



National Institute of Standards & Technology

Certificate

Standard Reference Material 934

Clinical Laboratory Thermometer

This Standard Reference Material (SRM) is intended for use in clinical laboratories as a primary calibrant, particularly in the area of clinical enzymology. SRM 934 is a clinical laboratory thermometer that was individually calibrated at four points. The certified corrections contained on a computer print-out sheet, are attached, together with information relating to the calibration details and to the International Temperature Scale of 1990.

The thermometer is a solid-stem, mercury-in-glass instrument, 300 ± 5 mm in length, and marked with a 95-mm immersion line. The stem is plain front, enameled back, made of lead-glass thermometric tubing 7 mm in diameter. Nitrogen gas fills the space above the mercury. It has an auxiliary scale from -0.20 to $+0.20$ °C with 0.05 °C divisions. The main scale extends from 24.00 °C to 38.00 °C in 0.05 °C divisions. The calibrated points are 0, 25, 30, and 37 °C. Detailed description and drawings of the thermometer are given in the following publications:

Mangum, B. W., Clin. Chem. **20**, 670 (1974).

Mangum, B. W. and Wise, J. A., NIST Special Publication 260-113, (June 1990) U.S Government Printing Office, Washington, D.C. 20402.

The thermometers were manufactured by Walter H. Kessler Co., Inc. of Westbury, L. I., NY on contract to the National Institute of Standards and Technology.

Measurements leading to the certification were performed by J. A. Wise of the Chemical Process Metrology Division, National Measurement Laboratory. The general direction of the technical work was performed by B. W. Mangum of the Chemical Process Metrology Division, National Measurement Laboratory.

The technical and support aspects involved in the revision, update and issuance of this Standard Reference Material were coordinated through the Standard Reference Materials Program by J. C. Colbert.

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Standard Reference Materials Program