

Test analysys.

Name of test material: **Natural hardwood lump charcoal**

Customer: **Primorskie Rudy (Land Sea Group of Companies)**

Heating Value: **>7200 kcal/kg**

Fixed carbon: **88-92%**

Volatile matter: **7%**

Ash content: **1.5-2.5% (on dry basis)**

Moisture: **3%-5%**

Composition of the coal and ash, % mass:

element	charcoal, %	ash, %
Si	0.017±0.001	0.33±0.01
K	0.027±0.001	2.89±0.02
Ca	0.054±0.001	8.43±0.04
Fe	0.005±0.001	0.211±0.004
Na	0.05±0.01	0.5±0.1
P	~0.001	0.36±0.03
Al	0.005±0.002	0.19±0.03
Mg	<0.001	0.76±0.05
S	0.003±0.001	0.39±0.04
Cu	0.001	0.009±0.001
Zn	~0.001	~0.001
Mn	~0.001	0.035±0.001
Sr	<0.001	0.04±0.01
Ba	<0.001	0.10±0.02
Rb	<0.001	0.003±0.001

The content of elements was determined by X-ray fluorescence analysis instrument Shimadzu EDX-800HS. tube with Rh-anode. the exposure time for 100 s in each energy channel in vacuum.

Concentrations were calculated by the fundamental parameter method. using the software tool.

October 2016

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