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# Polystyrene - Heat capacity and molecular weight

| | |
|---|---|
| Art. ID | NIST-705a |
| Unit | 5 g |
| Deliverydetails | No Dangerous Good /not restricted |

## Description

This Standard Reference Material (SRM®) is intended for use in the calibration of instruments used in polymer science and technology for the determination of molecular weight and for use in checking dynamic thermal analytical instruments. The SRM® is supplied in small white slender rodlets of polystyrene in a 5 g unit. Molecular weight (MW) values, measured using various techniques, and limiting viscosity (LV) numbers. /// Sample value(s) - please ask for current certificate.

| Text/Information | Analyte/Parameter | CAS number | Concentration/Value | Unit | Method | Source |
|---|---|---|---|---|---|---|
| Numer-average molecular weight, Mn, g/mol | Number-average molecular weight (Mn) | | 170900 | g/mol | Membrane osmometrie | |
| Weight-average molecular weight, Mw, g/mol | Weight-average molar mass (Mw) | | 179300 | g/mol | Light scattering | |
| Weight-average molecular weight, Mw, g/mol | Weight-average molar mass (Mw) | | 189800 | g/mol | Sedimentation equilibrium | |
| at 25 Grad Celsius in benzene | Limiting viscosity number | | 74,3 | mL/g | | |
| at 25 Grad Celsius in cyclohexane | Limiting viscosity number | | 35,4 | mL/g | | |
| Ratios of molecular weight | Mz:Mw:Mn | | 1,12 : 1,07 : 1 | | | |
| Please ask for the current certificate | Heat capacity | | | | | |