

ProSid™ Pellet Pro

Perfect performance in every pellet

Superior moisture management with mill optimization

- Retain pelleted feed volume
- Preserve pellet quality and uniformity
- Improve mill throughput
- Reduce energy costs

Moisture management & mill optimization in one

A plethora of gains with ProSid™ Pellet Pro

ProSid™ Pellet Pro features our patented glycerol esters of propionic acid. These innovative molecules reduce surface tension which allows for greater penetration of moisture into the feed raw materials. Esterified propionic acid has hydrophilic properties. It draws water into the feed pellets as bound moisture and helps to reduce water activity which creates an environment that supports mold inhibition to improve shelf life. Using ProSid™ Pellet Pro offers benefits in feed moisture management as well as mill optimization.

Moisture management

In feed moisture management, the loss of moisture through evaporation in the pelleting process is addressed.



ProSid™ Pellet Pro advantages for moisture management

- Mitigate moisture losses which can be as high as 3%. That is 3% more feed to be sold from the same raw materials.
- Preserve high pellet quality and uniformity.
- Support pellet hardness and durability
- Helps to improve pellet quality which supports optimal animal performance

Mill optimization

Feed mills process enormous amounts of raw materials every year. Modest consistent improvements can add up to substantial gains over time. Optimizing feed mill operations can be done through efficient use of raw materials, but also by reducing labor, improving output or reducing energy consumption.



ProSid™ Pellet Pro advantages for mill optimization

- Improved throughput
- Reduced energy consumption.
- Increased feed volume



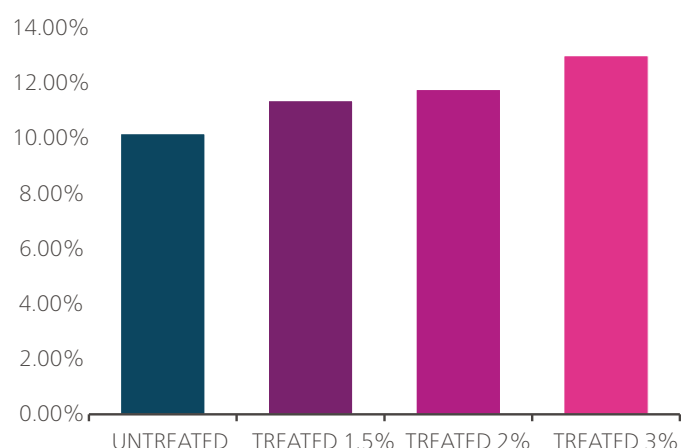
Moisture Management at its finest

ProSid™ Pellet Pro helps to replace lost moisture

The pelleting process involves much heat and friction. This results in losses of product of up to 3% moisture. Which in turn may reduce pellet quality. Reduced pellet uniformity, consistency and hardness may all be prevented by proper moisture management. Improved pellet quality has even shown to improve feed intake.

The numbers: moisture retention improvements

Moisture retention was compared between untreated product and different dosages of ProSid™ Pellet Pro. The ProSid™ Pellet Pro treated product retained up to 28% more moisture.



How it works: effects on water surface tension

ProSid™ Pellet Pro substantially lowers the water surface tension and promotes the distribution of water in feed. Esters of fatty acids are well known emulsifiers and surfactants as you can see in this illustration: it shows the perfect homogenous dispersion.

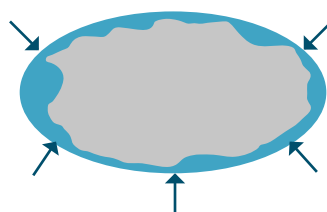
Water without
Prosid™ Pellet Pro



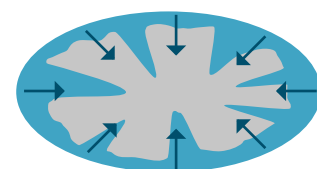
Water with
Prosid™ Pellet Pro



Feed particle without
Prosid™ Pellet Pro:
accumulation of moisture
in the outer layer



Feed particle with
Prosid™ Pellet Pro:
more equal spread of
moisture



Optimize Milling Operations

ProSid™ Pellet Pro's additional benefits for milling operations

There are benefits from using ProSid™ Pellet Pro that go beyond the impact that moisture management has on pellet quality and volume. After all the behavior of the feed changes due to the optimized moisture content and the lubricating effects of ProSid™ Pellet Pro.



