



What is Silage SAVOR® and Other Questions about Silage Management

Q: What is Silage SAVOR® Dry and Silage SAVOR® Plus Liquid Silage Preservative?

A: Both forms of Silage SAVOR, liquid and dry, are blended-acid preservatives especially formulated to enhance the fermentation of ensiled crops. Silage SAVOR also contains buffering compounds to protect metal surfaces from corrosion as well as provide safety to workers who might come into contact with the product. Silage SAVOR contains an antioxidant to prevent rancidity of fat in the silage and surfactants to enhance the penetration of the acids.

Q: If these products contain acids, will they harm my sealed silo or silage bunkers?

A: Silage SAVOR will not harm sealed silos or silage bunkers. The amount of acids included in Silage SAVOR in comparison to the amount of acid produced by the forage is insignificant. The advantage of Silage SAVOR is to provide quick acids into the forage material, thereby promoting correct fermentation of the product. Silage SAVOR will benefit silage in any storage facility.

Q: Why should I treat corn silage with Silage SAVOR?

A: Corn silage, like any other silage, benefits from treatment to promote faster fermentation. By fermenting faster, more of the nutrients are retained within the silage and less heat accumulates. This means a higher quality product available for your animals.

Q: Does Silage SAVOR immediately drop the pH of silage?

A: No. The purpose of Silage SAVOR is to inhibit the growth of yeast and mold species long enough for the beneficial bacteria, present in all good silage, to start producing lactic acid. Once the lactic acid producing bacteria (LAB) begin to grow and multiply, they generate enough acid to drop the silage pH.

Q: Does Silage SAVOR kill all the bacteria?

A: No. Silage SAVOR inhibits the growth of yeast and mold species. The beneficial bacteria are not impacted by Silage SAVOR. As previously stated, once the LAB start to multiply the acid they produce results in silage preservation.

Q: So Silage SAVOR is really a mold inhibitor?

A: Yes. The ingredients contained in Silage SAVOR Dry and Silage SAVOR Plus Liquid are effective at inhibiting mold in feed and feed ingredients. The label directions, when used as a mold inhibitor, are as follows:

Feed Application	LBS/Ton
Animal Feed and Total Mixed Rations (TMR's)	1 – 2
Processed Feed Ingredients	1 – 4
Bulk Life Extension	2



Q: On high moisture corn (HMC), do I use Silage SAVOR Dry or Liquid?

A: Silage SAVOR Plus Liquid is nearly always the best choice. Liquid products offer the advantage of better distribution. Whether the ensiled crop is corn silage, small grain silage, ground shelled corn, HMC or ground milo, proper application of Silage SAVOR Plus Liquid offers the best efficacy.

Q: May I use Silage SAVOR on baled hay?

A: No. Baled hay is regulated by the U.S. Environmental Protection Agency (EPA). FRESH CUT® Plus Liquid Hay Preservative is registered with the EPA for application to baled hay.

Q: Which should I use, Silage SAVOR or Kem LAC® HD Silage Inoculant?

A: Silage SAVOR and Kem LAC HD are two very different products. Silage SAVOR is utilized as the direct acidification approach; acids are applied into the forage to inhibit particular bacteria which are detrimental to silage fermentation. Kem LAC, on the other hand, is an inoculant product. It provides *Lactobacillus plantarum*, *Lactobacillus acidophilus* and *Lactobacillus bulgaricus* into the silage, thereby ensuring proper fermentation. Both products are backed by efficacy research at the Kemin research laboratories as well as independent investigations. Deciding which product to use is a difficult question. Acid offers the advantage of requiring no mixing and no special storage before the product is used. Its immediate acid addition onto the silage guarantees correct fermentation. Kem LAC provides the opportunity of a product that is a non-acid addition into silage. Being water based, there is no chance of any chemical reaction while being applied. In addition, it is the natural approach to silage fermentation.

