

# WOOD PELLETS

### product information:

Wood pellets are a type of solid bio fuel made from compressed sawdust and shavings. They are a renewable and sustainable energy source that can be used for heating and electricity generation. Wood pellets areeasyto store and transport, and producelowemissions compared to traditional fossil fuels. They are a popular choice for residential and commercial heating, as well as for industrial processes.



MARINE LOGISTICS & STEVADORE

Ref. No.: CAR022215401 Alexandria on: October 30, 2022

#### **QUALITY CERTIFICATE**

#### ANALYSIS

Sr.	Test	Results	Standard Test Method	Sr.	Test	Result	Standard Test Method
1	Total Moisture	3.5	ISO 589	12	Hydrogen (As received)	6.23	
2	Ash(As received)	1.25	10.0	13	Hydrogen (in dry)	6.46	
3	Ash(in dry)	1.3	ISO 1171	14	Carbon (As received)	50.95	ASTM D-5373
4	Volatile matter(As received)	80.1	ISO	15	Carbon(in dry)	52.8	
5	Volatile matter(in dry)	83	562	16	Nitrogen (As received)	0.2	
6	Fixed carbon (As received)	15.15		17	Nitrogen(in dry)	0.21	
7	Fixed carbon (in dry)	15.7		18	Sulphur (As received)	0.02	
8	Gross Calorific value (As received)	4655 Kcal/Kg	ISO 1928	19	Sulphur(in dry)	0.02	- ISO 29541
9	Gross Calorific value (in dry)	4824 Kcal/Kg		20	Oxygen (As received)	39.45	
10	Nett calorific value ( CV)	4335 Kcal/Kg		21	Oxygen(in dry)	38.08	
11	Emissionfactor CO2(CV)	102.86 tCO2/TJ	Directive 2007//589/EC				

#### AFT (Oxidizing)

Sr.	Test	Results	Standard Test Method	
1	Initial Deformation temperature	1210 C	o canadra rest method	
2	AFT - ST( Softening temperature)	1220 C	ISO 540	
3	AFT - HT (Hemispherical Temperature)	1230 C		
4	AFT - FT ( Fluid temperature)	1240 C		

#### AFT (Reducing)

Sr.	Test	Results	Standard Test Method	
1	Initial Deformation temperature	1170 C	otandard rest method	
2	AFT - ST( Softening temperature)	1180 C	ISO 540	
3	AFT - HT (Hemispherical Temperature)	1190 C		
4	AFT - FT ( Fluid temperature)	1210 C		



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#### **MARINE LOGISTICS & STEVADORE**

Sr.	Test	Results	Standard Test Method	
1	Cd ( Cadmium)	<5 PPM	ASTM D6357	
2	Pb (Lead)	298 PPM	ASTM D6357	
3	. As ( Arsenic)	0.3 PPM	ASTM D4606	
4	Hg ( Mercury)	<0.05 PPM	ASTM D6722	
5	Ni ( Nickel)	79 PPM	ASTM D6357	
6	Cr ( Chromium)	294 PPM	ASTM D6357	
7	Cu ( Copper)	251 PPM	ASTM D6357	
8	Zn ( Zinc)	2877 PPM.	ASTM D6357	
9	Chlorine (As received)	490 PPM		
10	Chlorine (in dry)	508 PPM	ISO 589	
11	Fluorine(As received)	26 PPM	150 589	
12	Fluorine (in dry)	27 PPM		
13	Mechanical Durability	96%		
14	Bulk Density	620 Kg/m3		
15	<u>sieve analysis</u> : +3,15 -3,15	98.96 1.04		
16	<u>SIZE ANALYSIS</u> : Length Diameter	10-44 mm 4-6 mm		

#### Ash Composition

Sr	Test	Results %	Standard Test Method	
1	Na2O	3.82		
2	MgO	3.79		
3	Al2O3	3.94		
4	SiO2	33.42		
5	P2O5	1.3		
6	SO3	3.6		
7	K2O	4.77		
8	CaO	28.04	V	
9	TiO2	0.84	ASTM D 4326	
10	Fe2O3	3.71	_	
11	Mn304	0.92		
12	Phosphor in Ash	0.57		
13	Phosphor in dry coal	0.007		
14	phosphor in original coal			



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End of report

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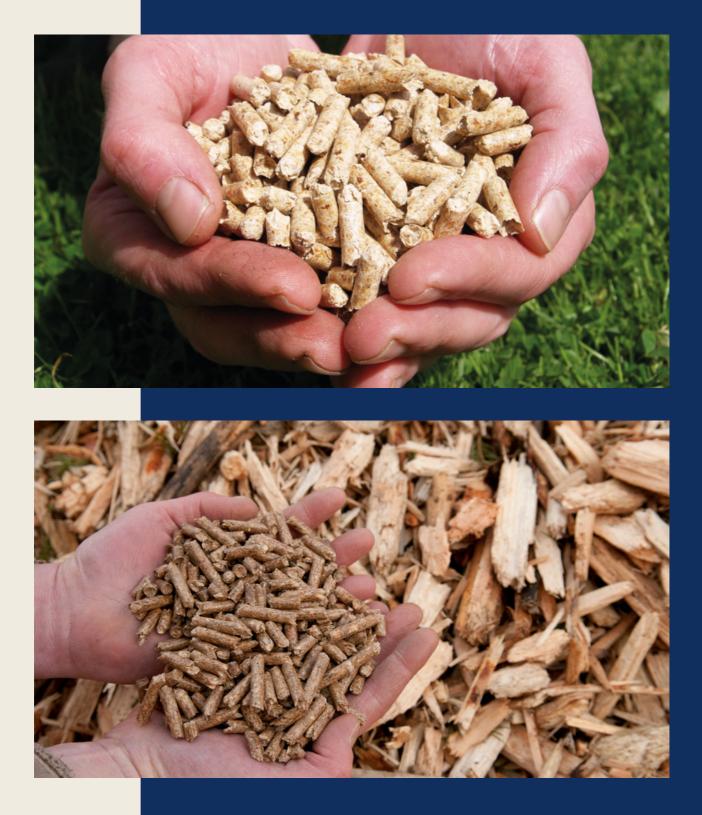
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# photo Gallery









## THANK YOU FOR YOUR INTEREST IN OUR PRODUCT

## **CONTACT US ON:**



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