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Certificate of Analysis Part No. B2503 Steel Ring Standard

RM Doc Number: 240715

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Analytical Results

%Carbon

Value = 0.461Expanded Uncertainty = 0.016Method & Detection = Combustion/IR n = 48 $k \approx 2$ (95% confidence)

%Sulfur

Value = 0.0127Expanded Uncertainty = 0.0022Method & Detection = Combustion/IR n = 48 $k \approx 2 (95\% confidence)$

Primary Reference Standard used:

NIST SRM 2160, 13g, 339, 155, 346a NCS NS 13007 JSS 050-8, 605-11 BCS 464

Methods Employed:

ASTM E1019 – Standard Test Methods for Determination of Carbon, Sulfur, Nitrogen, and Oxygen in Steel, Iron, Nickel, and Cobalt Alloys by Various Combustion and Inert Gas Fusion Techniques

The intended use of this Reference Material (RM) is for the verification and calibration of induction furnace combustion and other appropriate analysis methods for the determination of carbon and sulfur.

The minimum sample size to perform this intended use is dependent upon the test method and instrumentation used. It is recommended that no less than 1 ring of CRM material be used for destructive test methods.

The Period of Validity for this RM is 15 years after from the date below, if handling and storage instructions are followed.

This bottle contains 454g of nominal 1g rings 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 21st of October 2024

Elemental Microanalysis Ltd

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