



Hay Silage and Forage Additives Inoculants and Preservatives

Nutra-Fix Hay Forage Silage Preservative

Advantages: Nutra-Fix Liquid Concentrate is a stable lactobacillus acidophilus, lactis, liquid fermentation extract for use on hay, silage and forage, based on organic food grade ingredients of natural sources.

Requires no refrigeration or special handling

Concentrated liquid solution for easy mixing with warm water

Safe and Easy to Use when compared to bacterial and corrosive organic acid formulations.

Nutra-Fix Liquid Concentrate Works with high humidity corn hay silage saving you money in drying costs and transportation.

Nutra-Fix Liquid Concentrate is very appealing to animals and may also be used as a feed flavoring agent for tasteless poor quality ensilage, hay, forage, silage grains and feeds.

Nutra-Fix Liquid Concentrate is one of the most economical and most effective methods to preserve your hay and silage.

Two Harvesting Practices Significantly Improve Protein Content of Baled Hay

Two hay harvesting practices that will significantly improve the nutritional quality and economic value of baled hay are:

Cutting at the Proper Stage of Maturity

Baling higher moisture hay, a practice made possible by the application of Nutra-Fix Liquid hay treatment to prevent spoilage.

This combination of cutting alfalfa at the proper stage of maturity (pre-bud to bud) and baling at 18% to 23% moisture offers an economical, efficient hay management program for producing high protein, more digestible hay.

For the dairy and livestock producer, the increased value of hay that is high in protein and digestible nutrients represents considerable savings in the cost of supplemental feeds.

Cutting at Proper Stage of Maturity

The nutrient composition of the alfalfa plant changes as its stage of maturity increases. Alfalfa contains its maximum content of crude protein and digestible dry matter at the pre-bud stage of growth. Then, as the plant matures, valuable nutrients decrease and crude fiber content increases, until late bloom alfalfa which produces forage with lowest feeding value.

Baling Higher Moisture Hay



Baling hay at higher moisture (18% - 24%) and applying Nutra-Fix Liquid hay preservative to prevent heat and mold damage will improve the protein quality of baled hay.

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When hay is baled at lower moisture, significant leaf loss occurs as a result of mechanical shattering. With approximately 70% of the alfalfa plant's protein contained in the leaf, excessive leaf loss at baling will reduce nutrient quality of baled hay. With lower feed value, the baled hay will be of considerably less economic value.

The greater value of higher moisture baled hay was proven by university research and our own field work which demonstrated that baling alfalfa at higher moisture (18% - 24%) will minimize leaf loss during harvesting to maximize nutrient content.

New Mexico State University research demonstrated that approximately 30% of the leaf material was lost when hay was cured down and baled at 15% moisture. Another New Mexico State study found that the most significant protein losses occurred when a alfalfa hay dried down from 23% - 13% moisture. This work showed that maximum protein can be harvested when hay is baled at about 23% moisture.

Field Trials Demonstrate Benefits of Higher Moisture Baling with Nutra-Fix Liquid

Field trials, conducted during the 1994-5 hay growing season, also demonstrated that higher moisture baling with Nutra-Fix Liquid produces higher quality forage with superior nutrient content.

One-ton square bales:

Tests on alfalfa hay baled in one-ton square bales showed that Nutra-Fix Liquid treated hay baled at 20% moisture contained 12% more crude protein than untreated bales harvested at 14% moisture. Data also showed that the Nutra-Fix Liquid treated one-ton bales contained 11% more digestible protein. When the bales were opened and evaluated for preservation quality. ALL of the high moisture Nutra-Fix Liquid treated bales were classified as high quality bales free from any evidence of heat damage (browning) and/or mold.

Large Round Bales:

Field research also demonstrated that Nutra-Fix Liquid effectively preserved high moisture (24.0%) 1200-pound round alfalfa bales.

According to F.R. Courtin, Agr. Eng. from Agri Bios Enrg., All of the Nutra-Fix Liquid treated bales were free of any evidence of quality deterioration, such as browning, moldiness or foul odors. The untreated high moisture (21.3%) round bales showed considerable spoilage, particularly in the inner portion of the bales, and more than 50% of the untreated bales showed discoloration (browning), extensive foul odors and mold formation.

General Use Rates

Per/Ton/of Hay 60 ml
Per/Ton/of Humid Corn (20 to 30% Moisture)..... 30 ml
Per/Ton/of Whole Corn (20 to 26% Moisture)..... 30 ml
Per/Ton/of Silage (General)..... 25 to 35 ml

Premix the required amount with warm water and agitate.
Keep container closed at room temperature before and after use.
Mix concentrate well before use.
Stability: Up to 2 years under normal conditions.
Contact your local distributor for application rates with automatic injection spray systems.

Typical Analysis

Lactic Acid.....16.0% Min.
Lactose.....20.0% Min.
Saponins Food Grade.....1.0% Max.
Protein and Fat6.0% Max.
Moisture Max.....54.0% Max.
pH..... 3.6
Type Tan pourable liquid
Odor Pleasant appealing to animals
Status Non Hazardous

Contact your local distributor for availability in your area

Packaging: 10, 20 and 210 liter plastic re-sealable pails and drums

Storage: Store in a cool dry area **Stability:** Up to 2 years from date of manufacture