

# ANTIBIOTIC FREE IN 28 DAYS CASE STUDY

## Antibiotic Free in 28 Days Case Study

### Introduction

Hydritreat™ SB 1523 is a GRAS for animal feed, proprietary, patent pending formulation containing peracetic acid. Hydritreat SB 1523 has no known bacterial resistance, it's effective against gram-positive and gram-negative bacteria and is a cost-effective replacement for standard antibiotic treatments. A dry grind ethanol plant was using 8 pounds of antibiotics in their fermentation systems. This treatment was expensive and not effectively removing bacteria. Hydrite replaced antibiotics with a process using Hydritreat SB 1523 to reduce bacteria loading.

### Value Created

By using Hydritreat SB 1523, Hydrite aimed to control bacterial and eliminate the use of antibiotics in the fermentation process. The plan below was designed to replace the use of antibiotics and effectively limit bacteria using Hydritreat SB 1523, which is the most cost-efficient solution for bacteria control in a fermentation system.

**Week 1 Baseline:**

**8 pounds of antibiotics**



**Week 2:**

**8 pounds of antibiotics and Hydritreat SB 1523**



**Week 3:**

**2 pounds of antibiotics and Hydritreat SB 1523**



**Week 4:**

**0 pounds of antibiotics, only Hydritreat SB 1523**



## Solution & Results

In order to achieve this goal, Hydrite followed the following plan:

- **Week 1 Baseline:** 8 pounds of antibiotics
- **Week 2:** 8 pounds of antibiotics and SB 1523
- **Week 3:** 2 pounds of antibiotics and SB 1523
- **Week 4:** 0 antibiotics, SB 1523 only



	8 lbs AB	8 lbs AB + SB1523	2 lbs AB + SB1523	SB1523
— Lactic	0.45	0.38	0.38	0.34
— Acetic	0.11	0.04	0.04	0.03

## Conclusion

In just 28 days, Hydrite's proprietary Hydritreat SB 1523 eliminated antibiotics from the fermentation process and reduced bacterial loading to levels well below baseline. By swapping Hydritreat SB 1523 for the previously used antibiotics, a greater than 50% reduction in treatment costs was realized.



Providing Creative Solutions

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