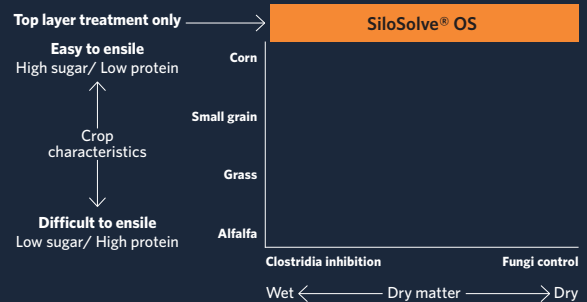


# SiloSolve<sup>®</sup> OS

## Powerful bacterial inoculant reduces top layer spoilage

SiloSolve<sup>®</sup> OS is a science-based, research proven bacterial inoculant, specifically designed for top layer protection:

- Significantly reduces growth of yeasts and molds in the top layer
- Improves dry matter recovery in the top layer



**CHR HANSEN**

*Improving food & health*

## Top layer spoilage

Top layer spoilage is a result of diffusion of oxygen through the cover along with insufficient compaction. The growth of undesirable spoilage microorganisms may also lead to production of mycotoxins. The result is extra work to remove the spoiled top layer and problems with stability at feed out.

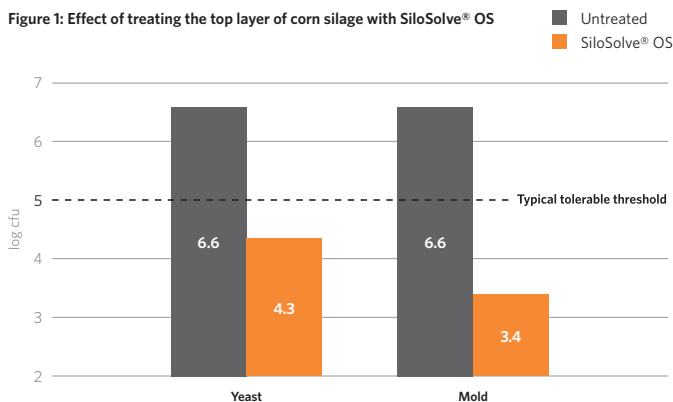
## SiloSolve® OS protects your top layer

SiloSolve® OS is a powerful silage inoculant that combines the effects of rigorously selected, proven lactic acid bacterial strains with a unique strain, *Lactococcus lactis* O224, known for its superior oxygen scavenging ability. In combination, the three bacteria shorten the time to an anaerobic state in silage. The novel combination of bacteria ensures rapid reduction in pH of the top layer, which enhances the effectiveness of sodium benzoate as a preservative. Together with sodium benzoate, the bacteria inhibit growth of yeast and mold and promote fermentation, making SiloSolve® OS ideal for top layer treatment.

## SiloSolve® OS inhibits growth of yeast and mold in the top layer on farm

Results from nine farms consistently showed reduced levels of mold and yeast in corn silage treated with SiloSolve® OS. The bacterial strains created the optimal condition for the sodium benzoate to keep spoilage microorganisms in check and the value of your silage well preserved.

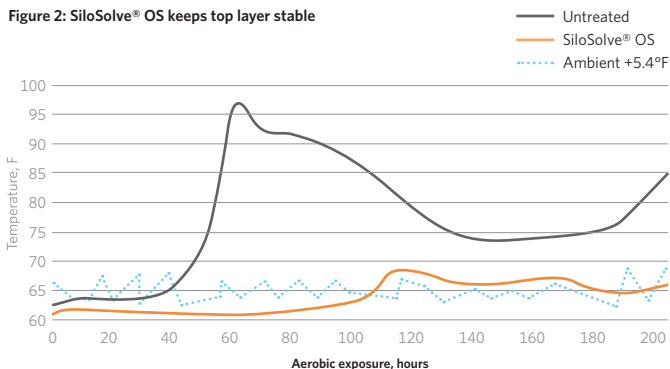
Figure 1: Effect of treating the top layer of corn silage with SiloSolve® OS



## SiloSolve® OS keeps top layer stable

SiloSolve® OS effectively improves aerobic stability by reducing yeast and mold growth in a variety of crops. The longer it takes silage to surpass 5.4°F above the ambient temperature, the more stable it is. Forages ensiled with SiloSolve® OS are more stable than untreated silage.

Figure 2: SiloSolve® OS keeps top layer stable



Grass ensiled at 26.5% dry matter.

### Package:

Each package has two parts: 50 g canister + 9 kg sodium benzoate and treats 3,750 square feet of top layer surface - or 25 tons of forage

### Form:

Powder

### Solubility:

Water soluble

### Shelf life:

24 months at room temperature (<77°F)

### Application (recommendation for corn silage):

One 50 g canister of silage inoculant and one 9 kg bag of sodium benzoate, uniformly mixed in at least 25 gallons of water, treats 3,750 square feet of top surface area - or 25 tons of silage. The mixed solution should be applied at a rate of one gallon of water per 150 square feet of top surface area - or

one ton of fresh forage. Follow mixing directions on product label for best results. When used as directed, 2 grams of SiloSolve® OS inoculates 1 ton of fresh forage at a rate of 150,000 cfu/g.

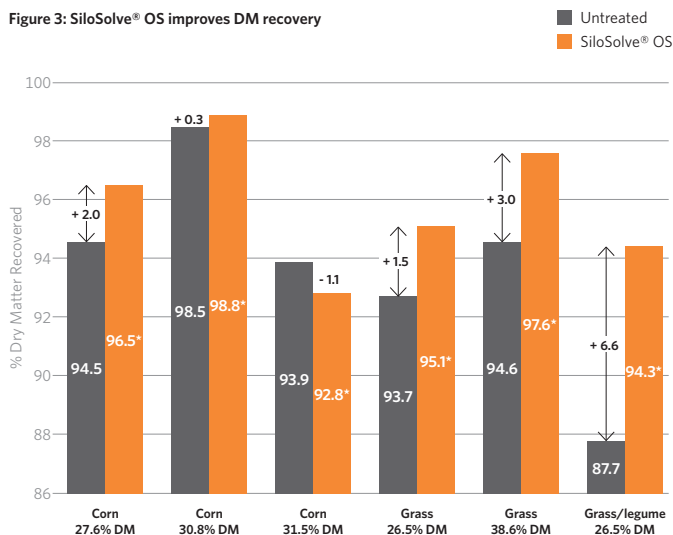
### Content:

- *Enterococcus faecium*
- *Lactobacillus plantarum* CH6072
- *Lactococcus lactis* O224
- Sodium benzoate

## SiloSolve® OS improves dry matter recovery

SiloSolve® OS features a trusted combination of three bacterial strains that accelerates fermentation and improves dry matter recovery up to 6.6% points in challenged difficult-to-ensile silages, while stabilizing the top layer. Not only does this result in more feed for cows, it reduces the amount of labor needed to remove the spoiled top layer.

Figure 3: SiloSolve® OS improves DM recovery



\*p<0.05 significantly different from untreated.

Specific trial data available upon request.

## What's inside SiloSolve® OS

SiloSolve® OS contains two fast-growing and competitive lactic acid bacteria, plus a unique strain of *Lactococcus lactis* O224. This combination improves fermentation processes and inhibits growth of yeast and mold, resulting in improved aerobic stability at feed out. Furthermore, there is a strong anti-fungal effect achieved through the addition of the preservative sodium benzoate.

SiloSolve® OS is ideally suited for all ensiled crops, especially those ensiled at higher than ideal dry matter.