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**Certificate of Analysis  
Part No. B2758  
Carbon Steel Chip Standard**

Certificate Number 813A  
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**% Carbon****Mean = 0.401****One Sigma Standard Deviation = 0.006****Expanded Uncertainty = 0.012****(k=2, 95% confidence)****% Sulphur****Mean = 0.0209****One Sigma Standard Deviation = 0.0007****Expanded Uncertainty = 0.0014****(k=2, 95% confidence)****% Nitrogen****Mean = 0.0067****One Sigma Standard Deviation = 0.0005****Expanded Uncertainty = 0.001****(k=2, 95% confidence)**

Method of analysis is ASTM E 1019-11, ARI 033 and ARI 034

Primary (NMI) Standards employed:

NIST SRM	368, 50c, 12h, 2160, 13g, 100b
NCS	HC11001
JSS	150-15
BCS/BAM	306/1, 035-1

**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 if needed

The material used in production of this standard was sampled in accordance with ARI 032. The samples used 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 consists of 150g, clean chips, to be used directly from the bottle with no preparation needed. This product has an indefinite shelf life. Keep sealed and store in a cool dry place

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

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Certified September 26, 2013