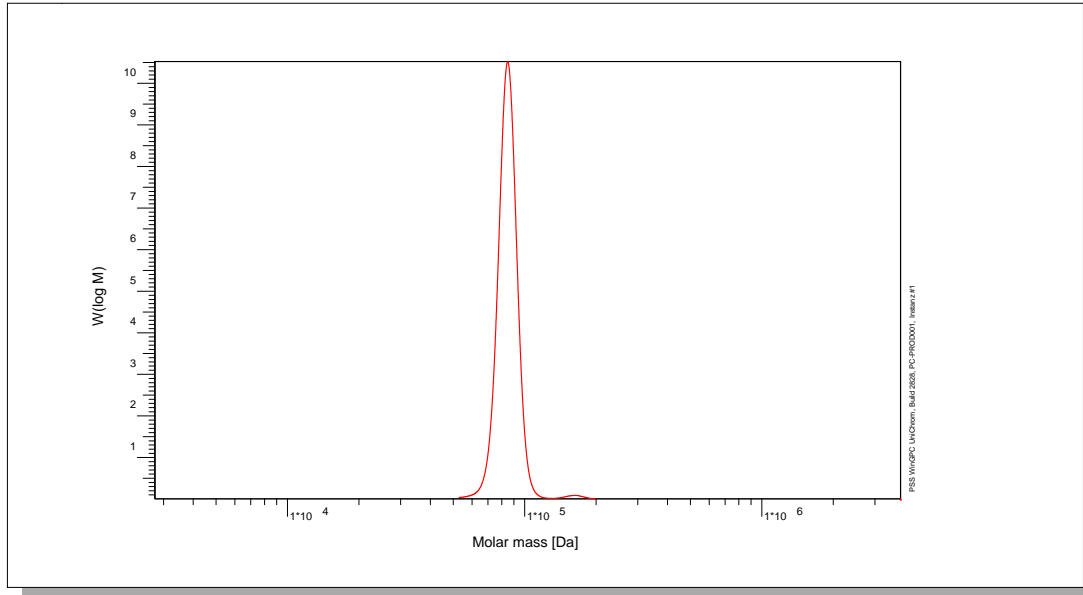


# Certificate of Analysis

Polymer type: Poly(isoprene-1.4)  
 Part No: PSS-pio80k  
 Lot No: pio100904

## Molar Mass Distribution



## GPC/SEC - Conditions

|                                       |                                   |               |             |
|---------------------------------------|-----------------------------------|---------------|-------------|
| Sample concentration                  | 1,00 g/l                          | Inject volume | 20 µl       |
| Solvent                               | THF                               | Flow rate     | 1,00 ml/min |
| Precolumn [8 x 50 mm]                 | PSS SDV 5µm                       | Temperature   | 23 °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 | 85400   | 84200   | 84700   | 1,01        |

## Additional Methods - Results

| Method                              | Mw [Da] |
|-------------------------------------|---------|
| Light Scattering, on-line (SLD7x00) | 92800   |

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

Light Scattering run on-line, based on Toluene Rayleigh Ratio  $R = 1.404 \cdot 10^{-5} \text{ cm}^{-1}$  at 633 nm.  
 System and instrument validation based on Certified Reference Materials Poly(styrene) Lot No: ERM-FA001.

Sample concentration 1.6904 g/L  
 Inject volume 100µL  
 Sample dn/dc 0.111mL/g

### Microstructure of the polymer (estimated uncertainty: +/- 5%):

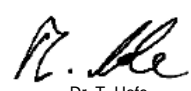
Poly(isoprene-3.4) 7%  
 Poly(isoprene-1.4) 93%

Polymer stabilized with 0.1% BHT.

**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

