



## Certificate of Analysis

AR4105

LOT 419A

**LOSS ON IGNITION STANDARD**

LOI = 4.94%

**EXPANDED UNCERTAINTY =  $\pm 0.09$**

**(k=2, @ 95% confidence limit)**

Verified using ASTM C25-11 referee method, compared to NIST 1d, Calcium Oxalate HP

### NOTES:

This standard was produced using high purity materials based upon their empirical and stoichiometric properties. These materials were blended and weighed on balances that are calibrated using NIST traceable weights. The values reported are in SI units and based on metrology and verification testing. This reference was produced and sampled for testing in accordance to ARI-252. The sample size used for the verification tests were 1g. Refer to your instrument manufacturer or test method for your required sample size and overall test method repeatability and reproducibility factors if needed. The overall coordination, direction, and calculation of statistical information was performed by K.E. Dyer, Chief Chemist.

The intended use of this standard is for the verification and quality check of LOI using ASTM methods utilizing a muffle furnace or TGA (Thermal Gravimetric Analysis) instrumentation. It is recommended this standard be dried per your test method, instrument manufacturer recommendations, or at 105° C to a constant mass prior to use. Ample amounts of air must be available for complete combustion, do not use covers. This reference does not contain any sulfur and no determination or corrections are needed. This bottle contains 100g powder material to be used directly and per your test method requirements. While unable to determine a definite shelf life this CRM should be reviewed 10 years after the date of certification. This certificate cannot be reproduced except in full. 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 is a Certified Reference Material CRM produced in accordance to ISO 17034 and Guide 31. These test results are accredited under the Alpha Resources, LLC laboratory's ISO/IEC 17025 and ISO 17034 accreditation (RMP) issued by ANSI-ASQ/ANAB. Refer to certificate and scope of accreditation(s) AT-1200 and AR-1920.

Certified April 18, 2019

Chief Chemist