

AG LAND

ASPERGILLUS ORYZAE - Helps treat intestinal disorders, helps breakdown certain fibers and grains. Tends to lower the risk of cardiovascular problems.

ASPERGILLUS NIGER - It is derived from a soil saprode with a wide array of hydrolytes and oxidative enzymes involved in the breakdown of plant lignocellulose, degrading fiber, and has molecular mechanisms critical to fermentation process.

BACILLUS SUBTILLUS - Works as kind of a fungicidal while not being a true fungicidal, it colonizes the "root" system of the bacteria leaving no way for the fungal organisms to grow. It is also beneficial in de-sizing fiber and starches making them more readily available for digestion.

The combination of these digestive enzymes activity has shown to increase fiber digestion by as much as 50%.
(more cows per acre ??)

ACTIVE DRY YEAST - A form of yeast that is dehydrated granules that are alive but dormant by the lack of moisture. It speeds up digestion allowing more feed to be digested in a shorter time. (more digestion-more consumption)



Determination of Relative Bioavailability of Copper from Copper Amino Acid Complex vs. Copper Sulfate in Growing Beef Steers

In the below table, the RBV for copper from Copper Amino Acid Complex was determined relative to Cu from copper sulfate. Using the slope ratio technique, the liver copper RBV for Copper Amino Acid Complex was calculated to be 115.5% compared with copper from copper sulfate. Although this RBV was not statistically significant, steers in this trial started with an internal copper concentration more than 100 ppm (DM basis) higher than the Hansen et al., 2018 study. In addition, the Hansen (2018) study tested copper sources for 148 days with a greater copper antagonism based on 6 ppm Mo compared to nearly 3 ppm Mo in this 90-day study. Lastly, control steers with the current antagonism regimen did not reach clinical Cu deficiency of < 33 ppm Cu (DM basis) as reported by Kincaid in 1999.

Estimated relative bioavailability of copper glycinate compared to copper sulfate for 90 days on growing beef steers liver copper concentrations, based on multiple linear regression of liver copper on total supplemental copper intake¹.

Cu intake ^{2,3}	Cu Source	Slope ± SE	P-value ⁴	Relative Bioavailability, %
Liver Cu	Sulfate	13.92 ± 2.021	.27	100
	Glycinate	16.08 ± 2.056		115.5

¹ Based on regression of Cu indices, liver Cu in mg/kg DM, on total supplemental Cu intake (g) of steers over the 90-day period.

² Regression based on final measurements following feeding a diet containing 0.3% S from calcium sulfate and 2 mg Mo/kg DM from sodium molybdate for 90 days.

³ Initial values were used as a covariate in analysis for final liver concentrations.

⁴ P-value for slope between Cu sources.

POLYSACCHARIDE COMPLEXED TRACE MINERALS

POLYSACCHARIDE COMPLEXED TRACE MINERALS are made through a patented process whereby sulfate trace minerals are imbedded in the polysaccharide matrix of kelp. These organic trace minerals are labeled as **POLYSACCHARIDE COMPLEXES** of Zinc, Manganese, Iron, Copper and Cobalt.

Poly-complexed trace minerals do not harm vitamins. Also, they are not tied up and made unavailable by antagonists in the feed such as fiber and phytic acid. Almost 100% of the poly-complexed traces are absorbed into the bloodstream where they are utilized for growth, production and reproduction. In contrast, up to 100% of other trace minerals are tied up in the feed, rumen, and stomach and are unavailable to livestock. The following are benefits of **POLYSACCHARIDE COMPLEXED TRACE MINERALS** for BEEF:

- **Won't destroy vitamins in premix and feeds**
- **Better reproduction and conception.** Tests show up to **20 days shorter calving interval** and $\frac{1}{2}$ less services per conception.
- **Not tied up in feed** with antagonists such as fiber in roughage and phytic acid in soybean meal. More mineral available.
- **70% Rumen Bypass.** Minerals get into bloodstream and tissues.
- **Acid tolerant in stomach.** Not made un-digestible by stomach acids like oxides, carbonates, sulfates and chelated minerals.
- **Totally released in small intestine by pancreatin enzymes.**
- **Higher blood levels than other traces (2X sulfates, 4X oxides)**

EFFECT OF SUPPLEMENTAL PHOSPHOROUS ON CALF CROP AND WEANING WEIGHT

	Control No Phosphorous Supplement	Phosphorous Supplement
Average Cow Weights at Weaning, Lbs.	802	1020
Average Calf Weaning Weight, Lbs.	489	538
% Calf Crop Weaned	64	90
Average Interval Between Calving, Days	459	366

Texas A&M Univ.
Average of Four Calf Crops

COW-CALF MANAGEMENT

Major Goal:

Wean a calf from each cow, every year with a high pounds of calf weaner per cow exposed ratio.

Breeding Heard

- Provide the correct Beefmaker Premix for the season of the year and feed in a clean, dry mineral feeder.
- Select heifers or cows that will breed easily and wean heavy, high-quality calves annually. Select a bull with a production record and that has structurally sound legs and feet.
- Individually identify the herd.
- Choose calving a season to match farm labor availability, ease of calving for pregnant females and the weaned calf market.
- Check herd bulls' fertility and physical soundness
- Limit breeding season to 60 days for cows and 75 days for yearling heifers to calves at 2 years.
- Start breeding heifers 3 weeks prior to cows.
- Bull Power- yearling bull should breed up to 15 cows. Mature bull should breed up to 30 cows.
- Pregnancy check all cows 45 days past breeding or at weaning – cull open ones.
- Observe cows nearing calving and watch for calving difficulties.
- Calve in a clean, dry environment with wind protection.
- Provide veterinary assistance when required.
- At weaning, do weighing, identification, parasite control and vaccinations.
- Follow a recommended external and internal parasite control program.
- Follow a recommended vaccination program.

CALVES

- Drop calves in a clean, well-ventilated environment.
- Remove mucus from calf's nose and mouth and make sure calf is nursing.
- Disinfect naval cord with iodine.
- Identify calves with tags or ear tattoo weights.
- Dehorn and castrate males before 2 months of age to be sold as feeders.
- Follow the recommendations of your veterinarian or vaccinations, deworming, parasite control, implanting and other health needs.
- Creep feed calves if: feeder price-feed cost relationship is positive; forage supply is short for cow and calf; cow not maintaining adequate condition and milk production; selling purebred stock.

