



# SILOSTOP

THE ULTIMATE OXYGEN BARRIER FILM

SILOSTOP BALE WRAP FILM  
FACTSHEET

## SILOSTOP BALE WRAP FILM



SILOSTOP Bale Wrap Film is the world's first oxygen barrier bale wrap film.

It is a thin (0.98 mil) film which prevents the entry of oxygen into the bale.

It can be used in exactly the same way as conventional PE bale wrap, with the same level of stretch and the same basic handling and storage conditions.



### Benefits of SILOSTOP Bale Wrap Film

- Reduces dry matter losses by more than 40% per bale during storage.
- Less risk of diseases from accidental ingestion of moldy silage by animals.
- Yeast counts are reduced.
- Better palatability and increased animal intake.
- Less film per bale results in time saving and lower recycling costs.
- Almost 100 times more effective at stopping oxygen than conventional PE bale wrap brands of the same thickness.



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### Oxygen Barrier Performance

Film Type	Thickness (mil)	Thickness (mil) @ 70% Stretch	Oxygen Transmission Rate (cm <sup>3</sup> /m <sup>2</sup> /24hrs @ 21% O <sub>2</sub> )	Oxygen Transmission Rate @ 70% Stretch (cm <sup>3</sup> /m <sup>2</sup> /24hrs @ 21% O <sub>2</sub> )
<b>SILOSTOP Bale Wrap Film</b>	<b>0.98</b>	<b>0.91</b>	<b>20</b>	<b>286</b>
Conventional PE bale wrap: Brand 1	0.98	0.71	1978	11650
Conventional PE bale wrap: Brand 2	0.98	0.79	1871	9240

Source: Independent test - Innoform, Germany 2015

The oxygen transmission table shows that independent lab tests prove that SILOSTOP Bale Wrap Film is almost 100 times more of a barrier to oxygen than leading conventional bale wrap brands.

It also shows that SILOSTOP Bale Wrap Film is much more elastic during the stretching process as it maintains far more of its original thickness after bale wrapping, ensuring greater durability and reduced propensity to puncture / damage.



**SILOSTOP Bale Wrap Film is designed to be used in all bale wrapping systems, on both round and square bales.**



### Technical specification

Colour	Gold
Thickness	0.98 mil (25 micron)
Oxygen Transmission Rate: DIN 53380-3	20 cm <sup>3</sup> / m <sup>2</sup> / 24 hr @ 21% O <sub>2</sub>
Puncture resistance: ASTM F1306	Strength: 4 N Elongation: 14 mm Energy: 37 mJ
Tear strength: EN ISO 6383-1	MD: 168 N / mm TD: 196 N / mm
Tensile properties: EN ISO 527-3 Elongation at break	MD: 720% TD: 731%
Tensile strength at break	MD: 33 N / mm <sup>2</sup> TD: 32 N / mm <sup>2</sup>
Dart Drop (impact resistance): ASTM D 1709	189g (7.6g / micron)
UV stability	One year on bale
Size	750mm x 1500m (29" x 4921')

Please note: Tolerances (+/-10%) are incorporated into these values.



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### Return on investment per bale

PE bale wrap: layers used	SILOSTOP: layers required	Product cost saving \$	Labor cost saving (wrapping time) \$	Total wrapping cost saving \$	Average dry matter gained (%)	Average dry matter gained (value) \$	Total cost benefit per bale \$
		A	B	<b>C (A + B)</b>		D	<b>E (C + D)</b>
6	4 x SILOSTOP	(0.90)	0.71	<b>(0.19)</b>	3.5	1.26	<b>1.07</b>
6	2 x PE wrap 2 x SILOSTOP	0.08	0.71	<b>0.79</b>	2.0	0.72	<b>1.51</b>
8	4 x SILOSTOP	0.15	1.67	<b>1.82</b>	2.9	1.04	<b>2.86</b>
8	2 x PE wrap 2 x SILOSTOP	1.13	1.67	<b>2.80</b>	2.0	0.72	<b>3.52</b>
8	3 x PE wrap 3 x SILOSTOP	(0.41)	0.95	<b>0.54</b>	2.0	0.71	<b>1.26</b>

Labor cost savings are based on average US contractor costs. The savings are due to fewer layers, resulting in faster wrapping of each bale and so more bales wrapped per hour. This does not always apply to all machines being used on farms.

Please note: SILOSTOP adopts a continuous development programme which sometimes necessitates specification changes without notice. Please contact us for the latest version.  
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