

**Certificate of Analysis  
Part No. B2800  
Tungsten Carbide Standard**

Certificate Number 914C  
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**% Carbon**  
**Mean = 6.13**  
**One Sigma Standard Deviation = +/- 0.03**  
**Expanded Uncertainty = +/- 0.06**  
**(k=2, 95% confidence)**

**%Sulphur**  
**Mean = 0.0055**  
**One Sigma Standard Deviation = +/- 0.0009**  
**Expanded Uncertainty = +/- 0.0018**  
**(k=2, 95% confidence)**

Method of analysis is ASTM E 1019-11, and ARI 033

Primary (NMI) Standards employed:

NIST 276a, 134a, 363  
EURO 783-1, 352-1

Notes

The mean analytical values were derived by 4 data sets (n=40), showing trace-ability to the above mentioned NMI standards, and reported in mass fraction. The precision values represent the estimated uncertainty derived from the data sets and may not represent your testing capabilities. Refer to your test method for the expanded method derived uncertainty, and typical analysis sample size.

The material used in production of this standard was selected and evaluated in accordance with ARI 032. The samples for round robin testing were selected in accordance with ARI 014. The above values relate only to the material used to produce this standard. This bottle contains 100g, tungsten carbide powder, to be used directly from the bottle with no preparation needed. This standard has an indefinite shelf life. Keep sealed and store under normal laboratory conditions.

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.

This is a Certified Reference Material (working standard), and is traceable to the above-mentioned standards. For good laboratory practice it is recommended that all standards be verified prior to use.

For and on behalf of

Elemental Microanalysis Limited

Certified November 18, 2014