Beef Creep Rations

Cracked/Shelled corn	1235	1535
Course ground/Rolled oats	400	- - -
Oats Groats	- - -	100
Soybean Meal	300	300
White Salt	10	10
Ag Lac	5	5
Ag Land Calf Creep	50	50

2000

2000

- Provide creep ration to month old calf at a level of 1#/100# body weight to 4-5#/day maximum at weaning.
- Wean calves at 6-8 months (499-500 lbs.)

General Information

- Gestation Period – 283 days
- Duration of heat period is 3-48 hours
- Interval between heat periods – 3 weeks
- Beef cow herds can utilize large quantities of forage.
- A beef herd will be more profitable if more than 90% of the cows in the herd produce weaned calves.
- During periods of lush pasture growth beef cows may develop “grassy tetany” of hypomagnesemia

AG LAND

CALF CREEP/DECOX

MEDICATED

MINERAL FOR CALVES AND GROWING CATTLE ON PASTURE

For the prevention of coccidiosis in ruminating and nonruminating calves and cattle caused by *Elmeria bovis* and *Eimeria zuernii*. Feed at least 28 days during periods of coccidiosis exposure or when experiences indicates that coccidiosis is likely to be a hazard. Coccidiostats are not indicated for use in adult animals due to continuous previous exposure.

ACTIVE DRUG INGREDIENT

Decoquinatate.....816 G/TON

GUARANTEED ANALYSIS

Calcium (Ca), Min.....23.0%
 Calcium (Ca), Max27.0%
 Phosphorus (P), Min.....6.0%
 Salt (NaCl), Min.....4.0%
 Salt (NaCl), Max.....6.0%
 Iodine (I), Min75 ppm
 Magnesium (Mg), Min.....1.5%
 Potassium (K), Min.....0.80%
 Selenium (Se), Min.....5 ppm
 Vitamin A, Min300,000 IU/lb
 Vitamin D, Min200,000 IU/lb
 Vitamin E, Min300 IU/lb

INGREDIENTS

Calcium Carbonate, Monocalcium Phosphate, Salt, Potassium Sulfate, Magnesium Sulfate, Magnesium Oxide, Dried Molasses, Mineral Oil, Distillers Dried Grains with Solubles, Manganese Amino Acid Complex, Yeast Concentrate, Potassium Chloride, Zinc Sulfate, Zinc Amino Acid Complex, Niacin Supplement, Choline Chloride, Zinc Oxide, Manganous Oxide, Ferrous Sulfate, Copper Sulfate, Cobalt Glucoheptonate, Vitamin E Supplement, Potassium Iodide, Copper Amino Acid Complex, Vitamin A Supplement, D-Activated Animal Sterol (Source of Vitamin D3), Vitamin B12 Supplement, Sodium Selenite, Cobalt Carbonate, Natural and Artificial Flavors.

FEEDING DIRECTIONS

CALF CREEP/DECOX can be fed as a top dress at the rate of one (1) ounce per head per day. CALF CREEP/DECOX can be mixed in the following suggested rations at 50 lbs. per ton as shown below and self-fed with high quality forage.

MIXING DIRECTIONS

	18% PROTEIN	18% PROTEIN	16% PROTEIN	16% PROTEIN
Shelled, Cracked Corn	1465 lbs.	1090 lbs.	1560 lbs.	1190 lbs.
Oats, Rolled or Course	0 lbs.	400 lbs.	0 lbs.	400 lbs.
Soybean Meal 48%	475 lbs.	450 lbs.	380 lbs.	350 lbs.
Salt	10 lbs.	10 lbs.	10 lbs.	10 lbs.
Calf Creep/Decox	50 lbs.	50 lbs.	50 lbs.	50 lbs.
	2000 lbs.	2000 lbs.	2000 lbs.	2000 lbs.

WARNING: Do not feed to breeding animals or animals producing milk for food.

GRO-TEC, INC.
10324 W. US HWY 36
MODOC, IN 47358

NET WT. 50 LBS. (22.68 kg.)

LOT.#

BEEF HERD PROGRAM

The Key elements to success in the operation of a profitable beef-cow enterprise include proper management, a sound nutrition program, the genetics for optimum development and growth, a marketing strategy, and the herd health program.

The beef cow reproductive cycle can be divided into four separate periods. Period 1 – 82 days (calving to breeding) has the greatest nutritional demand. The cow is at her maximum milk flow, recovering from her calving and is to be pregnant by the end of the period; Period 2 – 123 days (breeding to weaning to calf) has cow gain weight while still lactating; Period 3 – 110 days (weaning of calf to 50 days pre-calving) has cow maintain her condition and development of the fetus; Period 4 -50 days (last 50 days of pregnancy) where 75% of the fetal growth occurs and cow condition is critical to re-breeding.

Forages and crop residue products should be the main feedstuffs for the cow-calf nutritional program. The feeding program based on a sound forage regimen should need limited supplementation of energy and protein. However, it is recognized that due to seasonal growth patterns, plant variety differences, soil fertility, annual precipitation rates and harvesting methods. Forages can't always provide all the nutrients needed for efficient profitable beef production. The Ag Land Stocker Premix Program will show you how to manage and make up the nutritional differences.

Protein and energy needs of the breeding herd have been determined for growth, maintenance and the stage of reproduction (see Table 1). Supplemental feeding can provide these extra nutrients when conditions necessitate their need. During the last 30 days of gestation and the first 60 to 90 days of lactation daily energy and protein needs increase. The forage quality and/or intake during these periods may not meet requirements and additional grain must be fed.

Adequate mineral and vitamin intake lead to higher conception rates, proper fetal development and the milk production to nourish the growing calf to weaning. Mineral levels in forages and other crop residues in feedstuffs are extremely variable and there is a wide range in the biological availability of plant minerals (see Graph 1).

University research supports the concept that reliance on natural feedstuffs as a reliable source of the essential mineral elements is wrong and leads to mineral underfeeding. With inadequate mineral nutrition the brood cow-calf unit will not return the maximum potential.

