

Analytical Results

Proximate Analysis		n=	k=	ASTM	Ultimate Analysis		n=	k=	ASTM
% Ash	7.46±0.42	44	2.0	D3174/D7582	% Carbon	67.7±1.72	18	2.1	D5373
% Volatile Matter	44.04±1.71	42	2.0	D3175/D7582	% Hydrogen	4.66±0.84	16	2.1	D5373
% Fixed Carbon (calculated)	(48.5)	--	--	D3172	% Nitrogen	0.96±0.05	14	2.2	D5373
% Sulfur	0.61±0.04	66	2.0	D4239	% Oxygen (calculated)	(18.6)	--	--	D3176
Btu/lb	11482±82	16	2.1	D5865					
Mineral Analysis		n=	k=	ASTM	Sulfur Forms		ASTM		
%Silica	29.44±1.47	16	2.1	D4326/D6349	%Pyritic	(0.04)			D2492
% Alumina	15.96±1.24	16	2.1	D4326/D6349	%Organic (calculated)	(0.51)			D2492
% Titania	1.12±0.08	14	2.2	D4326/D6349	% Sulfate	(0.06)			D2492
% Ferric Oxide	5.39±0.37	15	2.1	D4326/D6349					
% Calcium Oxide	22.86±2.13	15	2.1	D4326/D6349	Ash Fusion Temperature	Degrees F	Degrees F	Degrees F	Degrees F
% Magnesium Oxide	5.54±0.22	14	2.2	D4326/D6349	ASTM D1857	Reducing	Oxidising	Reducing	Oxidising
% Potassium Oxide	0.38±0.10	14	2.2	D4326/D6349	Initial deformation	(2159)	(2183)	(2159)	(2183)
% Sodium Oxide	1.48±0.33	15	2.1	D4326/D6349	Softening	(2197)	(2203)	(2197)	(2203)
% Sulfur Trioxide	15.87±2.18	12	2.2	D4326/D6349	Hemispherical	(2209)	(2209)	(2209)	(2209)
% Phosphorus Pentoxide	0.54±0.11	15	2.1	D4326/D6349	Fluid/Final	(2231)	(2233)	(2231)	(2233)
% Strontium Oxide	(0.46)	--	--	D4326/D6349					
% Barium Oxide	0.55±0.06	16	2.1	D4326/D6349	% Chlorine D4208/D6721	(0.0013)			
% Manganese Oxide	(0.05)	--	--	D4326/D6349	% Fluorine D3761/D5987	(0.0055)			

REFERENCES USED: Sulfur - NIST SRM 2682c, 1632d, NCS FC28006j, BTU - NIST 39j(Benzoic Acid); Mineral Analysis – NIST 1635a, 1634a; Chlorine – SRM 1635a, 1632d; Fluorine – SRM 1635a, 1632d.
() Indicates reference or information only value.

**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 various tests by the above-mentioned methods.

The typical and minimum sample size to perform this intended use is subject to the test method and instrumentation used.

The Period of Validity for this RM is 2 years after opening and should be reviewed 20 years after the date below.

This bottle contains 50g of fine coal powder (-60 mesh) to be used per the test method you follow. Keep sealed tightly and store under normal laboratory conditions. The analytical samples should be dried or corrected for moisture as per the test method you are using.

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 27th of October 2023

Elemental Microanalysis Ltd