



sappi | Pelletin



What is Pelletin?

Lignin is the natural binder found in trees; it gives wood its rigidity and stiffness. The complex molecule protects against disease. Pelletin is a technical lignin with the primary function as binder in the production of compound animal feeds. It is a natural wood-based product which Sappi produces from its renewable resource.

How does Pelletin work?

Pelletin offers multiple functionality to the benefit of the manufacturer, the animal and ultimately the consumer. Pelletin is a natural glue which binds all the feed ingredients and additives together to produce cost-effective compound feed pellets with enhanced durability and strength. The combined anti-caking and dispersing properties promote mixing uniformity and homogenous blending of all feed ingredients.

Pelletin acts as an effective lubricant where reduced friction in the pelleting process ensures increased production throughput, as well as reduced wear and tear on the manufacturing equipment.

Specialist studies show that farmers also benefit from improved animal performance. The prebiotic effect enhances the microbiome in the animal gut, therefore promoting overall animal health.

What are the benefits of using Pelletin?

The value proposition of feed binders offers benefits to the feed manufacturers, farmers and ultimately the consumers. Improved pellet quality and durability, reduced fines and ambient dust, improve the health and safety for humans. It has been shown that elevated dust levels correlate to increased microbial contamination.

The benefits for feed manufacturers include an increase in manufacturing productivity, where the binding properties at reduced production temperatures, as well as, energy savings related to the reduced friction in the pelleting equipment result in increased production rates and reduced costs. Furthermore, reduced friction leads to reduced maintenance costs and increased equipment availability.

Controlled studies** illustrated the potential for Pelletin to improve the body weight and overall productivity index, likely due to its prebiotic nature and the perceived positive effect it has on nutrient digestibility and the animal's gut health.



Pellet quality

- Better pellet durability and hardness
- Less fines and wastage
- Less segregation in silos
- Less customer complaints
- Higher moisture retention with low water activity
- Better pellet appearance



Manufacturing productivity and savings

- Increased production throughput - T/hr
- Reduced energy consumption (lubricating effect) kWh/T
- Less wear and maintenance on the die and rollers (lubricating effect)
- Less blockages and machine downtime
- Improved binding at lower conditioning temperatures

How should Pelletin be applied?

Pelletin is added to the dry feed ingredients during the mixing process at a dosage rate of between 0.1-2.5% (1-25g/kg) on a dry mass basis. Where the equipment provides for oil applicators, Pelletin can be applied in liquid form.

Pelletin packaging

Sappi Pelletin is a dry powder product available in 25kg and 600kg units.