



Berde Kaway

NAPIER GRASS PELLETS

Napier Grass 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 CO₂ and SO₂ which are widely accepted as contributing to global warming and acid rain.



SPECIFICATIONS:

Origin: South Luzon, Philippines

Material Composition:

- 100% Napier Grass
- Trace amount of natural coconut oil

Properties:

- Diameter: Available in nominal 9mm (+/- 1mm)
- Length: 10 – 60mm
- Gross Calorific value: ~ 4376 kcal/kg
- Moisture Content: 12-17%
- Ash Content: 5-7%
- Sulphur Content: 0.09%
- 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:

- SO₂ emissions lead to acid rain and contribute to global warming. Philippines Coal typically has >1% Sulphur content, our Napier Grass Pellets contain only 0.09% Sulphur – giving an almost total elimination of SO₂ emissions
- CO₂ is one of the main contributors to global warming. The CO₂ 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 Napier Grass Pellets the emission from production come from the use of electricity, and equate to:

- 9mm Napier Grass Pellets = 0.075 tCO₂/ 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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