

National Institute of Standards & Technology

Certificate

Standard Reference Material 1919

Lead Silica Glass Density Standard

This Standard Reference Material (SRM) is intended for use as a density reference in the determination of the density of solids and liquids. This SRM consists of an approximately rectangular slab with two rounded corners of lead silica glass having nominal dimensions of 6 x 40 x 25 mm. The certified density was determined by means of hydrostatic weighing.

Certified Density Value

The certified value is directly traceable to the units of mass and length as defined in the International System (SI). The certified value minus and plus its uncertainty is a 99% confidence interval for the certified value which includes every known source of error. The certified value applies to the specimen as a whole; the microhomogeneity of the specimen has not been evaluated.

The samples for this SRM were donated by the Schott Glass Company through ASTM Committee C-14.

The technical direction and physical measurements leading to certification were provided by R.S. Davis of the Automated Production Technology Division. Statistical consultation and analysis were provided by S. Schiller of the Statistical Engineering Division.

The technical support aspects involved in the preparation, certification, and issuance of this Standard Reference Materials Program by R.L. McKenzie.

Gaithersburg, MD 20899 August 13, 1990 William P. Reed, Acting Chief Standard Reference Materials Program