# **GATING ANDREAD SOLUTION OF ANDREAD SOLUTION O**

- **50** μ thick, blue-transparent oxygen barrier film
- use without underlay film
- extremely puncture and tear resistant
- extrem oxygen-tight 0 0.5 cm<sup>3</sup>/m<sup>2</sup>/24 h
- easy handling due to up to 75 % less weight
- environmentally friendly and resource-saving, 100 % recyclable
- up to 75 % less plastic and waste
- available up to 76 m wide
- UV-stable for 18 months



Eco-friendly due to less plastic with more oxygen density



#### Why 50 μ? – Agriculture with responsibility!

Imagine the amount of plastic that is produced, transported, used and then recycled every year:

Up to 70 % less plastic with the OXY MAX 50!

## 90 kg standard silage film

150  $\mu$  top sheet + 40  $\mu$  cling film approx. 90 kg at 10 m x 50 m

### **25 kg** OXY MAX 50

 $50\,\mu$  single silage film approx. 25 kg at 10 m x 50 m

#### Meaning:

- ✓ up to 70 % less plastic granulate has to be produced and transported at great expense
- ✓ up to 70 % less silage film has to be processed and transported
- $\checkmark$  up to 70 % less used film has to be disposed of

#### That's what we call sustainable!

#### Made from top raw materials for

- tear resistance
- elasticity
- puncture resistance

# How do we protect our 50 µ?

Beaks and claws cause major damage to silo covers of all kinds every year. Silo protection grids help, but the narrow claws of birds hopping over the silo reach through the grid and damage

the film. This results in many small, often invisible holes under which mould and spoilage form. This is better with our OXY Protec<sup>®</sup>! (More information on the back)

#### Oxygen permeability (according to DLG standard)







# Protect nutrients and ensure feed hygiene

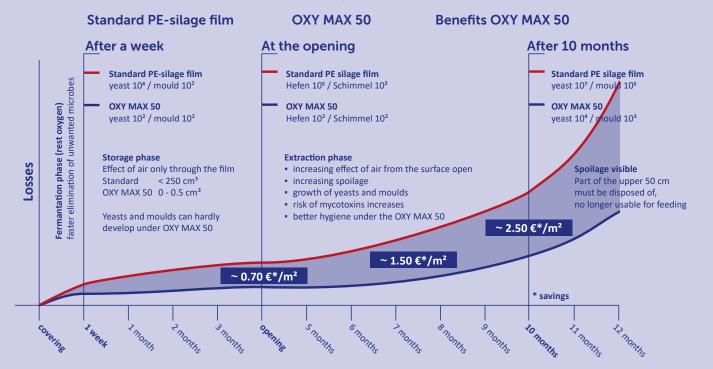
While moulds grow rather slowly, yeasts react to favourable conditions with a rapid rate of reproduction. The chart below clearly shows how the duration of exposure to oxygen increases the growth of the populations.

Many people believe that as long as the silage is stored under cover, the influence of oxygen plays a secondary role. It only becomes dangerous when the silage is opened. However, people forget that oxygen seeps into the silo through the polythene film the entire storage period. Yeasts and mold benefit from this and the number of colony-forming units (CFU) increases.

The more intensively the yeasts and moulds have developed under the film, the more nutrients they will consume when the silo is opened and air from the cut surface is added. Conclusion: The longer the storage period, the more air seeps through a 'normal' silage film. Under the gas-tight OXY MAX 50, on the other hand, yeasts and mold are suppressed and feed hygiene is improved. This is positive for profitability and also a plus for animal health!

An analysis of 31 studies with different films provided the following results on the general effect of barrier films on silage:

- under the barrier film, 41.5 % (= 81 kg/t) less DM was lost in the upper 50 cm due to air intake
- in the upper 50 cm under the barrier film, there was 72 % (77.4 kg/t) less spoiled/mouldy silage (total loss)
- the stability in the air increased from 3.1 to 5.6 days with the barrier film



#### **Scheme yield loss**

#### OXY MAX 50 is available in the following sizes

length x width														
m	6	7	8	9	10	12	14	16	18	20	22	24	26	28
50	35	35	35	35	35									
75						24	20	16	12	12	12	8	8	6
150			16	12	12									
225						6	6	6	3	2	2	2	2	2

special widths and lengths on request

italics = number per pallet

# <u>QXY MAX</u> 50

#### Covering as quickly as possible!



This ensures the energy and nutrient content and prevents later problems on the feed. Even after opening, harmful organisms become active again and accelerate the spoilage of the silage.

The faster we cover the silage, the less they can multiply beforehand.

# Lay loosely and allow for enough overlap!

Tightly applied films are more susceptible. They can no longer yield optimally when fermentation gases form and are more at risk of damage from being walked on. Loose laying ensures optimum adaptation to the uneven silage surface.

#### Suitable air barriers – avoid tyres and sand!



Rigid tyres do not adapt to the silo surface. They do not form a continuous oxygen barrier.

Particularly after opening, the oxygen in the roll marks and on the slopes can pass unhindered under the film

and activate yeasts and moulds.



Tyres also damage over time and the steel mesh perforates the film. Under certain circumstances, wires can even get into the feed and injure the cow.

#### Sandbag: No! Gravelbag: Yes!

The best solution is silo bags filled with gravel. These are easy to handle, can be used variably and can be used for several years consecutive.

When laid as cross barriers, the oxygen only gets as far as them. Even if there are unnoticed holes in the middle of the silo, the oxygen is prevented from spreading under the film.



#### Do not underestimate claw damage!

Silage protection nets are good, they protect against hooves or claws – with sharp claws the grid structure shifts, the claws do get in and damage the film.

An additional thick fleece can help here. Claws are held off.



#### **Optimum protection means in practice:**

- good covering (quickly, loosely laid and secured with barriers) is important
- reduction of small holes from birds, cats etc. by 68 % (when using silage fleece)
- less oxygen intake, less spoilage, minimal waste
- high-quality basic feed
- cost reduction due to lower requirement of concentrated feed

joachim behrens scheessel gmbh • Milchstraße 1 • D-27374 Visselhövede Tel.: +49 4262 - 2074 913 • int@jbs-agrar.com • jbs-agrar.com