



"TO WHOM IT MAY CONCERN"

Certificate dated:

A.H. Ref:

MAY 18, 2022 AT RIGA, LATVIA
V122442

CERTIFICATE OF ANALYSIS / QUALITY No. V122442-01A

We, the undersigned, Albers-Hansen, independent surveyor, hereby certify having supervised at time and place of accumulating stock of the following Product:

COMMODITY / PRODUCT (as declared) : WOOD PELLETS IN BULK
PLACE OF SAMPLING : AS "REMARS - RĪGA", RIGA, LATVIA
SCHEME OF SAMPLING : EN 18135:2017 (MANUAL)
DATE(S) OF SAMPLING : 00:00, MAY 01 – 23:59, MAY 15, 2022
DATE(S) OF ANALYSING : MAY 17 - 18, 2022

We performed the permanent supervision and sampling* at regular intervals, according to EN ISO 18135 sampling rules during the discharge railcars / trucks / accumulating stock of above product. The representative samples were drawn and composed according to EN ISO 14780 method.

Average sample No. V122442-01, sealed with numbered seal No. 1376608 was sent to recognized, duly accredited independent laboratory "Virsmā" and the findings of this laboratory as they reported are as follows***:

PARAMETER TESTED:	UNIT:	ACTUAL RESULT:		METHOD APPLIED:
		As Received	Dry Basis	
Moisture content	m/m %	5.3	---	LVS EN ISO 18134-1
Ash content (as received)	m/m %	0.76	0.81	LVS EN ISO 18122
Volatile matters	m/m %	80.0	84.5	LVS EN ISO 18123
Gross Calorific value at constant volume	GJ/ton	19.19	20.27	EN ISO 18125
	Kcal/kg	4584	4842	
	MWt/t	5.33	5.63	
Net calorific value at constant pressure	GJ/ton	17.79	18.92	EN ISO 18125
	Kcal/kg	4248	4520	
	MWt/t	4.94	5.26	
Elementary composition:				
• Chlorine, Cl	m/m %	0.003	0.004	LVS EN ISO 16994
• Nitrogen, N	m/m %	0.17	0.18	LVS EN ISO 16948
• Carbon, C	m/m %	48.1	50.8	LVS EN ISO 16948
• Sulphur, S	m/m %	0.019	0.020	LVS EN ISO 16994
• Hydrogen, H	m/m %	5.85	6.18	LVS EN ISO 16948
• Oxygen, O	m/m %	39.8	42.0	LVS EN ISO 16993
Diameter of pellets	mm	6.2 ± 0.1 mm	---	LVS EN ISO 17829
Length of pellets (fraction):				
• 3.15 ≤ 40 mm;	m/m %	100.0	---	LVS EN ISO 17829
• 3.15 ≤ 50 mm;	m/m %	100.0	---	
Bulk (apparent) density	kg/m ³	660	---	LVS EN ISO 17828
Fines ≤ 3.15 mm (round hole sieves)	m/m %	1.47	---	LVS EN ISO 18846
Mechanical durability (as received)	m/m %	98.5	---	LVS EN ISO 17831-1
Particle size distribution of disintegrated pellets (Wet sieve):				
< 4.0 mm (round hole sieve)	m/m %	99.9	---	LVS EN ISO 17830
< 3.15 mm (round hole sieve)	m/m %	99.7	---	
< 2.0 mm (square hole sieve)	m/m %	98.7	---	
< 1.4 mm (square hole sieve)	m/m %	91.6	---	
< 1.0 mm (square hole sieve)	m/m %	76.8	---	
Ash Fusion:				
• Shrinkage (SST)	°C	1320	---	LVS EN ISO 21404
• Deformation (DT)	°C	1470	---	
• Hemisphere (HT)	°C	>1500	---	
• Flow (FT)	°C	>1500	---	

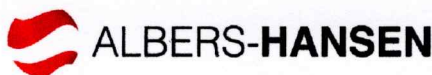
Remarks:

- * See details in Albers-Hansen document "Inspection and Sampling Report" No. V122442-01s, dated on MAY 16, 2022;
- ** Tests and results reported in this Certificate were received from duly accredited by the Latvian National Accreditation Center (LATAK) laboratory "Virsmā", address: 29, S.Eizensteina street, Riga, Latvia, LV-1079. Copy of original report from this lab is available upon request;
- ***Albers - Hansen was not witnessing the above analyzing and bear no responsibility for the results reported in this Certificate which remain with contracted lab only.

The execution of our activities is based on the procedures of our quality assurance manual. The result of this inspection only refers to the order mentioned. It is not permitted to duplicate this certificate without permission of Albers-Hansen and / or her Principals.

For and on behalf of
Albers-Hansen:


/ Pavel Petrovsky/



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