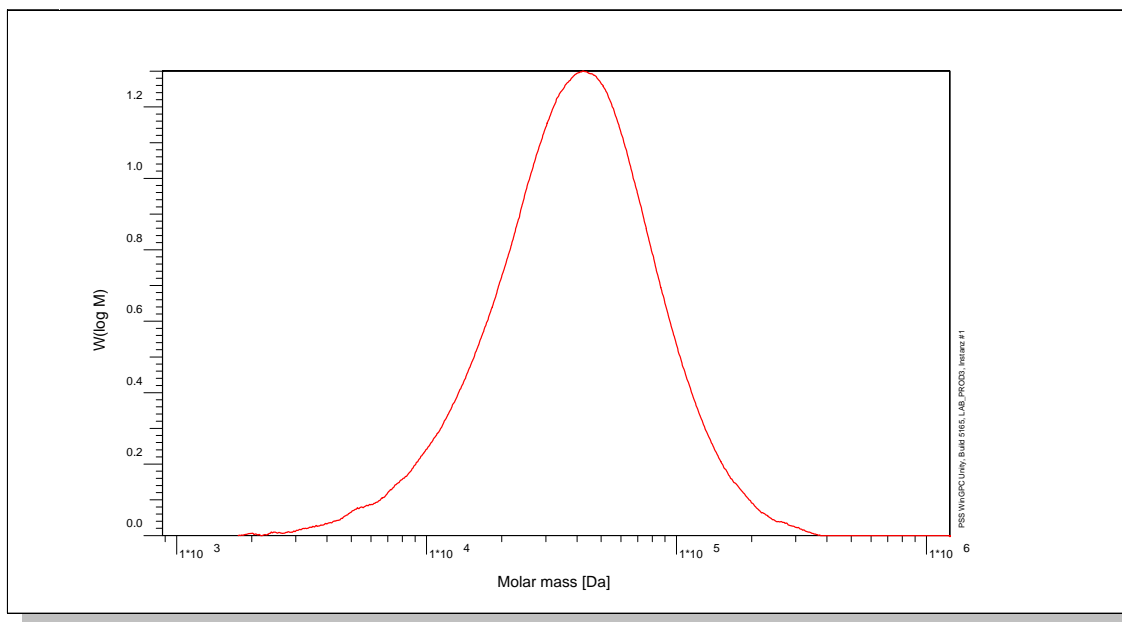


Certificate of Analysis

Polymer type: Poly(carbonate) broad
 Part No: PSS-pcd50k
 Lot No: pcd427045n

Molar Mass Distribution



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	Temperature	23,0° C
Columns [analytical, each 8 x 300 mm]	PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å	Operator	S. Fugmann
Data Acquisition Software	PSS WinGPC		

GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [Mw/Mn]
Shodex RI 71	49800	28100	-	1,78

Note:

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: See product label.


This product has t-Butylphenyl end groups, oligomer molar masses, M_i , of degree of polymerization i , can be calculated by:

$$M_i = 326.4 + (i \cdot 254.2)$$

Reference standard P_0 with $i = 0$ can be purchased from PSS [Poly(carbonate) Lot No: pcp0].

GPC/SEC - Results based on universell calibration with Poly(styrene)
 Mark-Houwink coefficient $K = 0.0399$; $a = 0.695$
 Degree of deuteration arr.98%

Manufacture control according to PSS method of analysis


 Dr. T. Hofe
 production director