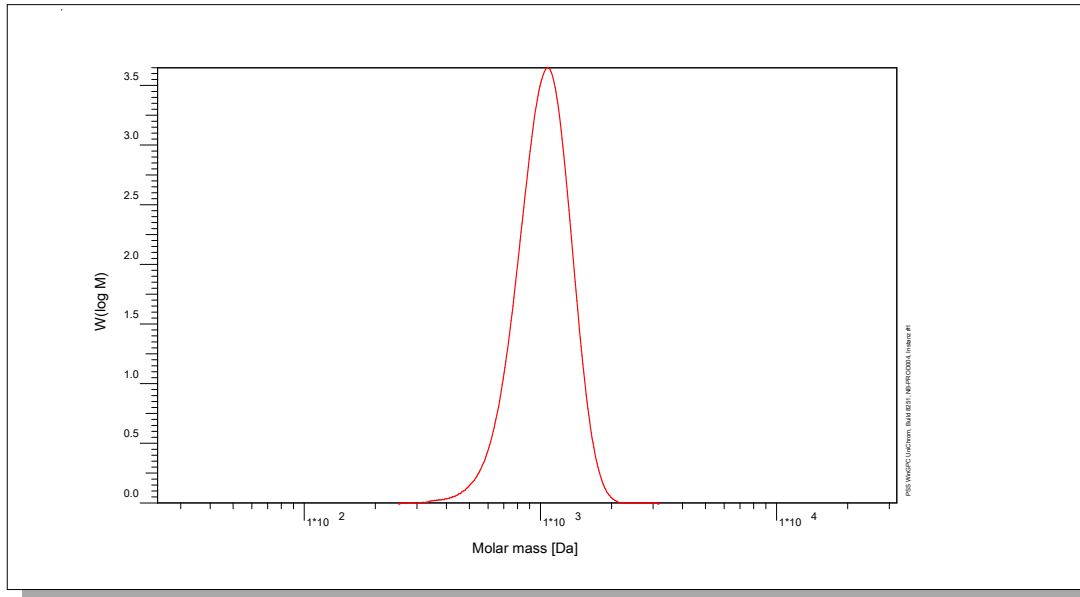


# Certificate of Analysis

Polymer type: Poly(butadiene-1.2)  
 Part No: PSS-bdt1k  
 Lot No: bdt071217

## 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 °C       |
| Columns [analytical, each 8 x 300 mm] | PSS SDV 5µm 10e3Å / 10e5Å / 10e6Å | Operator      | J.Preis     |
| Data Acquisition Software             | PSS WinGPC                        |               |             |

## GPC/SEC - Results

| Detector         | Mw [Da] | Mn [Da] | Mp [Da] | PDI [Mw/Mn] |
|------------------|---------|---------|---------|-------------|
| PSS SECcurity RI | 1060    | 994     | 1060    | 1,07        |

## Additional Methods - Results

| Method                                  | Mn [Da] |
|---|---------|
| Nuclear Magnetic Resonance spectroscopy | 920     |

<sup>1</sup>H-NMR (300MHz, CDCl<sub>3</sub>)

### Note:

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

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

Poly(butadiene-1.2) 84%  
 Poly(butadiene-1.4) 16%

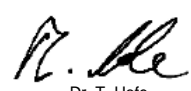
Polymer stabilized with 0.1% BHT.

**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

