

Analytical Results	
<p><b>% Carbon</b></p> <p>Mean = 2.05</p> <p>Standard Deviation = <math>\pm 0.04</math></p> <p>Expanded Uncertainty = 0.08 (k=2, @95% confidence. n=44)</p>	<p><b>% Sulfur</b></p> <p>Mean = 0.018</p> <p>Standard Deviation = <math>\pm 0.001</math></p> <p>Expanded Uncertainty = <math>\pm 0.002</math> (k=2, @95% confidence. n=48)</p>
<p>Primary (NMI)/Guide 34/ISO 17034 References Employed:</p> <p>NIST – 107c, 16e, 338, 341</p> <p>NCS – HC11403, HC11010, HC11007</p> <p>EURO – 035-2, CKD230</p> <p>JSS – 102-8</p> <p><b>Method of Analysis is ASTM E 1019-18</b></p>	

*\*The analytical results above are provided by an accredited reference material manufacturer with a current certification in ISO 17025 and 17034.*

The intended use of this Reference Material (RM) is for the calibration and continued quality validation of Carbon and Sulfur in induction combustion, IR detection systems as described in ASTM E1019.

The analytical sample test size used was 0.3-0.5g nominal as suggested by the instrument manufacturer(s). The minimum sample size is subject to the ASTM test method and detection capability of your analyzer.

The Period of Validity for this RM is not able to be determined and should be reviewed 25years after the date below.

This bottle contains 150g of cast iron powder to be used per the test method you follow. Keep sealed tightly and store under normal laboratory conditions.

Refer to your test methods and or manufacturer manual for expanded uncertainties, repeatability/reproducibility factors.

For good laboratory practice, we recommend that all reference materials be verified as fit for purpose prior to use. Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Elemental Microanalysis Ltd. be liable for incidental or consequential damages.

Certified on the 8<sup>th</sup> of January 2024.

Elemental Microanalysis Ltd