PRODUCT INFORMATION SHEET

C-NEWABLE EG22-RW

Bio-carbon powder

torrefied recycled wood

NCV
22 GJ/ton
Industrial Heat

GENERAL INFORMATION

Black colour
Odour free
Biologically inactive
Non-sticky

KEY DATA

Type	Bio-carbon powder from torrefied recycled wood
Form	Powder
Code	C-Newable EG22-RW (E = Energy, G = GigaJoule/ton, 22 = Energy value GJ per ton, RW = Recycled Wood) NCV = Net Calorific Value
Feedstock input	Wood waste, consisting of a mix of particleboard, multiplexing plates, osb-plate, painted wood, demolition wood, furniture wood, MDFs, hard and soft board plates, paper and cardboard. This blend of treated wood is called B-wood and falls to ISO 17225-1 in Class 1.3.
Biomass content	> 97%
Alternative to fossil	Brown coal (lignite solid fuel)
Saving CO_2-credits	CO_2-emission factor lignite powder (= 101 kg CO_2/GJ) x CO_2 price (= EU ETS Price in €/ton CO_2)

TORRCOAL

PRODUCT CHARACTERISTICS

Product characteristic	Dimension	Torrefaction temperature 285°C (+/-5°C)	Measuring method
Particle size	mm	Min. 99% < 2,0 mm	CEN / TS 15149
		Min. 60% < 0,250 mm	CEN / TS 15149
		Min. 30% < 0,125 mm	CEN / TS 15149
Bulk weight	kg/m³	250 kg/m³ - 350 kg/m³	CEN / TS 15103
Biomass content	%	> 97%	not defined
Net Cal. Value	MJ/kg (a.r.)	22 (+/- 0,5)	CEN / TS 14918
Moisture (wet base)	% (a.r.)	< 5%	CEN / TS 14774
Ash	% (d.b.)	< 8%	CEN / TS 14775
Volatiles	% (d.a.f.)	50% - 60%	CEN / TS 15148
Fixed carbon	% (d.a.f.)	35% - 45%	CEN / TS 15149
Total carbon	% (d.a.f.)	60% - 70%	CEN / TS 15104
Hydrogen	% (d.a.f.)	about 4,5%	CEN / TS 15104
Nitrogen	% (d.a.f.)	about 2,0%	CEN / TS 15104
Oxygen	% (d.a.f.)	20% - 30%	Calculated by difference
Sulfur	% (d.a.f.)	< 0,50%	CEN / TS 15289
Chlorine	% (d.a.f.)	< 0,15%	CEN / TS 15289
Relevant micro-elements	As	max. 20 mg/kg (d.b.)	CEN / TS 15297
	Cd	max. 10 mg/kg (d.b.)	CEN / TS 15297
	Cr	max. 400 mg/kg (d.b.)	CEN / TS 15297
	Cu	max. 400 mg/kg (d.b.)	CEN / TS 15297
	Hg	max. 0,6 mg/kg (d.b.)	CEN / TS 15297
	Ni	max. 200 mg/kg (d.b.)	CEN / TS 15297
	Pb	max. 1000 mg/kg (d.b.)	CEN / TS 15297
	Zn	max. 1400 mg/kg (d.b.)	CEN / TS 15297
	Mn	max. 600 mg/kg (d.b.)	CEN / TS 15297
Ash melting temperature	° Celcius	> 1400°C	CEN / TS 15370
Ash composition	SiO_2	25% - 45%	DIN 51730 A, C, D
	Al_2O_3	3% - 6%	DIN 51730 A, C, D
	Fe_2O_3	2% - 6%	DIN 51730 A, C, D
	CaO	15% - 30%	DIN 51730 A, C, D
	K_2O	3% - 6%	DIN 51730 A, C, D
	MgO	2% - 7%	DIN 51730 A, C, D
	Na_2O	2% - 6%	DIN 51730 A, C, D
	TiO_2	5% - 10%	DIN 51730 A, C, D

a.r. = as received *d.b. = on dry base* *d.a.f. = on dry and ash free base*

v1.1-02-2022-s

THE HEAT IS ON