



Výzkumný ústav zemědělské techniky, v.v.i.  
Drnovská 507, 161 01 Praha 6 – Ruzyně  
IČ: 00027031

## CERTIFICATE OF ANALYSIS

This certificate certifying that the fuel has the following characteristics, in accordance with the methods, agreed with a customer.

**Fuel type:** GRANOFYT R, pellets ø 8 mm made from rape straw

**Customer:** ATEA Praha, s.r.o., Rudná u Prahy, Chrást'any 43

### ANALYSIS RESULT

Parameters	Unit	Original sample	Sample without water
Water	%	7,85	-
Volatile matter	%	70,11	76,08
Non-volatile matter	%	16,40	17,80
Ash	%	5,64	6,12
C	%	43,64	47,36
H	%	6,11	6,63
N	%	0,84	0,91
S	%	0,14	0,15
O	%	35,64	38,68
Cl	%	0,14	0,15

Ash - fusibility

$t_s$  1 050 °C  
 $t_A$  (softening) > 1 300 °C  
 $t_B$  (melting) > 1 300 °C  
 $t_c$  (flow) > 1 300 °C

Abrasion by ONORM M 7135 2,28 %

Density 1,23 kg/dm<sup>3</sup>

Gross heating value 16,95 MJ/kg

Net heating value 15,43 MJ/kg

Without water 18,40

Without water 16,96

In Prague 12.6. 2009

Responsible officer: Ing. Petr Hutla, CSc.





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## CERTIFICATE OF ANALYSIS

This certificate certifying that the fuel has the following characteristics, in accordance with the methods, agreed with a customer.

**Fuel type:** GRANOFYT S, pellets ø 8 mm made from wheat straw

**Customer:** ATEA Praha, s.r.o., Rudná u Prahy, Chrást'any 43

### ANALYSIS RESULT

Parameters	Unit	Original sample	Sample without water
Water	%	6,40	-
Volatile matter	%	69,81	74,58
Non-volatile matter	%	17,46	18,65
Ash	%	6,33	6,76
C	%	43,04	45,98
H	%	6,51	6,96
N	%	0,72	0,77
S	%	0,05	0,05
O	%	36,89	39,41
Cl	%	0,09	0,10

Ash - fusibility

t <sub>s</sub>	780 °C
t <sub>A</sub> (softening)	800 °C
t <sub>B</sub> (melting)	1020 °C
t <sub>c</sub> (flow)	1050 °C

Abrasion by ONORM M 7135 2,28 %

Density 1,34 kg/dm<sup>3</sup>

Gross heating value 17,19 MJ/kg

Net heating value 15,62 MJ/kg

Without water 18,37

Without water 16,85

In Prague 12.6. 2009

Responsible officer: Ing. Petr Hutla, CSc.