TABLE 1. BEEF COW DAILY NUTRIENT REQUIREMENTS

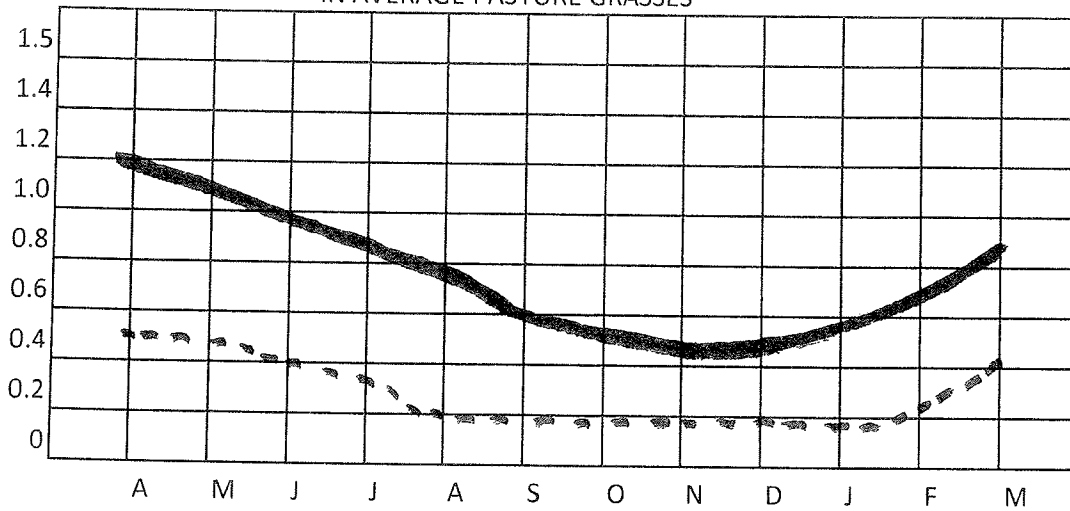
Body Wt#	DMI #	NEm (Mcal)	NEg (Mcal)	TDN #	Crude Protein #	Calcium gm.	Phosphorus Gm.
Dry Pregnant Mature cow - middle third gestation:							
1000	18.8	7.6	NA	8.8	1.3	15	15
Bred Yearling Heifer - last third gestation:							
850	18.2	8.8	1	10.8	1.3	30	20
Dry Pregnant Mature cow - last third gestation							
1100	21	10.3	NA	11.2	1.6	30	25
Lactating Heifers and Cows first 3-4 months post partum*							
First Calf Heifer - 10# milk/day:							
900	19.2	10.4	1	12	2	30	25
Cows nursing calves, average (10#) milking ability:							
1000	20.3	11	NA	13.8	2.5	30	25
Cows nursing calves, superior (20#) milking ability:							
1000	20.3	14.4	NA	13.8	2.5	40	30

* Requirements dependent on milking ability, age and condition.

Gro-Tec, Inc. recommends that cows receive at least 30% of their daily calcium and phosphorus requirements from biologically available inorganic sources as found in the Stocker Premixes

The other essential trace minerals and vitamins are provided to the animal by the Stocker Premixes

