

For the production of wood pellets produced by

Rožkalni ZS, Lēdmane, LATVIA

certified according to **ENplus® A1** with the ID number: **LV015**

we confirm the following test results analysed within the inspection 2019 valid until the inspection in 2020.

| Sample 2019316 | Standard | unit | Pellets | Limit values according ENplus® | |
|---|----------------|----------|---------|--------------------------------|----------------|
| | | | | Class A1 | Class A2 |
| mechanical durability** | ISO 17831-1 | [%] | 98,1 | ≥ 98,0 | ≥ 97,5 |
| bulk density (ar)** | ISO 17828 | [kg/m³] | 660 | 750≥BD≥600 | 750≥BD≥600 |
| moisture content** | ISO 18134-2 | [%] | 7,0 | ≤ 10 | ≤ 10 |
| ash content 550°C(db)** | ISO 18122 | [%] | 0,4 | ≤ 0,7 | ≤ 1,2 |
| net calorific value (ar)** | ISO 18125 | [MJ/kg] | 17,6 | ≥ 16,5 | ≥ 16,5 |
| net calorific value (ar) | ISO 18125 | [kWh/kg] | 4,9 | ≥ 4,6 | ≥ 4,6 |
| net calorific value (db) | ISO 18125 | [MJ/kg] | 19,1 | - | - |
| net calorific value (db) | ISO 18125 | [kWh/kg] | 5,3 | - | - |
| gross calorific value (ar) | ISO 18125 | [MJ/kg] | 19,0 | - | - |
| gross calorific value (ar) | ISO 18125 | [kWh/kg] | 5,3 | - | - |
| Sulphur content (db) | ISO 16994 | [%] | 0,005 | ≤ 0,04 | ≤ 0,05 |
| Chlorine content (db) | ISO 16994 | [%] | < 0,005 | ≤ 0,02 | ≤ 0,02 |
| Nitrogen content (db) | ISO 16948 | [%] | 0,06 | ≤ 0,30 | ≤ 0,50 |
| pressing aid / additives | - | [%] | 0,17 | ≤ 1,8 | ≤ 1,8 |
| dimensions** | | | | | |
| finer (< 3,15 mm) | ISO 18846 | [%] | 0,3 | ≤ 0,5* / ≤ 1 | ≤ 0,5* / ≤ 1 |
| length (3,15 ≤ L ≤ 40 mm) | ISO 17829 | [%] | 99,7 | > 98,5* / > 98 | > 98,5* / > 98 |
| length (40 ≤ L ≤ 45 mm) | ISO 17829 | [%] | 0 | ≤ 1 | ≤ 1 |
| length (> 45 mm) | ISO 17829 | [amount] | 0 | 0 | 0 |
| diameter | ISO 17829 | [mm] | 6 | 6 or 8 ± 1 | 6 or 8 ± 1 |
| heavy metals*** | | | | | |
| Chromium (db) | ISO 16968 | [mg/kg] | < 1 | ≤ 10 | ≤ 10 |
| Copper (db) | ISO 16968 | [mg/kg] | < 1 | ≤ 10 | ≤ 10 |
| Zinc (db) | ISO 16968 | [mg/kg] | 10,0 | ≤ 100 | ≤ 100 |
| Lead (db) | ISO 16968 | [mg/kg] | < 0,5 | ≤ 10 | ≤ 10 |
| Mercury (db) | ISO 16968 | [mg/kg] | < 0,075 | ≤ 0,1 | ≤ 0,1 |
| Cadmium (db) | ISO 16968 | [mg/kg] | < 0,1 | ≤ 0,5 | ≤ 0,5 |
| Arsenic (db) | ISO 16968 | [mg/kg] | < 0,1 | ≤ 1 | ≤ 1 |
| Nickel (db) | ISO 16968 | [mg/kg] | < 1 | ≤ 10 | ≤ 10 |
| ash melting behaviour (ash preparation at 815°C)** | | | | | |
| shrinking temperature SST | CEN/TS 15370-1 | [°C] | 1200 | - | - |
| deformation temperature DT | CEN/TS 15370-1 | [°C] | 1590 | ≥ 1200 | ≥ 1100 |
| hemisphere temperature HT | CEN/TS 15370-1 | [°C] | > 1600 | - | - |
| flow temperature FT | CEN/TS 15370-1 | [°C] | > 1600 | - | - |

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

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