

ProSid™ Pellet Pro

More feed. Less resources. Better quality.

Manage moisture like a Pro

- More feed through moisture retention
- Less resources through mill optimization // energy reduction and throughput improvement
- Better quality through improved shelf life and pellet durability

Moisture Management at its finest

The cost of insufficient moisture management



Shrinkage

Feed mills can lose 0.5–2.5% moisture — 5–25 kg of finished feed for every ton produced.



Energy and steam

More energy and steam are needed to pellet the feed, and throughput is affected.



Feed quality

Lower gelatinisation reduces pellet quality.



ProSid™ Pellet Pro helps to replace lost moisture

ProSid™ Pellet Pro helps replace moisture lost in pellets by drawing in water and reducing water activity, creating conditions that inhibit mold growth. This will allow you to:



Improve Feed Yield

Controlled moisture management restores finished feed to its target specification, converting the same raw material into more saleable tons.



Improve Mill Efficiency

Optimum moisture means faster heat transfer and better gelatinization of raw materials. Gelatinized starch and moisture together lubricate the die, while even moisture distribution keeps the mash consistent from batch to batch. Friction and motor load fall — delivering lower kWh per ton and higher throughput.



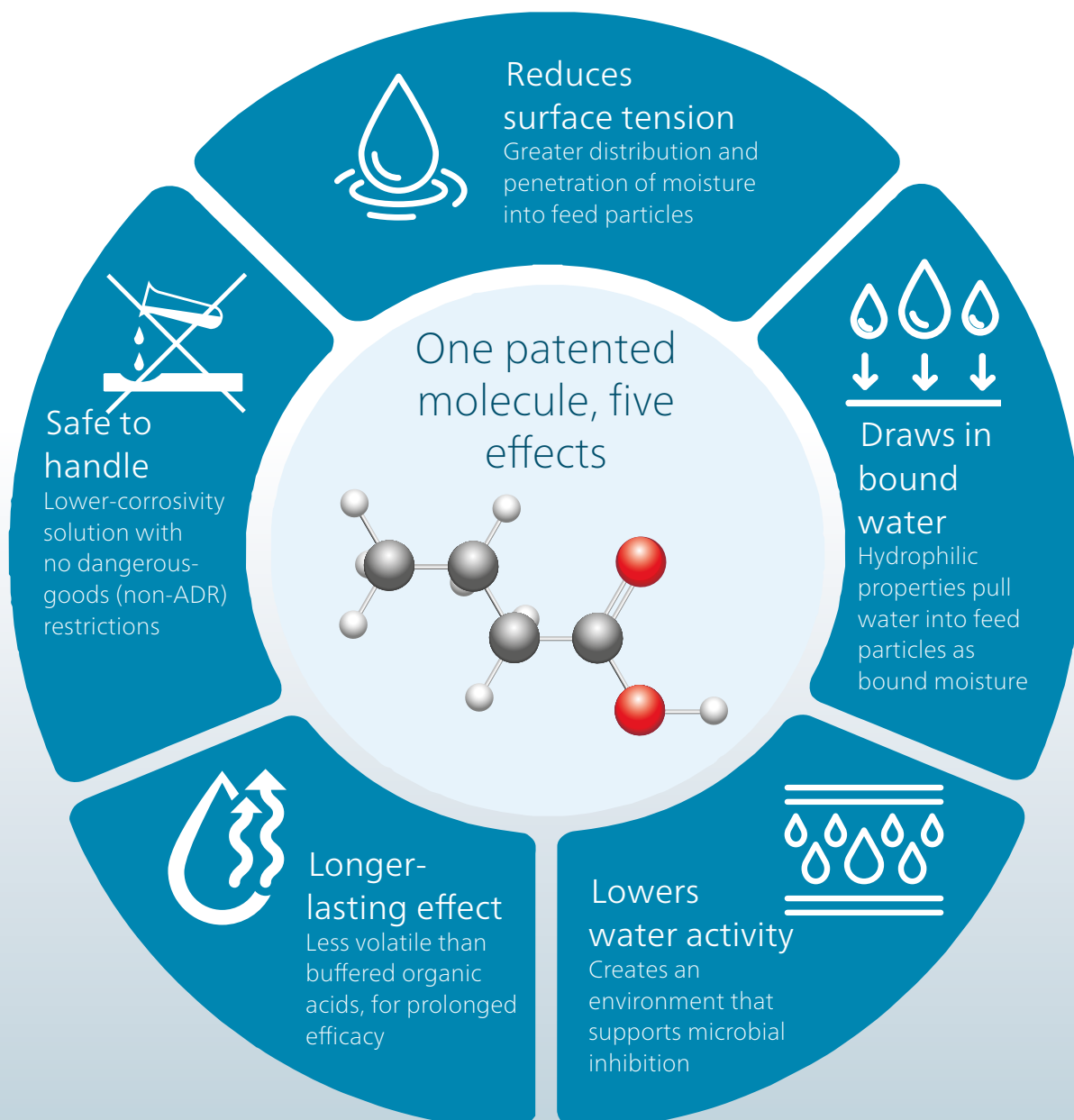
Improve Feed Quality

Higher gelatinization produces a better pellet. Starch that has gelatinized is the glue holds the pellet together through cooling, conveying, transport and feed-out. Next to this improved pellet durability, ProSid™ Pellet Pro also reduces water activity and supports a longer shelf life.

The power of esterification

A unique patented solution

ProSid™ Pellet Pro is built on Perstorp's proprietary technology binding glycerol esters to propionic acid: a step change in moisture management. It maximizes the benefits of added moisture while controlling the risks that come with it.



Proven in commercial practice

34 commercial trial runs · 12 countries · poultry, ruminant, swine and equine

82.3%

of added moisture recovered

Mean recovery versus no-moisture control, flat across 1%, 2% and 3% addition

+28.7%

more moisture than competitor

Extra retention at matched water addition versus ammonia propionate products

-7.7%

press energy

Mean reduction; with a peak of 30.2% less energy used during pelleting

+4.8