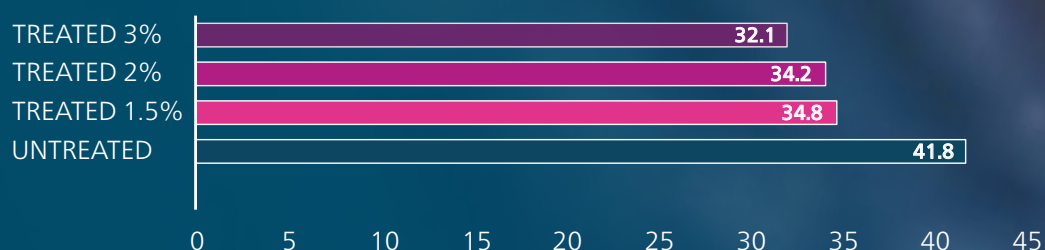
By optimizing moisture absorption and retention during feed production, ProSid™ Pellet Pro has demonstrated throughput improvements of up to 18%.

Thanks to its lubricating function and reduced drier requirements, ProSid™ Pellet Pro can reduce energy consumption up to 1.10 Euro per ton.



The numbers: reduction in energy consumption

Energy consumption of a feed mill was compared between untreated product and different dosages of ProSid™ Pellet Pro. The ProSid™ Pellet Pro treated product used up to 23% less Kw/Hour.



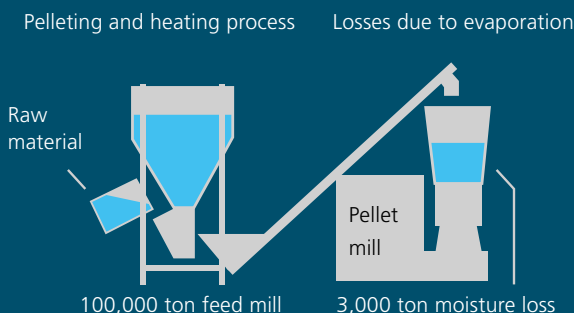
An example calculation

Standardize the moisture content of your pellets

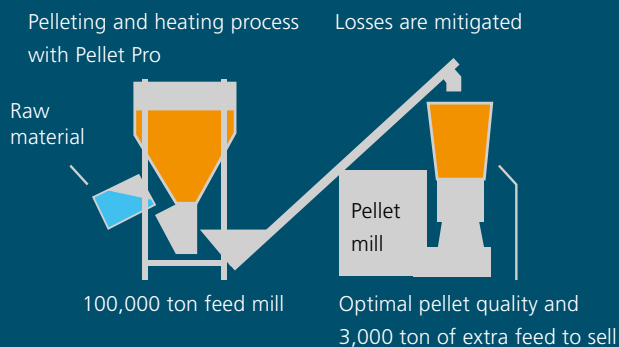
During the production process of compound feed, moisture loss can be a major issue. Moisture loss can be as high as 3% by weight. This has a negative effect on pellet quality and is a major expense.

An example: at a feed mill that produces 100,000 ton per year, a 3% reduction of moisture loss can save up to € 900.000,- per year (calculated with € 300 per ton of feed).

Standard process



Process with ProSid™ Pellet Pro

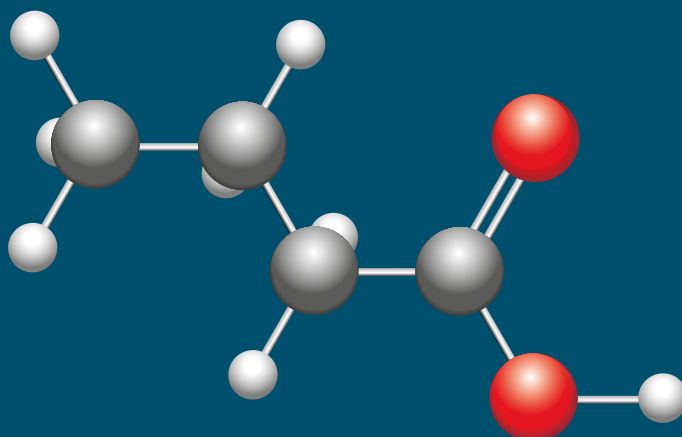


The power of esterification

A unique patented solution

ProSid™ Pellet Pro features our patented glycerol esters of propionic acid. This innovative molecule:

- reduces surface tension which allows for greater penetration of moisture into the feed materials.
- has hydrophilic properties that help to draw water into the feed pellets as bound moisture.
- helps to reduce water activity which creates an environment that supports mold inhibition to improve shelf life of the final feed.
- is less volatile than buffered organic acids, resulting in prolonged efficacy.
- provides a low-corrosivity organic acid solution without dangerous goods restrictions on transport or storage.



More information on:

www.perstorp.com/ProSid-Pellet-Pro

Get the gut wealth feeling

When you have gut health completely under control, that's the feeling of gut wealth – only from Perstorp. It's knowing you have the right approach to gut health and that you're achieving it in the right way – with expert support, proven gut health solutions and responsible sourcing. Find out more about gut wealth at www.perstorp.com/gutwealth

For more information on ProSid™ Pellet Pro, contact your sales manager or email animal.nutrition@perstorp.com