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Certificate of Analysis
Part No. B2764
Steel Chip Standard

Analytical Results

% Carbon	**% Nitrogen**
Value = 0.140	Value = 0.040
Expanded Uncertainty = ± 0.006	Expanded Uncertainty = ± 0.003
Method & Detection = Combustion/IR	Method & Detection = Inert Gas Fusion/TC
n = 40	n = 40
k = 2.0	k = 2.0

Other reference values:

% Sulfur

Value = 0.0017

Method & Detection = Combustion/IR

n = 39

Primary Reference Standards employed:

NIST SRM: 19b, 133b, 16f, 293, 335, 2166, 349a, 64c

BCS: 464

BAM: 289-1, 227-1, 231-2, 267-1, 035-2

JSS: 030-9, 066-5, 050-8, 003-6, 244-11

Methods employed:

ASTM E1019-18 – 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 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 verification and calibration of induction furnace combustion and inert gas fusion (or other appropriate) analysers for the determination of carbon, sulfur, and nitrogen.

The minimum recommended sample size to perform this intended use is 1.0g. Typical sample size for analytical testing is dependent upon the test method and instrumentation used.

The Period of Validity for this RM is 15 years after the date below.

This bottle contains 150g of steel chips 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 29th of August 2024.

Elemental Microanalysis Ltd