



National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material 1474

Polyethylene Resin

This Standard Reference Material (SRM) is intended primarily for use in calibration and performance evaluation of instruments used in polymer technology and science for the determination of the melt flow rate. The SRM is supplied as white pellets of polyethylene in a 60 gram unit.

This material is certified for melt flow rate using procedure A described in Section 8 of ASTM Method D-1238-86. Standard test condition 190/2.16 was used. Thus, the flow rate was determined at 190.0 ± 0.1 °C using a load of 2.16 kg. The flow rate of the melt was measured by a manually operated extrusion plastometer. Under this condition the melt flow rate for this material is 5.03g/10 minutes with a standard deviation for a single measurement of 0.037g/10 minutes.

Notice and Warnings to Users:

Expiration of Certification: This certificate will be valid for five years from the date of shipment.

Storage: SRM 1474 should be stored in the tightly closed, original bottle under normal laboratory conditions.

Details of the preparation and measurements for this SRM are described by Maurey, J.R., and Guttman, C.M., "Studies on the Melt Flow Rate of the SRM 1474, A Polyethylene Resin"[1].

The technical coordination leading to certification of this material was provided by F.W. Wang with technical measurement and data interpretation provided by J.R. Maurey and C.M. Guttman.

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

REFERENCE

[1] Maurey, J.R. and Guttman, C.M. NISTIR 90-4239.

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Gaithersburg, MD 20899

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Standard Reference Materials Program