WOOD PELLETS SPECIFICATIONS **19-12-2012**

Initiative Wood Pellets Buyers: Industrial wood pellets specifications

PARAMETERS AND REJECTION LIMITS	Units	Standard	I1 industrial		I2 industrial		I3 industrial		performed by [1]
Origin and source	Only accepted	EN 14961-1	1.1 Forest, plantation and other virgin wood, 1.2.1 chemically untreated wood residues		1.1 Forest, plantation and other virgin wood, 1.2.1 chemically untreated wood residues		1.1 Forest, plantation and other virgin wood, 1.2.1 chemically untreated wood residues		declared by seller
		OFGEM	sustainability proven for UK		sustainability proven for UK		sustainability proven for UK		proven by seller
Additives (composition, mass)	weight% ar	EN 14961-1	< 3% additives [4]		< 3% additives [4]		< 3% additives [4]		declared by seller
Sampling		EN 14778							insp
Sample preparation		EN 14780							insp & lab
Quality check									insp
No water damage [2]			None		None		None		insp
No burned/charred pellets [3]			None		None		None		insp
Physical parameters			Limit	Tolerance	Limit	Tolerance	Limit	Tolerance	
Diameter	mm	EN 16127	6 to 8	within range	6 to 10	within range	6 to 12	within range	insp & lab
Length ≤50 mm	weight %	EN 16127	99.9%	within range	99.9%	within range	99.9%	within range	insp & lab
Length ≤40 mm	weight %	EN 16127	99%	within range	99%	within range	99%	within range	insp & lab
Total moisture	weight% ar	EN 14774	≤ 10 %	0,5% absolute	≤ 10 %	0,5% absolute	≤ 10 %	0,5% absolute	insp & lab
Bulk (apparent) density	kg/m3	EN 15103	≥ 600	2% of limit	≥ 600	2% of limit	≥ 600	2% of limit	insp & lab
Maximum bulk temperature [5]	°C	Annex F	≤ 60	1°C	≤ 60	1°C	≤ 60	1°C	insp
Fines ≤ 3.15 mm (round hole sieves)	weight% ar	EN 15210-1	≤ 4 %	1% absolute	≤ 5 %	1% absolute	≤ 6 %	1% absolute	insp & lab
Durability	weight% ar	EN 15210-1	97,5-99%	0,5% absolute	97,0%-99%	0,5% absolute	96,5%-99%	0,5% absolute	lab
Particle size distribution of disintegrated pellets:									
% < 3.15 mm (round hole sieve)	weight %	EN 16126	>99%	1% absolute	>98%	1% absolute	>97%	1% absolute	lab
% < 2.0 mm (square hole sieve)	weight %	EN 16126	>95%	2% absolute	>90%	2% absolute	>85%	2% absolute	lab
% < 1.0 mm (square hole sieve)	weight %	EN 16126	>60%	5% absolute	>50%	5% absolute	>40%	5% absolute	lab
Net calorific value at constant pressure	GJ/ton ar	EN 14918	≥ 16,5	0,3 GJ/ton	≥ 16,5	0,3 GJ/ton	≥ 16,5	0,3 GJ/ton	lab
Ash content	weight% DM	EN 14775	≤ 1,0%	10% of limit	≤ 1,5%	10% of limit	≤ 3%	10% of limit	lab
Elementary composition									
Cl	weight% DM	EN 15289	≤ 0,03%	0,01% absolute	≤ 0,05 %	0,01% absolute	≤ 0,1 %	20% of limit	lab
N	weight% DM	EN 15104	≤ 0,3%	0,05% absolute	≤ 0,3 %	10% of limit	≤ 0,6 %	10% of limit	lab
S	weight% DM	EN 15289	≤ 0,15 %	0,01% absolute	≤ 0,2 %	20% of limit	≤ 0,4 %	20% of limit	lab
Trace elements									
As	mg/kg DM	EN 15297	≤ 2	0,064 absolute	≤ 2	0,064 absolute	≤ 2	0,064 absolute	lab
Cd	mg/kg DM	EN 15297	≤ 1	0,06 absolute	≤ 1	0,06 absolute	≤ 1	0,06 absolute	lab
Cr	mg/kg DM	EN 15297	≤ 15	0,032 absolute	≤ 15	0,032 absolute	≤ 15	0,032 absolute	lab
Cu	mg/kg DM	EN 15297	≤ 20	0,043 absolute	≤ 20	0,043 absolute	≤ 20	0,043 absolute	lab
Pb	mg/kg DM	EN 15297	≤ 20	0,033 absolute	≤ 20	0,033 absolute	≤ 20	0,033 absolute	lab
Hg	mg/kg DM	EN 15297	≤ 0,1	0,0046 absolute	≤ 0,1	0,0046 absolute	≤ 0,1	0,0046 absolute	lab
Zn	mg/kg DM	EN 15297	≤ 200	5,43 absolute	≤ 200	5,43 absolute	≤ 200	5,43 absolute	lab

[1] Performed by: -Lab: analyses will be performed by the independent laboratory; - Insp: test will be performed by the inspection company;
-Insp & lab: means a field test will be performed by the inspection company, the final value will be analyzed by the lab

[2] Water damage: visually wet material or moisty material either pellets, swollen pellets or degraded pellets.

[3] Burned/charred pellets: Pellets showing visual damage from fire or self combustion (completely or partly charred (dark brown or black coloring from outer edge all the way to the pellet core) or turned to ash).

[4] Type and quantity to be stated

[5] Bulk maximal temperature to be checked when the pellets leave the final point of loading for delivery to the end-user. i.e leaving the final storage point or the factory. This is the maximum temperature measured at any spot.