Rev 1

Berde Kaway

COCONUT HUSK PELLETS

Coconut Husk Pellets are a highly consistent biomass fuel allowing for easy handling and storage, as well as efficient energy conversion.

Biomass Pellets are used for space heating in residential appliances, industrial boilers & furnaces, district heating plants and for electricity generation in power plants. Often the pellets are co-fired alongside other solid fuels such as coal.

By switching to Biomass Pellets from other fossil fuels can lead to a significant reduction in the emissions of CO_2 and SO_2 which are widely accepted as contributing to global warming and acid rain.

SPECIFICATIONS:

Origin: South Luzon, Philippines

Material Composition:
- 100% Coconut Husk
- Trace amount of natural coconut oil

Properties:
- Diameter: Available in nominal 9mm (+/- 1mm)
- Length: 10 – 60mm
- Gross Calorific value: ~ 4627 kcal/kg (clients laboratory average)
- Moisture Content: 6-12% (clients laboratory average 6.6%)
- Ash Content: 4-6% (clients laboratory average 5%)
- Sulphur Content: 0.16%
- Density 625 – 725 kg/m³

Note: The above values are typical but are subject to variation due to the nature of the natural raw ingredients

ENVIROMENTAL IMPACT:

- SO_2 emissions lead to acid rain and contribute to global warming. Philippines Coal typically has >1% Sulphur content, our Coconut Husk Pellets contain only 0.16% Sulphur - giving an almost total elimination of SO_2 emissions

- CO_2 is one of the main contributors to global warming. The CO_2 emitted by burning the pellets is the same as what was absorbed by the tree or crop during its growth, thus can be considered net neutral. We also must consider the production and supply chain emissions, these will vary from case to case, however, the impact of the supply chain with locally sourced Biomass Pellets is likely to be substantially lower than its fossil fuel alternative. For our Coconut Husk Pellets the emission from production come from the use of electricity, and equate to:

- 9mm Coconut Husk Pellets = 0.075 tCO_2/ MT of pellets

STORAGE & SHELF LIFE:

1. The pellets should be stored in a dry, rain-free and well-ventilated storage
2. If the pellets are loosely stored directly on a concrete floor, this floor should have a moisture barrier between the concrete and the soil below.
3. The shelf life of the pellets is very dependent on storage conditions which are in the hands of our client: this is dependent on many factors: stored in bulk or in sacks, humidity & water ingress (too much moisture and the pellets will fall apart – however can still be used).
4. Whilst we have demonstrated that our pellets cans be stored in ideal conditions for many years, we recommend that they are used within 3months of delivery to avoid any degradation and increase in moisture content due to high humidity absorption

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