PDI points

Average durability improvements where Pellet Durability Index (PDI) was below 90; +3.0 points mean across all trials

+16.2%

throughput

Best observed capacity gain; 8-16% recorded across swine and poultry sites

Bound water, not free water

A mean +0.95% moisture increase came with a 0.048 reduction of water activity across seven trials. ProSid™ Pellet Pro treaded products had a higher finished moisture content without a proportional rise in free water



No saturation point in range

Recovery of ProSid™ Pellet Pro in treated pellets holds at 82.3%, 82.9% and 81.4% for products treated with 1%, 2% and 3% additions. Moisture increase scales linearly, while energy saving climb as the dosage rate increases.



Biggest gains where quality is weakest

Mills starting below 90 PDI gained +4.8 points in PDI. Those already at 90+ PDI gained an average of +1.0. Peak individual gain was +10.0 points.



The value of 1% moisture

Here is an example calculation of a compound feed mill producing 100,000 tons per year. Feed has been valued at €400 per ton:

	Standard process	Process with ProSid™ Pellet Pro	Value per year
	0,5%-2,5% moisture lost in storage and processing	1% moisture reintroduced: 8.2 kg/t retained as saleable feed, 820 tons more to sell	€328,000 €3.28 / ton
	Cost for output of 100,000 ton per year at € 15 per ton	10.3% increase in throughput: 10,300 ton extra production in the same time	€154,500 €1.54 / ton
	Press electricity at €4.00 per ton	7.7% lower press energy from reduced pellet press load	€30,800 €0.31 / ton
	€513,300 extra value per year for a 100,000 ton per year mill. Value from: □ moisture retained □ fixed cost saving by increasing throughput □ press energy saving.		€5.13 extra value per ton of feed All that peace of mind: Immeasurable

Calculated with the Perstorp ProSid™ Pellet Pro ROI model for compound feed. Assumptions: 100,000 per ton per year; feed value €400 per ton; 1% moisture addition with ProSid™ Pellet Pro, 82% retained as feed; electricity €4.00/t with 7.7% press energy saving; 10.3% production increase valued at €15 per ton in fixed cost savings. Gains are shown before product cost. Results depend on mill conditions; your Perstorp contact can run the model with your own figures.



Want to know if we can make a difference for your business?
Contact us via
animal.nutrition@perstorp.com and
request a **personalized calculation!**

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