



National Institute of Standards & Technology

Report of Investigation

Reference Material 8384

N-tertiary-butyl-2-benzothiazole sulfenamide (TBBS)

Prepared by the American Society for Testing and Materials

Reference Material (RM) 8384 is being distributed by the National Institute of Standards and Technology (NIST) through a cooperative program between NIST and ASTM Committee D-11 on Rubber (Subcommittee D11.20 on Compounding Materials and Procedures). This is not a Standard Reference Material.

RM 8384 consists of 3.2 kg (4 x 800 g containers) of N-tertiary-butyl-2-benzothiazole sulfenamide (TBBS). RM 8384 is intended for use as a standard compounding ingredient and is referenced in the following ASTM Standards: ASTM D2228, D2934, D3184, D3185, D3186, D3189, D3191, D3403, D3484, and D3848. It is intended primarily for use by the rubber-producing industries. This material is supplied in the form of a white powder.

This RM has been evaluated for purity only by reverse phase liquid chromatography. For 41 observations the mean and uncertainty are:

Purity, wt %
95.3 ± 2.3

This uncertainty is based on a distribution-free 90 % confidence, 90 % coverage tolerance interval, incorporating measurement imprecision as well as material variability.

NOTICE AND WARNING TO USERS

Handling: This material causes irritation to eyes, skin and respiratory tract and should be handled with care. Wash thoroughly after handling.

Storage: To ensure retention of quality, store in a cool/dry location and keep the container tightly capped when not in use.

Stability: This material is expected to remain stable for two years from date of shipment.

The supplier for this material was Monsanto Chemical Co., Akron, OH.

Analyses for this material were performed under the auspices of ASTM Subcommittee D11.20 on Compounding Materials.

The statistical analysis of the data was performed by S.B. Schiller of the NIST Statistical Engineering Division.

The overall direction and coordination of the materials procurement and issuance of this Reference Material were coordinated through the Standard Reference Materials Program by J.C. Colbert.

Gaithersburg, MD 20899
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