

**Certificate of Analysis  
Part No. B2812  
Proximate Coal Standard**

Certificate Number 732520  
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Issue 2

**Dried Basis Value**

<b>Proximate Analysis</b>		<b>n=</b>	<b>k=</b>	<b>ASTM</b>
<b>% Ash</b>	<b>46.0 ± 0.8</b>	<b>18</b>	<b>2.11</b>	<b>D3174/D7582</b>
<b>% Volatile Matter</b>	<b>21.7 ± 0.8</b>	<b>18</b>	<b>2.11</b>	<b>D3175/D7582</b>
<b>% Fixed Carbon (calculated)</b>	<b>(32.3)</b>	<b>--</b>	<b>--</b>	<b>D3172</b>
<b>% Sulphur</b>	<b>6.55 ± 0.25</b>	<b>25</b>	<b>2.06</b>	<b>D4239</b>
<b>Btu/lb</b>	<b>6829 ± 300</b>	<b>8</b>	<b>2.36</b>	<b>D5865</b>

References used:  
Sulphur – NIST SRM 2693, FC28143,  
AR1715-715617, AR1732-321208, AR1712-712914;  
BTU- Benzoic Acid NIST SRM 39j

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

**Notes:**

The intended use of this standard is for the verification of various tests by the above-mentioned methods. Typical sample size for analytical testing and minimum size is subject to the test method and instrumentation used. The uncertainty values represent the expanded uncertainty at a 95% confidence level obtained through analytical testing by the mentioned ASTM methods utilizing ANOVA, ISO Guide 35, and the Guide to Uncertainty Measurement. Metrological traceability is to the SI derived units expressed as mass fraction percent, or BTU/lb. Normal test procedures should be employed when using this standard; this includes using the reproducibility and repeatability factors of the method for establishing analytical uncertainty if needed. When necessary, professional judgment is applied toward consideration of data and statistical information.

The material used in production of this standard was prepared and sampled in accordance with ARI 041. The samples for round robin testing were selected in accordance with ARI 031. The above values relate only to the material used to produce this standard. The analytical samples should be dried or corrected for moisture as per the test method you are using. This bottle contains 50g fine coal powder (-60 mesh). While unable to determine a definite shelf life this reference standard should be reviewed 20 years from the date of certification. Once opened this certificate is valid for two years. Keep sealed tight and store under normal laboratory conditions. This certificate cannot be reproduced except in full. 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 Reference Material (RM) is traceable to the above-mentioned references. For good laboratory practice it is recommended that all standards be verified as fit for purpose prior to use.

**EXPIRATION DATE:  
THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING**

**CERTIFIED June 30, 2020**