National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 934

Clinical Laboratory Thermometer

Serial Number:

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 at those calibrated points are contained in the attached Report of Calibration 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 -0.50 °C to +0.50 °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, use, and drawings of the thermometer are given in the accompanying publication, "Description and Use of a Precision Thermometer for the Clinical Laboratory" SP 260-113 [1]. Additional information can also be found in reference [2].

Maintenance of Certification: NIST will monitor representative solutions from this SRM lot over the period of its certification. If substantive changes occur that affect the certification before the expiration of certification, NIST will notify the purchaser. Registration (see attached sheet) will facilitate notification.

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 NIST Process Measurements Division. The general direction of the technical work was performed by B.W. Mangum of the NIST Process Measurements Division.

The support aspects involved in the preparation of this SRM were coordinated through the NIST Measurement Services Division.

Michael Moldover, Acting Chief
Process Measurements Division

Robert L. Watters, Jr., Chief
Measurement Services Division

Gaithersburg, MD 20899
Certificate Issue Date: 22 February 2006
See Certificate Revision History on Last Page

REFERENCES

[1] Mangum, B.W.; Wise, J.A.; *Standard Reference Materials: Description and Use of a Precision Thermometer for the Clinical Laboratory, SRM 934*; NIST Special Publication 260-113, U.S. Government Printing Office: Washington, DC (1990).

[2] Mangum, B.W.; Clin. Chem. 20, 670 (1974).

Certificate Revision History: 22 February 2006 (This technical revision reflects a correction to the auxiliary scale range); 30 October 1992 (This revision reports formatting changes); (18 June 1990 (Original certificate date).

Users of this SRM should ensure that the certificate in their possession is current. This can be accomplished by contacting the SRM Program at: telephone (301) 975-6776; fax (301) 926-4751; e-mail srminfo@nist.gov; or via the Internet at http://www.nist.gov/srm