

This certificate attests that for the production of

## Wood Pellets Quality class A1

produced by

**SIA „GAUJAS KOKS“**

**LV-2136 Vangazi, Incukalna district, 24/35 Gaujas Street**

at the site

**LV-5202 Jekabpils, 93A Zilanu Street**

an initial inspection was carried out and a continuous surveillance is performed regarding the implementation of the requirements of

**ENplus®**  
Quality Certification Scheme For Wood Pellets



by BEA Institut für Bioenergie in the respective current version and that the product meets quality class A1.

For the validity of this certificate see [www.holzforSchung.at](http://www.holzforSchung.at).

**ENplus® ID:** LV 017

**Certificate number:** HFA-ENplus-0239

**Date of first issue:** 20.05.2019

**Date of issue:** 20.05.2019

**Valid until:** 19.05.2022

In cooperation with:



**DI Andreas Haider**  
Authorised signatory



**Dr. Manfred Brandstätter**  
Head of Certification Body

For the production of wood pellets produced by

**Gaujas koks SIA, LATVIA**

certified according to **ENplus® A1** with the ID number: **LV017**

we confirm the following test results analysed within the inspection 2021 valid until the inspection in 2022.

Sample 2021171	Standard	unit	Pellets	Limit values according ENplus®	
				Class A1	Class A2
mechanical durability**	ISO 17831-1:2015	[%]	98,9	≥ 98,0	≥ 97,5
bulk density (ar)**	ISO 17828:2015	[kg/m³]	700	750≥BD≥600	750≥BD≥600
moisture content**	ISO 18134-2:2017	[%]	6,2	≤ 10	≤ 10
ash content 550°C(db)**	ISO 18122:2015	[%]	0,3	≤ 0,7	≤ 1,2
net calorific value (ar)**	ISO 18125:2017	[MJ/kg]	17,6	≥ 16,5	≥ 16,5
net calorific value (ar)	ISO 18125:2017	[kWh/kg]	4,9	≥ 4,6	≥ 4,6
net calorific value (db)	ISO 18125:2017	[MJ/kg]	19,0	-	-
net calorific value (db)	ISO 18125:2017	[kWh/kg]	5,3	-	-
gross calorific value (ar)	ISO 18125:2017	[MJ/kg]	19,1	-	-
gross calorific value (ar)	ISO 18125:2017	[kWh/kg]	5,3	-	-
Sulphur content (db)**	ISO 16994:2016	[%]	< 0,001	≤ 0,04	≤ 0,05
Chlorine content (db)	ISO 16994:2016***	[%]	< 0,005	≤ 0,02	≤ 0,02
Nitrogen content (db)**	ISO 16948:2015	[%]	0,06	≤ 0,30	≤ 0,50
pressing aid / additives	-	[%]	0	≤ 1,8	≤ 1,8
<b>dimensions**</b>					
fines (< 3,15 mm)	ISO 18846:2016	[%]	0,3	≤ 0,5* / ≤ 1,0	≤ 0,5* / ≤ 1,0
length (3,15 ≤ L ≤ 40 mm)	ISO 17829:2015	[%]	99,7	> 98,5* / > 98	> 98,5* / > 98
length (40 ≤ L ≤ 45 mm)	ISO 17829:2015	[%]	0	≤ 1	≤ 1
length (> 45 mm)	ISO 17829:2015	[amount]	0	0	0
diameter	ISO 17829:2015	[mm]	6	6 or 8 ± 1	6 or 8 ± 1
<b>heavy metals</b> (quantification according to ISO 17294-2:2016)					
Chromium (db)	ISO 16968:2015	[mg/kg]	< 1	≤ 10	≤ 10
Copper (db)	ISO 16968:2015	[mg/kg]	< 1	≤ 10	≤ 10
Zinc (db)	ISO 16968:2015	[mg/kg]	8,2	≤ 100	≤ 100
Lead (db)	ISO 16968:2015	[mg/kg]	< 0,5	≤ 10	≤ 10
Mercury (db)	ISO 16968:2015	[mg/kg]	< 0,075	≤ 0,1	≤ 0,1
Cadmium (db)	ISO 16968:2015	[mg/kg]	0,11	≤ 0,5	≤ 0,5
Arsenic (db)	ISO 16968:2015	[mg/kg]	< 0,5	≤ 1	≤ 1
Nickel (db)	ISO 16968:2015	[mg/kg]	< 1	≤ 10	≤ 10
<b>ash melting behaviour</b> (oxidizing atmosphere, ash preparation at 815°C)					
shrinking temperature SST	CEN/TS 15370-1:2006	[°C]	1150	-	-
deformation temperature DT	CEN/TS 15370-1:2006	[°C]	1260	≥ 1200	≥ 1100
hemisphere temperature HT	CEN/TS 15370-1:2006	[°C]	> 1550	-	-
flow temperature FT	CEN/TS 15370-1:2006	[°C]	> 1550	-	-

\* for bags or sealed big bags, ar...as received, db...dry basis