

CERTIFICATE OF SAMPLING AND ANALYSIS

Vessel : M/V "LAUREN C"  
 Loading Port : Ventspils, Latvia  
 Commenced Loading : 29 September 2018/ 11:30 LT  
 Completed Loading : 30 September 2018/ 16:30 LT  
 Quantity (as per SGS D/S) : 4,022.987 Metric Tonnes  
 Cargo : WOOD PELLETS IN BULK  
 Our Principal : KURZEMES GRANULAS SIA  
 SGS Reference No. : LV.20.18.0463

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 Stock pile 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 +5.1°C up to +18.9°C.

**ANALYSIS:** 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:

Parameters	Methods	Units	As-Received basis	Dry basis
Total Moisture	LVS EN ISO 18134-2	% mass	6.64	-
Ash	LVS EN ISO 18122	% mass	0.30	0.32
Volatile Matter	LVS EN ISO 18123	% mass	79.73	85.40
Total Sulphur	LVS EN ISO 16994	% mass	0.01	0.01
Gross CV	LVS EN ISO 18125	kcal/kg	4,516	4,837
Gross CV	LVS EN ISO 18125	kJ/kg	18,907	20,252
Gross CV	LVS EN ISO 18125	MWh/ton	5.25	5.63
Net CV (constant volume)	LVS EN ISO 18125	kcal/kg	4,197	4,535
Net CV (constant volume)	LVS EN ISO 18125	kJ/kg	17,573	18,987
Net CV (constant volume)	LVS EN ISO 18125	MWh/ton	4.88	5.27

**SGS LATVIJA LIMITED**

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We report the following on the composite sample:

Parameters	Methods	Units	Results
Bulk Density	LVS EN ISO 17828	kg/m <sup>3</sup>	690
Amount of Fines (< 3,15 mm - round holes)	LVS EN ISO 17831-1	% mass	1.67
Mechanical Durability	LVS EN ISO 17831-1	%	98.7

Particle Size Distribution (Dust Content)

Sieves	Units	Results	Method
Over than 3.15* mm	% mass	97.95	LVS EN ISO 17827-2
Between 2.8 - 3.15* mm	% mass	0.00	
Between 2.0 - 2.8 mm	% mass	0.13	
Between 1.4 - 2.0 mm	% mass	0.28	
Between 1.0 - 1.4 mm	% mass	0.38	
Between 0.5 - 1.0 mm	% mass	0.73	
Between 0.25 - 0.5 mm	% mass	0.32	
Less than 0.25 mm	% mass	0.21	

\* Round 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  
4 October 2018

For and on behalf of  
 SGS Latvija Ltd  
 Alexander Kluev  




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