



CERTIFICATE OF SAMPLING AND ANALYSIS

Vessel : ██████████
Loading Port : VENTSPILS, LATVIA
Cargo (as declared) : 1 GRADE 100% PELLETS
Quantity (as per SGS D/S) : Metric Tonnes
Commenced Loading : ██████████
Completed Loading : ██████████
Our Principal : KURZEMES GRANULAS SIA
SGS Reference No. : LV.20.23.0291

THIS IS TO REPORT that in accordance with instructions received from our Principal, to perform sampling and analysis of the above-mentioned shipment, we hereby report the following:

SAMPLING: MANUAL SAMPLING - SGS, performed as per EN ISO 18135*. Sampling occurred from freshly exposed surface while the material was in motion, on a systematic known-mass intervals basis, with fixed-increment mass. Manual Sampling method was agreed to with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible or was not selected by the SGS Principal. The suitability of this sampling method is defined by the sampling standard.

TEMPERATURE MEASUREMENTS: The actual temperature of the Material checking was performed on the Stockpile in the warehouse and on the surface of the cargo in the vessel's hold throughout the loading. The temperature of the Cargo was found to be from +14.4°C up to 33.5°C.

ANALYSIS: Reported results are based on a calculated weighted average of 2 Sub-lot(s) analysis results using weights and qualities on the same moisture basis, and composite analysis results where applicable. Analysis performed in accordance with EN ISO Standards, except as noted.

We report the following weighted average:

<u>Parameters</u>	<u>Methods</u>	<u>Units</u>	<u>As-Received basis</u>	<u>Dry basis</u>
Nitrogen	LVS EN ISO 16948	% mass	0.11	0.12
Oxygen (excludes O in moisture)	LVS EN ISO 16993	% mass	39.91	42.87
Hydrogen (excludes H in moisture)	LVS EN ISO 16948	% mass	5.75	6.18
Total Carbon	LVS EN ISO 16948	% mass	46.80	50.27



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<u>Parameters</u>	<u>Methods</u>	<u>Units</u>	<u>As-Received basis</u>	<u>Dry basis</u>
Total Moisture	LVS EN ISO 18134-2	% mass	6.90	-
Ash	LVS EN ISO 18122	% mass	0.52	0.56
Volatile Matter	LVS EN ISO 18123	% mass	79.13	85.00
Total Sulphur	LVS EN ISO 16994	% mass	0.01	0.01
Gross CV	LVS EN ISO 18125	kcal/kg	4,539	4,875
Gross CV	LVS EN ISO 18125	kJ/kg	19,004	20,413
Gross CV	LVS EN ISO 18125	MWh/ton	5.28	5.67
Net CV (constant volume)	LVS EN ISO 18125	kcal/kg	4,218	4.572
Net CV (constant volume)	LVS EN ISO 18125	kJ/kg	17,660	19,140
Net CV (constant volume)	LVS EN ISO 18125	MWh/ton	4.91	5.32
Net CV (constant pressure)	LVS EN ISO 18125	kcal/kg	4,200	4,554
Net CV (constant pressure)	LVS EN ISO 18125	kJ/kg	17,583	19,068
Net CV (constant pressure)	LVS EN ISO 18125	MWh/ton	4.88	5.30

We report the following on the Composite sample:

<u>Parameters</u>	<u>Units</u>	<u>Results</u>	<u>Methods</u>
Bulk Density	kg/m ³	660	LVS EN ISO 17828
Mechanical Durability	%	98.5	LVS EN ISO 17831-1

Ash Melting Behaviour

<u>Parameters</u>	<u>Units</u>	<u>Oxidizing Atmosphere</u>	<u>Method</u>
Shrinkage starting temperature (SST)	°C	1470	ISO 21404
Deformation Temperature (DT)	°C	> 1540	ISO 21404
Hemisphere Temperature (HT)	°C	> 1540	ISO 21404
Flow Temperature (FT)	°C	> 1540	ISO 21404

Particle Size Distribution (Dust Content)

<u>Sieves</u>	<u>Units</u>	<u>Results</u>	<u>Method</u>
Over than 3.15 ¹ mm	% mass	98.59	LVS EN ISO 17827-2
Between 2.8 - 3.15 ¹ mm	% mass	0.00	
Between 2.0 - 2.8 mm	% mass	0.12	
Between 1.4 - 2.0 mm	% mass	0.30	
Between 1.0 - 1.4 mm	% mass	0.27	
Between 0.5 - 1.0 mm	% mass	0.38	
Between 0.25 - 0.5 mm	% mass	0.20	
Less than 0.25 mm	% mass	0.14	

¹Round holes

SGS Latvija Ltd.

SGS LATVIJA LTD Katrīnas iela 5
LV 1045, Rīga, Latvia
P: + 371 67 32 61 63
F: + 371 67 32 61 64

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Particle Size Distribution (Pellets Component Size):

Sieves	Units	Results	Method
Over than 4.0 ¹ mm	% mass	0.22	LVS EN ISO 17830
Between 3.15 ¹ - 4.0 ¹ mm	% mass	0.77	
Between 2.8 - 3.15 ¹ mm	% mass	0.10	
Between 2.0 - 2.8 mm	% mass	1.98	
Between 1.4 - 2.0 mm	% mass	8.85	
Between 1.0 - 1.4 mm	% mass	17.75	
Between 0.5 - 1.0 mm	% mass	32.04	
Between 0.25 - 0.5 mm	% mass	21.02	
Less than 0.25 mm	% mass	17.27	

¹Round holes

This certificate reflects our findings at time and place of our intervention only and does not relieve the parties from their contractual responsibilities.

Signed and dated in Riga
29 August 2023

For and on behalf of
SGS Latvija Ltd
Dmitry Kulak



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