Elemental Microanalysis Ltd
1 Hameldown Road
Okehampton
EX20 1UB
United Kingdom
Telephone: 01837 54446
Fax: 01837 54544
Web: www.elementalmicroanalysis.com

# Certificate of Analysis
# Part No. B2759
## Stainless Steel Chip Standard



## Analytical Results

**% Carbon**
Value = 0.212
Expanded Uncertainty = 0.006
Method & Detection = Combustion/IR
n = 40
k ≈ 2 (95% confidence)

**% Sulfur**
Value = 0.0244
Expanded Uncertainty = 0.0038
Method & Detection = Combustion/IR
n = 40
k ≈ 2 (95% confidence)

**% Nitrogen**
Value = 0.0069
Expanded Uncertainty = 0.0007
Method & Detection = Inert Gas Fusion/TC
n = 40
k ≈ 2 (95% confidence)

**Primary Reference Standards Used:**
**NIST SRM** 19h, 20g, 100b, 12h, 368, 20g
**JSS** 030-9, 601-12
**NCS** HC 11325, HC 11001
**ZRM** 079-1

**Method 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 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 of and calibration of induction furnace combustion, inert gas fusion, and other appropriate analysis methods for the determination of carbon, sulfur, and nitrogen.

The minimum sample size to perform this intended use is dependent upon the test method and instrumentation used. For destructive test methods a minimum sample size of 1g is recommended.

The Period of Validity for this RM is 20 years from the initial date of certification if handling and storage instructions are followed.

This bottle contains 150g of 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 10th of January 2025

Elemental Microanalysis Ltd