

TEST PROTOCOL Nr. 511554

Test Protocol issue Date 2024-02-29
 Customer (name, address) UAB Bageta, Šiaulių g. 39, Meškuičiai, LT-81444 Šiaulių raj.
 Test Object: Solid Biofuel - wood pellets
 Test Method: Determination of moisture, ash content and the gross and net calorific value at constant volume according to Standards LST EN ISO 18134-2:2017, LST EN ISO 18134-3:2016, LST EN ISO 18122:2016; LST EN ISO 18125:2017 (except 8.3;8.4;8.6;9.7.2;10.3.3;10.3.4 and appendix A;B;D3;D4)

Test Results:

Sample ID	Test started	Test finished
2024-02-21	2024-02-27 12:55:55	2024-02-29 13:01:35

Test	Result	Extended uncertainty
Total Moisture Mar, %	8.529	0.072 ±%
Ash content on dry basis Ad,	0.497	0.092 ±%
Net calorific value at constant volume of dry fuel, qv,net,d, MJ/kg	18.965	0.071 ±MJkg
Gross calorific value at constant volume of dry fuel, qv,gr,d, MJ/kg	20.236	0.06 ±MJkg
Net calorific value at constant volume as received, qv,net,m, MJ/kg	17.151	0.076 ±MJkg
Gross calorific value at constant volume as received, qv,gr,m, MJ/kg	-	- ±MJkg

The reported expanded uncertainty is calculated by multiplying the cumulative standard uncertainty by the coverage multiplier k=2, which corresponds to a 95% confidence level for a normal distribution. Standard uncertainty calculated according to ILAC-G17:01/2021.

Conditions:

- a) The values used according to the Annex G of the Standard LST EN ISO 18125:2017: Hdaf, % 6.2, S, % 0.02
- b) Ambient Temperature: 21.1 °C Relative Humidity RH: 22 %
- c) Package of this sample was received intact, no sample loss was suffered during transportation
- d) Sample registration date: 2024-02-21 08:00:00 e) Date of sample delivery to laboratory: 2024-02-27 10:14:04

Equipment:

The name, type and identification No. of measuring devices and equipment	Calibration Certificate No	Expanded uncertainty U (coverage factor k=2)/measurement uncertainty	Test
Balance ML 104/01 № IK06026-2	KL22-52	U= ±0,00017 g	Ash content
Balance ME 3002 № IK05181	KL22-57	U= ±0,012 g	Total moisture
Balance ML104/01 № IK05658	KL22-56	U= ±0,00019 g	Calorific value, moisture in general analysis sample
Drying Oven LSIK-B2/VC222 № IK06971-8	KL003336	U= ±0,67 °C	Moisture in general analysis sample
Furnace LV150H1CN № IK06969	KL005516	U= ±2,5 °C	Ash content
Automatic Shiling burette № R.5219.5	21/2737	U= ±0,0011 ml	Calorific value
Automatic calorimeter Parr 6400 № IK06965 and PPM benzoic acid	123119 (SRM 39j)	±0,1%; 6318,4±2,9 cal/g	Calorific value

Tyrimą atliko: Neringa Laugalytė

Tvirtina: Vitalijus Gylys