

Sulfamethazine Reference Material

Product No: AR298**Lot No: 241111**

Material and Intended Use

AR298 is a reference material (RM) intended for the verification of analysis methods used in the determination of carbon, hydrogen, nitrogen, oxygen, and sulfur. This RM can also be used to verify value assignment of in-house reference materials. A unit consists of one bottle containing 25 g of reference material as a fine powder. All reference materials should be verified as fit for purpose prior to use.

Instructions for Use

No preparation is required before use. The minimum sample size for analysis is dependent upon the test method and instrumentation used. Bottles of powder should be kept sealed tight and stored in a cool, dry location. Reported values are valid until October 22, 2030 if handling and storage instructions are followed. However, values are rendered null and void if the RM is in any way modified or damaged.

Reported Values

Property values are metrologically traceable to the International System of Units (SI) derived unit of mass fraction expressed as a percent (%) and are determined by empirical stoichiometry and material purity (99.8%). Sampling and calculation of reported values for each measurand are performed using practices consistent with ISO 17034:2016 and ISO Guide 35. Certified values are accredited under Alpha Resources, LLC ISO/IEC 17025 and ISO 17034 certificates issued by ANSI National Accreditation Board (ANAB), AT-1200 and AR1920.

Table 1. Reference values for AR298, Lot241111.

Property	Value
% Carbon	51.8
% Hydrogen	5.1
% Nitrogen	20.1
% Oxygen	11.5
% Sulfur	11.5

Homogeneity

This product was manufactured from one lot of raw material determined to be homogeneous upon receipt.

Methods and References

ISO/IEC 17025:2017 – General requirements for the competence of testing and calibration laboratories

ISO 17034:2016 – General requirements for the competence of reference material producers

ISO 33401:2024 – Reference materials – Contents of certificates, labels, and accompanying documentation

ISO Guide 30:2015 – Terms and definitions used in connection with reference materials

ISO Guide 35:2017 – Reference materials – General and statistical principles for certification

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