

Covertan vs competition: Quality

To compare Covertan and competition, a natural open field aging trial has been performed. Both fleeces have been laid from May during two summer months, while sun rays are the most aggressive.

Covertan Performances

Fleeces have been tested before laying. Covertan's thick filaments (about 88% thicker than competitor) provide resistance to abrasion and to tearing, but also an important number of physical properties which are very useful for agriculture:

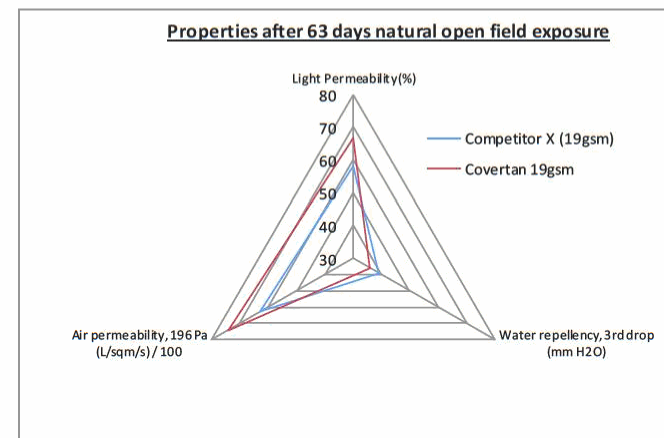
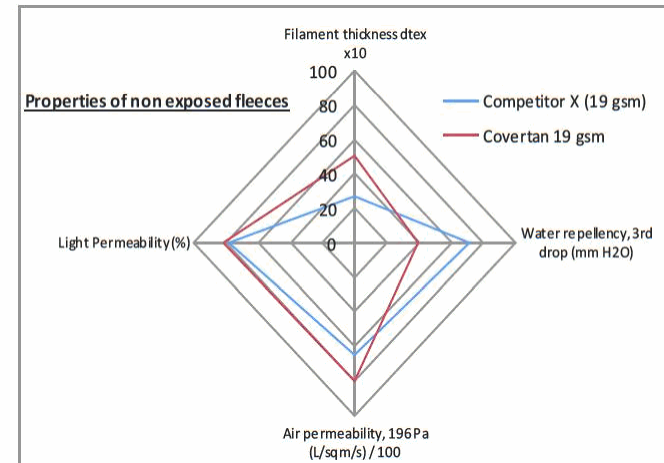
- Permeability:
 - Covertan's water repellency value is about 50% lower than competitor, which means fleece is more water permeable
 - This has to be linked with 20% higher air permeability

Rain or irrigation water can penetrate readily through the fleece in a uniform way to give efficient watering. The porosity of the fleece enables continuous renewal of the air.

Moreover, the greater the permeability of the fleece is, the less likely it will be caught up in windy conditions, especially for large widths.

- Light transmission:
 - The solar radiation necessary for the photosynthesis is transmitted by fleeces. As yield is linked to photosynthesis, the light transmission needs to be as high as possible. Covertan's light transmission is 4% higher than competitor's fleece.

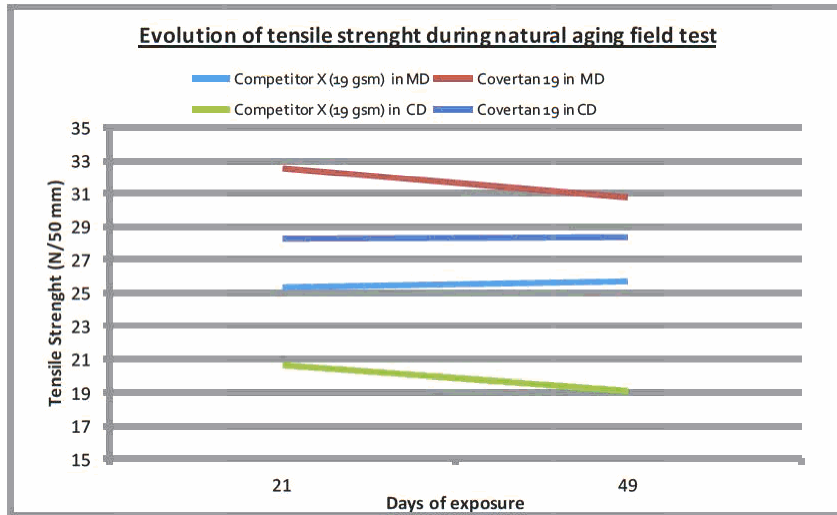
After 63 days exposure, these performances remain better for Covertan compare to competition.



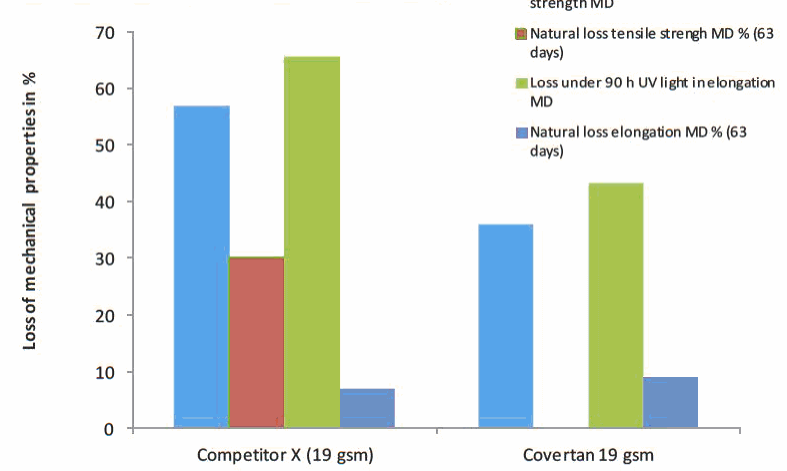
Covertan vs competition: durability

- UV resistance/ durability:

Exposure to sunlight, especially the Ultra Violet (UV) radiation has a negative impact on the life of polypropylene. It can cause premature degradation of the non-woven and mechanical properties such as elongation and tear resistance. To overcome this, Covertan is specially formulated with stabilizers that reduce this impact. Covertan thick filament allows a better resistance to UV radiation, which is highlighted by analysis made on both fleeces after several exposure period. Tensile strengths of Covertan in both direction (across the fleece and in the length) after 49 days exposure are still higher than that of competitor.



Comparison between artificial and natural aging



Results obtained with a natural field aging test (63 days of open field exposure) have been compared to accelerated aging under artificial UV light. Chart above proves that loss of mechanical properties are much higher for competitor fleece than for Covertan in both conditions.

Covertan thick fibers are warrantor of its Quality, not only in terms of agronomical properties (light transmission, air and water porosities), but also durability. Depending on light conditions, Covertan can be reused over several crop cycles. UV resistance is also increased with stabilizers that reduce their impact.