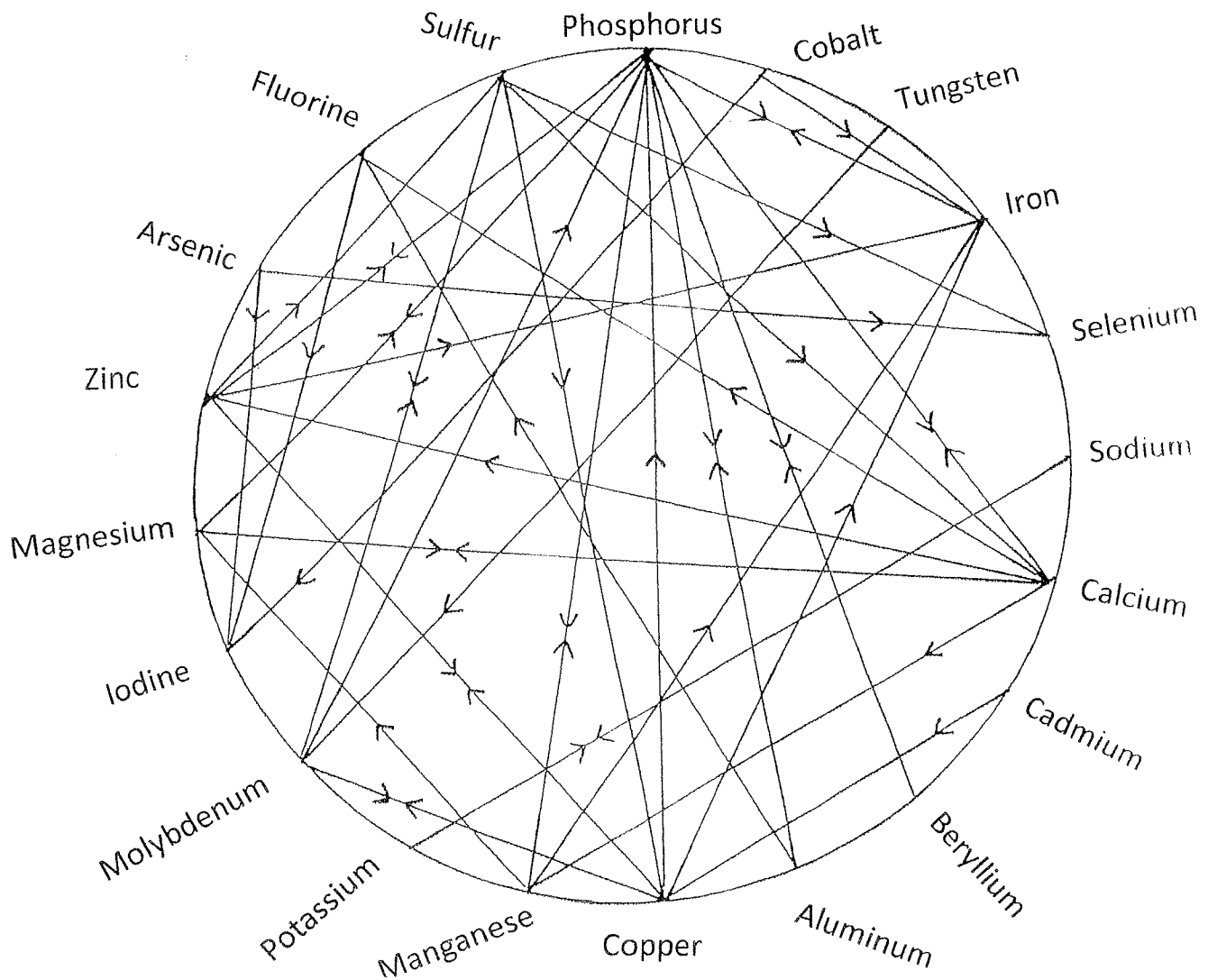
GRAPH 1. VARIABILITY OF CALCIUM AND PHOSPHORUS
IN AVERAGE PASTURE GRASSES



Solid Line = Calcium
Dashed Line = Phosphorus

Similar variations can be expected to occur for magnesium, potassium, sulfur, manganese, and other trace minerals.

See your Gro-Tec, Inc. representative so forage samples can be tested and a ration determined with the appropriate Ag Land Stocker Premixes to satisfy the feed cow's nutritional requirements.



AG LAND STOCKER 7

Mineral for beef cattle on pasture

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	13.00%
Calcium (Ca), Max.....	15.00%
Phosphorous (P), Min.....	7.00%
Salt (NaCl), Min.....	20.00%
Salt (NaCl), Max.....	24.00%
Magnesium (Mg), Min.....	6.00%
Potassium (K), Min.....	1.40%
Copper (Cu), Min.....	1,650 ppm
Iodine (I), Min.....	175 ppm
Selenium (Se), Min.....	35 ppm
Zinc (Zn), Min.....	5,400 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Salt, Calcium Carbonate, Magnesium Oxide, Potassium Sulfate, Magnesium Sulfate, Dried Cane Molasses, Potassium Chloride, Processed Grain By-Products, Mineral Oil, Zinc Oxide, Copper Sulfate, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Ferrous Amino Acid Complex, Selenium Yeast, Zinc Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Calcium Stearate, Manganese Amino Acid Complex, Soybean Oil, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Polysaccharide Complex of Copper, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

STOCKER 7 should be self-fed free choice in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. This mineral is designed to help fortify the ration with major and trace minerals, vitamins and yeast needed for optimum beef cattle performance.

Beef cattle should consume STOCKER 7 at the rate of 3 oz/head/day.

CAUTION: Consumption of this product by sheep may result in copper toxicity.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#

AG LAND

STOCKER 7/RUMENSIN

MEDICATED

Mineral for beef cattle in feedlot and stocker cattle on pasture
 For improved feed efficiency in cattle being fed in confinement for slaughter and for pasture cattle
 (slaughter, stocker and feeder, dairy and beef replacement heifers) for increased weight gains.

ACTIVE INGREDIENT

Monensin (Monensin Sodium).....1600 G/Ton

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	13.00%
Calcium (Ca), Max.....	15.00%
Phosphorous (P), Min.....	7.00%
Salt (NaCl), Min.....	20.00%
Salt (NaCl), Max.....	24.00%
Magnesium (Mg), Min.....	6.00%
Potassium (K), Min.....	1.40%
Copper (Cu), Min.....	1,650 ppm
Iodine (I), Min.....	175 ppm
Selenium (Se), Min.....	35 ppm
Zinc (Zn), Min.....	5,400 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Salt, Calcium Carbonate, Magnesium Oxide, Potassium Sulfate, Magnesium Sulfate, Dried Cane Molasses, Potassium Chloride, Processed Grain By-Products, Mineral Oil, Zinc Oxide, Copper Sulfate, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Ferrous Amino Acid Complex, Selenium Yeast, Zinc Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Calcium Stearate, Manganese Amino Acid Complex, Soybean Oil, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Polysaccharide Complex of Copper, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

For cattle weighing more than 400 lbs. mix 125 lbs. of STOCKER 7/RUMENSIN with other feed ingredients to make one (1) ton of a complete cattle supplement. This supplement to be fed at a rate of one (1) to four (4) lbs. per head per day so that each animal receives not less than 50 mg nor more than 200 mg Monensin daily. During the first five (5) days pasture cattle should receive no more than 100 mg of Monensin per head per day contained in not less than one (1) pound of feed.

CAUTION: Do not allow horses or other equines access to feeds containing Monensin. Ingestion of Monensin by horses has been fatal. Monensin medicated cattle and goat feeds are safe for use in cattle and goats only. Consumption by unapproved species may result in toxic reactions. Feeding undiluted or mixing errors resulting in higher concentrations of Monensin has been fatal to cattle and could be to goats. Must be thoroughly mixed in feeds before use. Do not exceed levels of Monensin recommended in feeding directions, as reduced average daily gains may result. Do not feed to lactating goats. If feed refusals containing Monensin are fed to other groups of cattle, the concentrations of Monensin in refusals and amount of refusals fed should be taken into consideration to prevent Monensin overdosing. A withdrawal time has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#

AG LAND STOCKER 7/JUSTIFLY

MEDICATED

Mineral for beef cattle on pasture

An insect growth regulator for control of horn fly, stable fly and face fly in the manure of cattle and calves.

ACTIVE INGREDIENT

Diﬂubenzuron (CAS# 35367-38-5).....477 G/Ton

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	13.00%
Calcium (Ca), Max.....	15.00%
Phosphorous (P), Min.....	7.00%
Salt (NaCl), Min.....	20.00%
Salt (NaCl), Max.....	24.00%
Magnesium (Mg), Min.....	6.00%
Potassium (K), Min.....	1.40%
Copper (Cu), Min.....	1,650 ppm
Iodine (I), Min.....	175 ppm
Selenium (Se), Min.....	35 ppm
Zinc (Zn), Min.....	5,400 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Salt, Calcium Carbonate, Magnesium Oxide, Potassium Sulfate, Magnesium Sulfate, Dried Cane Molasses, Potassium Chloride, Mineral Oil, Zinc Oxide, Copper Sulfate, Processed Grain By-Products, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Calcium Stearate, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Ferrous Amino Acid Complex, Selenium Yeast, Zinc Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Manganese Amino Acid Complex, Soybean Oil, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Polysaccharide Complex of Copper, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

STOCKER 7/JUSTIFLY should be self-fed free choice in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. This mineral is designed to help fortify the ration with major and trace minerals, vitamins and yeast needed for optimum beef cattle performance.

