



Nestléstr. 41
55120 Mainz
Germany
+49 (0)6131 55 400 80
Email: support@bs-partikel.de
URL: http://www.bs-partikel.de

Certificate of Calibration

Catalog No.:
Pu0900-01


Particle Powder Standard Lot No.: Pu311.205

The lot of this particle powder standard had been size-characterized with highest accuracy.
The determined particle size diameter x_N is traceable to the "Standard Meter" according to the National Institut of Standards and Technology (NIST).
For calibration of the particle sizing system 19 NIST traceable calibrants had been applied.
The determination of the data had been done by measurement of several samples of this lot after re-suspension of the powder in an aqueous solution of 0.05% sodiumdodecylsulfate

Particle Sizing Instrument: Particle sizing system "Syringe", Markus Klotz GmbH - Bad Liebenzell, Germany
Sensor Type: 8032 Calibr. Curve: 051018.cal Flow: 12.0 ml/min

Particle Diameter (Mode): $x_N = 8.69\mu\text{m} \pm 0.12\mu\text{m}$ $x_V = 8.72\mu\text{m} \pm 0.12\mu\text{m}$

Wiesbaden, 18.10.2005

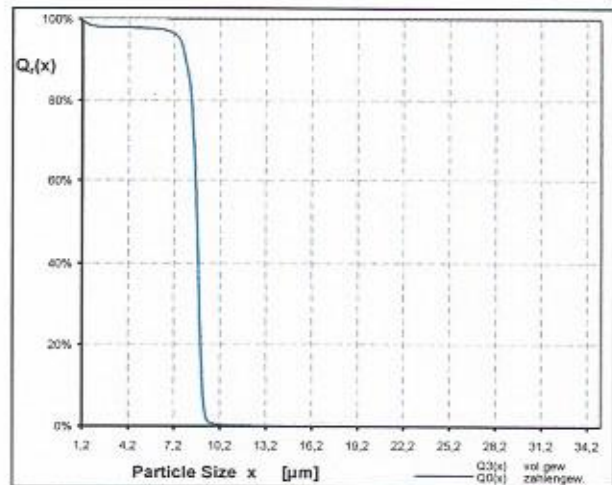
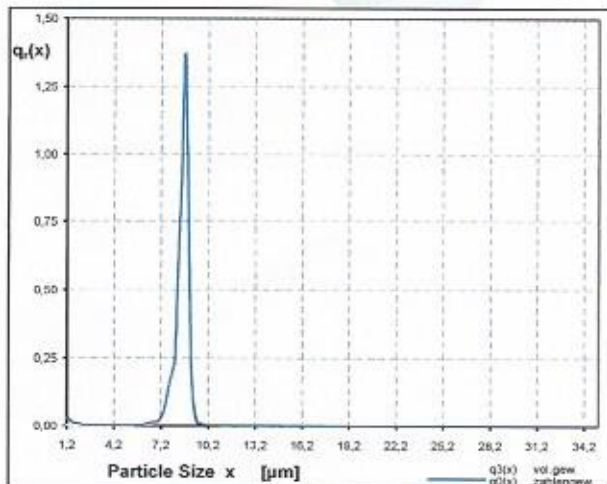


 Dr. Bernd Schied

Physical Data:

Standard Deviation: 0.31 μm relative to x_N
 Rel. Standard Dev. (C.V.): 3.5% relative to x_N
 Polymer Density: 1.05 g/ml
 Refractive Index: 1.59 (25°C, 589nm)
 Chemical Composition: White powder consisting of:

poly(styrene-co-divinylbenzene)



N_i or V_i : Number or volume of all particles $\geq x_i$

$$q_2 = (N_1 - N_2) / (N_{98} \cdot dx)$$

$$q_3 = (V_1 - V_2) / (V_{98} \cdot dx)$$

$$Q_2 = 100 \cdot N_i / N_{98}$$

$$Q_3 = 100 \cdot V_i / V_{98}$$



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Storage, Shelf Life

Date of Packaging: **2018 Mar 2nd**

This particle size standard can be applied without any quality loss for 5 years from date of packaging. Freezing, solar radiation, drying or any contamination can make this standard unusable for calibration purposes. Therefore please note the following advices.

- Keep the dropper-tipped vial sealed all the time.
- Do not touch the dropper-tip with fingers; do not clean it with towels or contact it with other chemicals.
- Recommended storage temperature is 4°C - 15°C; optimal temperature is 8°C; do not freeze!
- Particle size standards are reference substances.
Hence, store them definitely separated from other chemicals of daily use.