Attribute	Silage SAVOR	Kem LAC HD
Source of live bacteria	No	Yes
Begins to work immediately	Yes – Acids work upon application.	pH drop takes up to 3 days as bacteria
		multiply.
Low application rate	No – One pound per ton of silage.	Yes – One gram per ton of silage.
Requires a special applicator	Yes – Both liquid and dry products	Yes - Many forage harvesters have
	require application equipment.	inoculant applicators as an option.
Works best on forage at 60-70%	No - While Silage SAVOR will work	Yes – This is the ideal moisture range
moisture (30-40% dry matter)	well, it is not the best choice.	for Kem LAC HD to work.
Works best on dry forage – below 60%	Yes – Low moisture silage ferments	No – Kem LAC HD (and all inoculant
moisture (over 40% dry matter)	very slowly. Silage SAVOR provides	products) require moisture to grow.
	protection against mold growth until	
	fermentation starts.	
Works best on wet forage - above	Yes – High moisture silage often	No – Kem LAC HD does not produce
70% moisture (under 30% dry matter)	favors clostridia fermentation. The	an acid which is effective against
	acids in Silage SAVOR provides	clostridia.
	protection against clostridia growth.	
Frost damaged corn protection	Yes – When corn is subjected to frost,	No - Frost damaged corn requires
	cells in the plant burst creating a	more acid than is produced by
	favorable environment for mold	inoculants.
	growth. Silage SAVOR prevents mold	
	growth in frost damaged corn.	



Q: Should I use Kem LAC HD and Silage SAVOR in the same silage?

A: No. That would waste money. Kem LAC HD contains three lactic acid producing bacteria (LAB) which add to the acid produced by the natural LAB. Use Kem LAC HD when silage moisture is in the ideal range of 60-70% moisture. Silage SAVOR works in silage at the ideal moisture but really excels when the silage is not perfect. Low moisture, high moisture and frost damaged forages are all times to use Silage SAVOR.

Q: Does Kemin sell applicators for Silage SAVOR?

A: The Production Application Division (PAD) team at Kemin manufactured forage application equipment for many years. However, because forage choppers change so rapidly and application equipment designs continually evolve, Kemin now recommends a firm which specializes in making high quality forage application products. Dohrmann Enterprises in Saint Cloud, Minnesota, produces high quality equipment, designed for a wide variety of forage processors and does all this at affordable prices.

Q: I put up haylage which is fairly dry, will Silage SAVOR work as well there?

A: Yes. Silage SAVOR is specifically designed for difficult fermentation situations. Haylage is an excellent example of this type of material. In addition, Silage SAVOR will greatly improve bunk life of haylage put up slightly dry.

Q: Should Silage SAVOR be used through all of the bunker?

A: Yes. Since Silage SAVOR is designed to enhance fermentation, it should be used on the entire bunker in order to guarantee the greatest possible benefits.

Q: Does Silage SAVOR enhance aerobic stability of my total mixed ration (TMR)?

A: One of the things that Silage SAVOR does is prevent secondary fermentation that occurs when silage is unloaded from silos. By preventing the secondary fermentation, silage will remain cooler and have longer bunk life with the use of Silage SAVOR.

Q: What difference would it make if I used FRESH CUT Plus on my silage instead of Silage SAVOR Plus?

A: FRESH CUT Plus contains ingredients specifically aimed at controlling the two problems of moist hay storage: plant respiration and microbial growth. Silage SAVOR, on the other hand, is balanced to encourage lactic acid fermentation and prevent clostridial growth. The use of FRESH CUT on silage will provide some benefits but nothing like Silage SAVOR.

Q: Why do you have to put 6-10 pounds/ton on 20% moisture "dry hay" when using FRESH CUT Plus but you only have to use 1 pound/ton of Silage SAVOR Plus on 60-70% moisture corn silage?

A: The different rates of application of the two blended acid products is because of the forage being treated. Silage SAVOR Plus is applied to silage to inhibit mold and yeast growth until the naturally-occurring bacteria begin multiplying. These bacteria produce lactic acid, which drops the pH of the silage – essentially pickling the silage – and prevents mold and yeast



growth after Silage SAVOR protection ends. FRESH CUT Plus does not have the benefit of an "army of bacteria" to produce acid. The volume of FRESH CUT Plus applied must inhibit mold and yeast growth until the hay dries down to 12-13% moisture and mold and yeast growth is no longer a major concern.

Q: We often see spoilage along the top and the sides of the silage pile. Does Silage SAVOR Plus Liquid work well to prevent mold growth when used as a top cover?

A: Silage SAVOR Plus Liquid is a great mold inhibitor when applied over the top of silage. When applying to a bunker or an upright silo, apply 2 pounds (28 fluid ounces) to each 10 square feet (approximately 3' x 3') of silage surface. After application of Silage SAVOR, cover the bunker silo with an impervious oxygen barrier. When applying Silage SAVOR Plus Liquid in an upright silo, use "good silo entry practices" when entering the silo. Always pack loose forage. To prevent spoilage near the edge of the silo, double the application rate along the edge where moisture accumulates.