Beef cattle should consume STOCKER 7/JUSTIFLY at the rate of 3 oz/head/day to provide 45 mg of Diﬂubenzuron/head/day.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)
EPA Reg No. 96246

LOT#

AG LAND FESCUE 7

W/G-MANNA-CEL

Mineral for beef cattle on pasture

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	13.00%
Calcium (Ca), Max.....	15.00%
Phosphorous (P), Min.....	7.00%
Salt (NaCl), Min.....	17.00%
Salt (NaCl), Max.....	19.00%
Magnesium (Mg), Min.....	6.00%
Potassium (K), Min.....	1.50%
Copper (Cu), Min.....	1,650 ppm
Iodine (I), Min.....	175 ppm
Selenium (Se), Min.....	.25 ppm
Zinc (Zn), Min.....	5,400 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Calcium Carbonate, Salt, Magnesium Oxide, Potassium Sulfate, Magnesium Sulfate, Processed Grain By-Products, Dried Cane Molasses, Potassium Chloride, Brewers Dried Yeast, Calcium Montmorillonite, Mineral Oil, Zinc Oxide, Copper Sulfate, Dried Whey, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Ferrous Amino Acid Complex, Selenium Yeast, Niacin Supplement, Brewers Dried Grains, Soybean Meal Feed, Zinc Amino Acid Complex, Extracted Citric Acid Presscake, Vitamin B12 Supplement, D-Activated Animal Sterol (Source of Vitamin D3), Calcium Stearate, Calcium Pantothenate, Manganese Amino Acid Complex, Soybean Oil, Silicon Dioxide, Polysaccharide Complex of Zinc, Riboflavin Supplement, Ethylenediamine Dihydriodide, Menadione Sodium Bisulfite Complex (Source of Vitamin K activity), Yucca Schidegera Extract, Active Dry Yeast, Polysaccharide Complex of Iron, Cobalt Carbonate, Polysaccharide Complex of Manganese, Copper Amino Acid Complex, Sugar, Calcium Aluminosilicates, Polysaccharide Complex of Copper, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Sodium Selenite, Biotin, Thiamine Mononitrate, Cobalt Glucoheptonate and Natural Flavors.

FEEDING DIRECTIONS

FESCUE 7 W/G-MANNA-CEL is to be fed continuously at the rate of three to four (3-4) ounces per head per day.

CAUTION: Consumption of this product by sheep may result in copper toxicity.

**Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358**

NET WT 50 LB (22.7 kg)

LOT#

AG LAND FESCUE 7/RUMENSIN

**W/G-MANNA-CEL
MEDICATED**

Mineral for beef cattle

For improved feed efficiency in mature reproducing beef cattle on pasture.

ACTIVE INGREDIENT

Monensin as (Monensin Sodium).....1600 G/Ton

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	13.00%
Calcium (Ca), Max.....	15.00%
Phosphorous (P), Min.....	7.00%
Salt (NaCl), Min.....	17.00%
Salt (NaCl), Max.....	19.00%
Magnesium (Mg), Min.....	6.00%
Potassium (K), Min.....	1.50%
Copper (Cu), Min.....	1,650 ppm
Iodine (I), Min.....	175 ppm
Selenium (Se), Min.....	35 ppm
Zinc (Zn), Min.....	5,400 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Calcium Carbonate, Salt, Magnesium Oxide, Potassium Sulfate, Magnesium Sulfate, Processed Grain By-Products, Dried Cane Molasses, Potassium Chloride, Brewers Dried Yeast, Calcium Montmorillonite, Mineral Oil, Zinc Oxide, Copper Sulfate, Dried Whey, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Selenium Yeast, Zinc Amino Acid Complex, Extracted Citric Acid Presscake, Ferrous Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Calcium Stearate, Manganese Amino Acid Complex, Soybean Oil, Silicon Dioxide, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Yucca Schidegera Extract, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Calcium Aluminosilicates, Niacin Supplement, Brewers Dried Grains, Vitamin B12 Supplement, Polysaccharide Complex of Copper, Calcium Pantothenate, Riboflavin Supplement, Menadione Sodium Bisulfite Complex (Source of Vitamin K activity), Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Sodium Selenite, Biotin, Thiamine Mononitrate, Cobalt Glucoheptonate and Natural Flavors.

FEEDING DIRECTIONS

Mix 125 lbs. of FESCUE 7/RUMENSIN W/G-MANNA-CEL with other feed ingredients to make one (1) ton of a complete cattle supplement. This supplement to be fed at a rate of one (1) to four (4) lbs. per head per day so that each animal receives not less than 50 mg nor more than 200 mg Monensin daily. This supplement should be fed in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather and provide fresh, clean water at all times.

CAUTION: Consumption of this product by sheep may result in copper toxicity. Do not allow horses or other equines access to feeds containing Monensin. Ingestion of Monensin by horses has been fatal. Monensin medicated feed is safe for use in cattle only. Consumption by unapproved species may result in toxic reactions. Do not exceed levels of Monensin recommended in feeding directions, as reduced average daily gains may result. Feeding undiluted or mixing errors resulting in higher concentrations of Monensin could be fatal to cattle. Must be thoroughly mixed in feeds before use. Do not feed undiluted.

**Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358**

NET WT 50 LB (22.7 kg)

LOT#

AG LAND FESCUE 7/JUSTIFLY

W/G-MANNA-CEL
MEDICATED

Mineral for beef cattle on pasture

An insect growth regulator for control of horn fly, stable fly and face fly in the manure of cattle and calves.

ACTIVE INGREDIENT

Diflubenzuron (CAS# 35367-38-5).....477 G/Ton

GUARANTEED ANALYSIS

Calcium (Ca), Min.....13.00%
Calcium (Ca), Max.....15.00%
Phosphorous (P), Min.....7.00%
Salt (NaCl), Min.....15.00%
Salt (NaCl), Max.....17.00%
Magnesium (Mg), Min.....6.00%
Potassium (K), Min.....1.50%
Copper (Cu), Min.....1,650 ppm
Iodine (I), Min.....175 ppm
Selenium (Se), Min.....35 ppm
Zinc (Zn), Min.....5,400 ppm
Vitamin A, Min.....400,000 IU/lb
Vitamin D, Min.....140,000 IU/lb
Vitamin E, Min.....320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Calcium Carbonate, Salt, Magnesium Oxide, Potassium Sulfate, Magnesium Sulfate, Processed Grain By-Products, Dried Cane Molasses, Potassium Chloride, Brewers Dried Yeast, Calcium Montmorillonite, Mineral Oil, Zinc Oxide, Copper Sulfate, Dried Whey, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Calcium Stearate, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Selenium Yeast, Zinc Amino Acid Complex, Extracted Citric Acid Presscake, Ferrous Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3) Manganese Amino Acid Complex, Soybean Oil, Silicon Dioxide, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Yucca Schidegera Extract, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Calcium Aluminosilicates, Niacin Supplement, Brewers Dried Grains, Vitamin B12 Supplement, Polysaccharide Complex of Copper, Calcium Pantothenate, Riboflavin Supplement, Menadione Sodium Bisulfite Complex (source of Vitamin K activity), Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Sodium Selenite, Biotin, Thiamine Mononitrate, Cobalt Glucoheptonate and Natural Flavors.

FEEDING DIRECTIONS

FESCUE 7/JUSTIFLY W/G-MANNA-CEL should be self-fed in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. This mineral is designed to help fortify the ration with major and trace minerals, vitamins and yeast for optimum beef performance.

Beef Cattle should consume FESCUE 7/JUSTIFLY W/G-MANNA-CEL at the rate of 3 oz/head/day to provide 45 mg of Diflubenzuron/head/day.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)
EPA Reg No. 96246

LOT#

AG LAND STOCKER 4M

Mineral for beef cattle on pasture

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	15.00%
Calcium (Ca), Max.....	17.00%
Phosphorous (P), Min.....	4.00%
Salt (NaCl), Min.....	20.00%
Salt (NaCl), Max.....	24.00%
Magnesium (Mg), Min.....	6.00%
Potassium (K), Min.....	1.60%
Copper (Cu), Min.....	1,650 ppm
Iodine (I), Min.....	175 ppm
Selenium (Se), Min.....	35 ppm
Zinc (Zn), Min.....	5,400 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Calcium Carbonate, Salt, Monocalcium Phosphate, Magnesium Oxide, Processed Grain By-Products, Potassium Sulfate, Magnesium Sulfate, Dried Cane Molasses, Potassium Chloride, Mineral Oil, Zinc Oxide, Copper Sulfate, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Ferrous Amino Acid Complex, Selenium Yeast, Zinc Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Calcium Stearate, Manganese Amino Acid Complex, Soybean Oil, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Polysaccharide Complex of Copper, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

STOCKER 4M should be self-fed free choice in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. This mineral is designed to help fortify the ration with major and trace minerals, vitamins and yeast needed for optimum beef cattle performance.

Beef cattle should consume STOCKER 4M at the rate of 3 oz/head/day.

**Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358**

NET WT 50 LB (22.7 kg)

LOT#

AG LAND STOCKER 12M

Mineral for beef cattle on pasture

GUARANTEED ANALYSIS

Calcium (Ca), Min.....	9.50%
Calcium (Ca), Max.....	11.50%
Phosphorous (P), Min.....	5.00%
Salt (NaCl), Min.....	12.00%
Salt (NaCl), Max.....	14.00%
Magnesium (Mg), Min.....	12.00%
Potassium (K), Min.....	1.60%
Copper (Cu), Min.....	2,200 ppm
Iodine (I), Min.....	220 ppm
Selenium (Se), Min.....	35 ppm
Zinc (Zn), Min.....	6,800 ppm
Vitamin A, Min.....	400,000 IU/lb
Vitamin D, Min.....	140,000 IU/lb
Vitamin E, Min.....	320 IU/lb

INGREDIENTS

Monocalcium Phosphate, Magnesium Oxide, Calcium Carbonate, Salt, Dried Cane Molasses, Processed Grain By-Products, Potassium Sulfate, Magnesium Sulfate, Potassium Chloride, Mineral Oil, Zinc Oxide, Copper Sulfate, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Zinc Amino Acid Complex, Vitamin E Supplement, Vitamin A Supplement, Ferrous Amino Acid Complex, Selenium Yeast, Manganese Amino Acid Complex, Copper Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Calcium Stearate, Soybean Oil, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Active Dry Yeast, Polysaccharide Complex of Iron, Cobalt Carbonate, Polysaccharide Complex of Manganese, Polysaccharide Complex of Copper, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

STOCKER 12M should be self-fed free choice in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. This mineral is designed to help fortify the ration with major and trace minerals, vitamins and yeast needed for optimum beef cattle performance.

Beef cattle should consume STOCKER 12M at the rate of 3 oz/head/day.

**Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358**

NET WT 50 LB (22.7 kg)

LOT#

AG LAND STOCKER 26/CTC

MEDICATED

Mineral for beef cattle on pasture

Aid in control of bacterial pneumonia associated with shipping fever complex caused by
Pasteurella spp.

ACTIVE INGREDIENT

Chlortetracycline.....1400 Mg/LB

GUARANTEED ANALYSIS

Calcium (Ca), Min.....18.50%
Calcium (Ca), Max.....21.50%
Phosphorous (P), Min.....7.00%
Salt (NaCl), Min.....4.00%
Salt (NaCl), Max.....6.00%
Magnesium (Mg), Min.....1.60%
Potassium (K), Min.....1.20%
Copper (Cu), Min.....1,650 ppm
Iodine (I), Min.....175 ppm
Selenium (Se), Min.....35 ppm
Zinc (Zn), Min.....5,400 ppm
Vitamin A, Min.....300,000 IU/lb
Vitamin D, Min.....100,000 IU/lb
Vitamin E, Min.....240 IU/lb

INGREDIENTS

Calcium Carbonate, Monocalcium Phosphate, Processed Grain By-Products, Salt, Potassium Sulfate, Magnesium Sulfate, Dried Cane Molasses, Sodium Bentonite, Magnesium Oxide, Potassium Chloride, Mineral Oil, Zinc Oxide, Copper Sulfate, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Vitamin E Supplement, Vitamin A Supplement, Selenium Yeast, Zinc Amino Acid Complex, Ferrous Amino Acid Complex, Calcium Stearate, D-Activated Animal Sterol (Source of Vitamin D3), Manganese Amino Acid Complex, Soybean Oil, Ethylenediamine Dihydriodide, Polysaccharide Complex of Zinc, Active Dry Yeast, Polysaccharide Complex of Iron, Copper Amino Acid Complex, Cobalt Carbonate, Polysaccharide Complex of Manganese, Polysaccharide Complex of Copper, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

STOCKER 26/CTC should be self-fed free choice in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. Also, provide salt free choice at all times. This mineral is designed to help fortify the ration with major and trace minerals, vitamins and yeast needed for optimum beef cattle performance.

Beef cattle should consume STOCKER 26/CTC at the rate of 4 oz/head/day.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#

AG LAND STOCKER MIX

Mineral for beef cattle on pasture

GUARANTEED ANALYSIS

Crude Protein, Min.....	13.00%
Crude Fat, Min.....	0.40%
Crude Fiber, Max.....	5.00%
Calcium (Ca), Min.....	9.50%
Calcium (Ca), Max.....	10.50%
Phosphorous (P), Min.....	4.00%
Salt (NaCl), Min.....	17.00%
Salt (NaCl), Max.....	19.00%
Magnesium (Mg), Min.....	4.00%
Potassium (K), Min.....	1.00%
Copper (Cu), Min.....	1,100 ppm
Iodine (I), Min.....	110 ppm
Selenium (Se), Min.....	25 ppm
Zinc (Zn), Min.....	3,700 ppm
Vitamin A, Min.....	200,000 IU/lb
Vitamin D, Min.....	70,000 IU/lb
Vitamin E, Min.....	160 IU/lb

INGREDIENTS

Soybean Meal, Monocalcium Phosphate, Salt, Calcium Carbonate, Magnesium Oxide, Processed Grain By-Products, Dehydrated Alfalfa Meal, Potassium Sulfate, Magnesium Sulfate, Dried Cane Molasses, Mineral Oil, Zinc Oxide, Copper Sulfate, Potassium Chloride, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Sodium Sesquicarbonate, Selenium Yeast, Zinc Amino Acid Complex, Vitamin A Supplement, Vitamin E Supplement, Ferrous Amino Acid Complex, Manganese Amino Acid Complex, D-Activated Animal Sterol (Source of Vitamin D3), Polysaccharide Complex of Zinc, Soybean Oil, Copper Amino Acid Complex, Ethylenediamine Dihydriodide, Active Dry Yeast, Polysaccharide Complex of Iron, Polysaccharide Complex of Manganese, Sugar, Cobalt Carbonate, Polysaccharide Complex of Copper, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Cobalt Glucoheptonate, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

STOCKER MIX should be self-fed free choice in dry, wind free, rain protected feeders. Place feeders near a water source where animals gather. Provide fresh, clean water at all times. This blend of proteins, minerals, vitamins and yeast helps to provide the nutrients needed to balance the cow herd diet.

Beef cattle should consume STOCKER MIX at the rate of 6 oz/head/day.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#

GRO-TEC YEAST EXTRA

For livestock, poultry and pet foods

GUARANTEED ANALYSIS

Crude Protein, Min.....	23.00%
Crude Fat, Min.....	5.00%
Crude Fiber, Max.....	10.00%
Saccharomyces Cervisiae, Min.....	12 Million CFU's/lb

INGREDIENTS

Processed Grain By-Products, Roughage Products, Sodium Bentonite, Calcium Carbonate, Dried Yeast, Brewers Dried Grains, *Saccheromyces cervisiae* Fermentation Extract Dehydrated, Dried *Aspergillus oryzae* Fermentation Extract, Dried *Bacillus licheniformis* Fermentation Extract, Dried *Bacillus subtilis* Fermentation Extract and Silicon Dioxide.

DIRECTIONS FOR USE

GRO-TEC YEAST EXTRA is a feed supplement designed to be mixed with nutritionally balanced complete feeds for Dairy, Beef, Swine, Poultry, Horses, and Companion Animals. It may be Top Dressed on Beef, Dairy, Horse, and Swine feeds.

Dairy	Complete Dairy Ration	5-15 lbs/ton
	Lactation Grain Ration	10-20 lbs/ton
	Top Dress	2.0 oz/head/day
Beef	Grower/Finisher Rations	5-20 lbs/ton
	Top Dress	1-2.0 oz/head/day
Swine	Gestation/Lactation & Starter Rations	10-20 lbs/ton
	Grower/Finisher Rations	5-10 lbs/ton
Poultry	Starter/Breeder & Layer Rations	5-10 lbs/ton
	Broiler Grower/Finisher Rations	2-5 lbs/ton
Horses	Grain Ration	10-20 lbs/ton
	Top Dress	1-2.0 oz/head/day
Cat/Dog	Complete Ration	10-20 lbs/ton

**Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358**

NET WT 50 LB (22.7 kg)

LOT#
Patent Pending

G-MANNA-CEL

For the manufacture of livestock feeds

GUARANTEED ANALYSIS

Crude Protein, Min.....	20.00%
Crude Fat, Min.....	1.00%
Crude Fiber, Max.....	10.00%
Niacin, Min.....	500 ppm
Pantothenate, Min.....	90 ppm
Riboflavin, Min.....	100 ppm

INGREDIENTS

Calcium Montmorillonite, Brewers Dried Yeast, Processed Grain By-Products, Dried Whey, Extracted Citric Acid Presscake, Silicon Dioxide, Yucca Schidigera Extract, Calcium Carbonate, Calcium Aluminosilicates, Niacin Supplement, Brewers Dried Grains, Vitamin B12 Supplement, Calcium Pantothenate, Riboflavin Supplement, Menadione Sodium Bisulfite Complex (source of Vitamin K activity), Mineral Oil, Biotin and Thiamine Mononitrate.

