

## MIDLAND BIO ENERGY GRADE 1 PELLET ANALYSIS

Parameter	ENplus A1 Spec	Actual Test Result	Units	is	Bas
Diameter	6 (±1) – 8 (±1)	6	mm	Ar	
Length	3.15 ≤ l ≤ 40	25	mm	Ar	
Moisture	≤ 10.0	4.8	%	Ar	
Ash 550 ° c	≤ 0.7	0.6	%	D	
Durability	≥ 97.5	99.3	%	Ar	
Fines	≤ 1.0	0.2	%	Ar	
Additives	≤ 2.0	≤ 2.0	%	Ar	
Net Calorific Value	≥ 4.6	4.88	kWh/kg	Ar	
Net Calorific Value	≥ 16.5	17.556	MJ/kg	Ar	
Bulk Density	≥ 600	682	Kg/m <sup>3</sup>	Ar	
Nitrogen	≤ 0.03	0.15	%	D	
Sulphur	≤ 0.05	0.01	%	D	
Chlorine	≤ 0.02	<0.01	%	D	
Arsenic	≤ 1.0	0.5	mg/kg	D	
Cadmium	≤ 0.05	<0.5	mg/kg	D	
Chromium	≤ 10.0	<1	mg/kg	D	
Copper	≤ 10.0	1.8	mg/kg	D	
Lead	≤ 10.0	<1	mg/kg	D	
Mercury	≤ 0.1	<0.02	mg/kg	D	
Nickel	≤ 10.0	<1	mg/kg	D	
Zinc	≤ 100	<10	mg/kg	D	
Ash Melting Point	≥ 1200	1400	0c	D	
Origin & Source		1 Stemwood 2 Chemically untreated wood residues			

Note: Results expressed on a dry basis – D; Results expressed on an as received basis – Ar

Test date : May 2011