ALPHA RESOURCES® Value Beyond Measure

Certificate of Analysis

AR961 Stainless Steel Powder CRM

AR961, Lot# 240124 – Certified Values			
	% Carbon	% Sulfur	% Nitrogen
Mean	0.0198	0.0174	0.0462
St Dev	0.0021	0.0019	0.0017
Exp Uncertainty	0.0047	0.0042	0.0038
k=2, @ 95% CI	n=60	n=60	n=40

Method of Analysis: ASTM E 1019-18, ARI-LAB-621, ARI-LAB-622

Primary (NMI)/GUIDE 34/ISO 17034 Reference Standards Employed:

NIST SRM	**348a, 2160, 339, 101g, 106b,155,64c, 73c**
EURO	**183-1, 289-1, 284-2, 231-2, 191-2, 035-2, 291-1**
JSS	**610-10**
AR	**AR958-212A, AR949-317B, AR960-814B, AR961-308, AR961-719B, AR959-14833, AR949-317D, AR869-708917409**

This product is a Certified Reference Material (CRM) traceable to the above-mentioned reference materials. All reference materials should be verified as fit for purpose prior to use. These test results are accredited under Alpha Resources, LLC ISO/IEC 17025 and ISO 17034 accreditation issued by ANSI National Accreditation Board (ANAB). Refer to certificates and scopes of accreditation AT-1200 and AR-1920. Each bottle contains 150 g of material intended for use directly from the bottle with no preparation needed.

The intended use of this reference material standard is for the calibration and verification of Carbon/Sulfur/Nitrogen analysis as described by ASTM E-1019. The mean analytical values were derived by data sets with traceability to the above-mentioned references. The typical sample size used for testing was 1 g. The precision values represent the estimated mean, standard deviation, and expanded uncertainty derived from the data sets, using ISO Guide 35, ANOVA, and the Guide to Uncertainty Measurement. Metrological traceability is to the SI derived unit of mass fraction expressed as percent. Refer to the test method for additional information related to measurement uncertainty.

Values are valid for 20 years from the date of certification. Keep sealed and store under normal laboratory conditions. Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Alpha Resources be liable for incidental or consequential damages. This certificate cannot be reproduced except in full. Produced in accordance with ISO 17034.

Certification Date: April 10, 2024
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Global Technical Director

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER