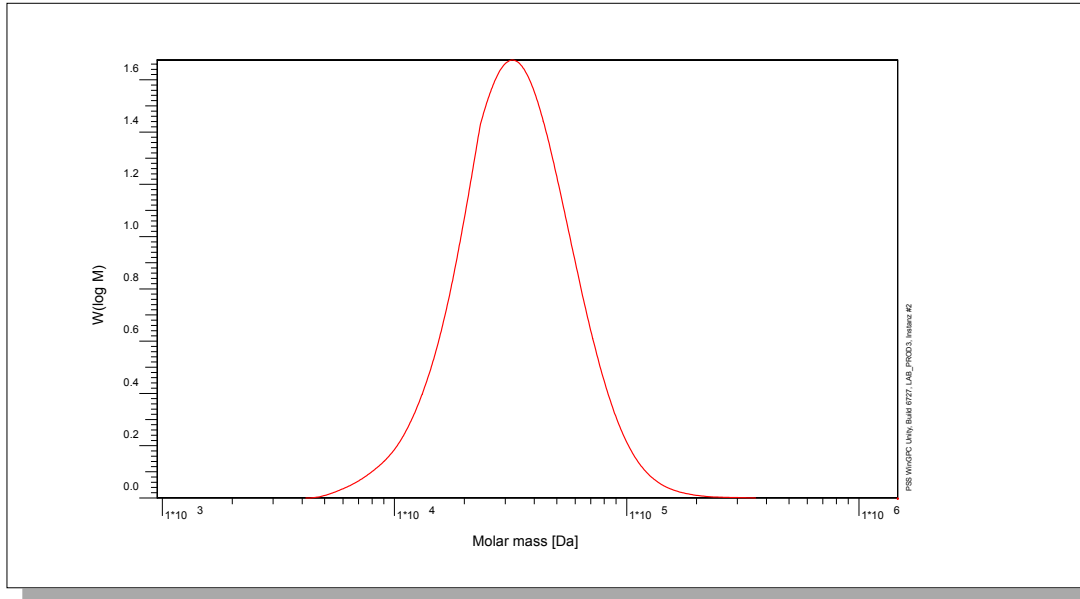


Certificate of Analysis

Polymer type: Hydroxyethyl starch
 Part No: PSS-hes40k
 Lot No: hes081210

Molar Mass Distribution



GPC/SEC - Conditions

Sample concentration	2,50 g/l	Inject volume	20 µl
Solvent	Sodium nitrate 0.1M	Flow rate	1,00 ml/min
Precolumn [8 x 50 mm]	PSS SUPREMA 10 µm	Temperature	30 °C
Columns [analytical, each 8 x 300 mm]	PSS SUPREMA 10µm 100Å / 3 000Å / 3 000Å		
Data Acquisition Software	PSS WinGPC	Operator	S.Fugmann

GPC/SEC - Results

Detector	Mw [Da]	Mn [Da]	Mp [Da]	PDI [mw/Mn]
Agilent RID	38100	27700	35200	1,38

Note:


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

GPC/SEC - Results based on Hydryethyl starch calibration.

Light scattering - Results : Mw (Da) = 42 100

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 control according to PSS method of analysis


 Dr. T. Hofe
 production director



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