FEEDING DIRECTIONS

Dairy:	1-2 oz (28-56 gm)/head/day
Beef:	
Calves.....	8 lbs/per ton
Growers.....	4 lbs/per ton
Swine:	
Starters.....	8 lbs/per ton
Growers.....	4 lbs/per ton
Poultry:	
Layers.....	2-4 lbs/per ton
Broilers.....	2-8 lbs/per ton
Sheep/Goats:	4-10 lbs/per ton

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#

AG LAND AG LAC

For the manufacture of livestock feeds and as a top dress for lactating dairy cows and lactating sows

GUARANTEED ANALYSIS

Crude Protein, Min.....	10.00%
Crude Fat, Min.....	2.50%
Crude Fiber, Max.....	12.00%
Total Lactic Acid Producing Bacteria, Min.....	5.8 Billion CFU's/lb

INGREDIENTS

Dried Extracted Streptomyces Fermentation Solubles, Corn Germ Meal, Processed Grain By Products, Dried Lactobacillus acidophilus Fermentation Product, Dried Lactobacillus lactis Fermentation Product, Dried Lactobacillus plantarium Product, Dried Enterococcus cermoris Fermentation Product, Dried Enterococcus dicetylactis Fermentation Product, Dried Bacillus subtilis Fermentation Product, Dried Aspergillus oryzae Fermentation Product, Extracted Streptomyces Fermentation Meal, Dried Fermented Corn Extractives and Dried Yeast.

FEEDING DIRECTIONS

Lactating Dairy Cows	Top Dress.....	1/2-1 oz/head/day
Lactating Sows	Top Dress.....	1/4-1 oz/head/day

MIXING DIRECTIONS FOR COMPLETE FEEDS

Cattle	Calves and Incoming Cattle.....	10 lbs./ton
	Beef, Dairy and Feedlot Cattle.....	5 lbs./ton
Horses	Creep.....	10 lbs./ton
	Maintenance and Work.....	5 lbs./ton
Poultry and Turkeys		5 lbs./ton
Swine	Starter, Grower, Finisher, Gestation.....	5 lbs./ton
	Lactation.....	10 lbs./ton
Sheep		5 lbs./ton

Store in a dry place. Do not expose to direct sunlight.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#

AG LAND HAY TREAT 21

GUARANTEED ANALYSIS

Total Lactic Acid Producing Bacteria.....300 Billion CFU/lb
Contains a source of live (viable) naturally occurring microorganisms

INGREDIENTS

Calcium Carbonate, Dextrose, Iron Oxide, Cobalt Carbonate, Lactobacillus Plantarum Fermentation Product Dehydrated, Pediococcus Pentosaceus Fermentation Product Dehydrated, Pediococcus Acidilactici Fermentation Product Dehydrated, Enterococcus Faecium Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Streptococcus Lactis Fermentation Product Dehydrated, Dried Aspergillus Oryzae Fermentation Extract, Dried Bacillus Subtilis Fermentation Extract.

FEEDING DIRECTIONS

HAY TREAT 21 is designed to be used as a forage inoculant and preservative and is to be applied at the rate of one-half to one pound of HAY TREAT 21 per one ton of Hay or Baleage, as indicated below.

PRODUCT	RECOMMENDED MIN.	MOISTURE MAX.
Alfalfa Hay	10%	21%
Grass Hay	10%	21%
Baleage	15%	35%

NOTE: It is suggested product not be left in applicator for extended periods of time.

**Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358**

NET WT 50 LB (22.7 kg)

LOT#

AG LAND

BEEF BACKGROUNDING EDGE/R

For increased rate of gain for stocker cattle on pasture

ACTIVE INGREDIENT

Monensin as (Monensin Sodium).....120 G/Ton

GUARANTEED ANALYSIS

Crude Protein, Min.....14.00%
Crude Fat, Min.....4.50%
Crude Fiber, Max.....8.00%
Calcium (Ca), Min.....4.50%
Calcium (Ca), Max.....5.50%
Phosphorous (P), Min.....2.00%
Salt (NaCl), Min.....22.00%
Salt (NaCl), Max.....26.00%
Iodine (I), Min.....65 ppm
Selenium (Se), Min.....12 ppm
Zinc (Zn), Min.....1,900 ppm
Vitamin A, Min.....145,000 IU/lb
Vitamin D, Min.....50,000 IU/lb
Vitamin E, Min.....120 IU/lb

INGREDIENTS

Processed Grain By-Products, Salt, Calcium Carbonate, Monocalcium Phosphate, Dried Cane Molasses, Mineral Oil, Magnesium Oxide, Zinc Oxide, Copper Sulfate, Magnesium Limestone, Ferrous Sulfate, Manganous Oxide, Vitamin E Supplement, Vitamin A Supplement, Zinc Amino Acid Complex, Selenium Yeast, D-Activated Animal Sterol (Source of Vitamin D3), Ferrous Amino Acid Complex, Soybean Oil, Manganese Amino Acid Complex, Ethylenediamine Dihydriodide, Active Dry Yeast, Cobalt Carbonate, Sugar, Yeast Culture, Dried Bacillus subtilis Fermentation Extract, Dried Aspergillus oryzae Fermentation Extract, Dried Trichoderma reesi Fermentation Extract, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Product Dehydrated, Sodium Selenite and Natural Flavors.

FEEDING DIRECTIONS

BEEF BACKGROUNDING EDGE/R is to be hand fed at the rate of one (1) to two (2) pounds per head per day depending on weight of the cattle and conditions of the forage to provide 120 to 240 mg per head per day of Monensin. Feed bunks should be placed close to a water source. Provide fresh, clean water at all times.

CAUTION: Do not allow horses or other equines access to feeds containing Monensin. Ingestion of Monensin by horses has been fatal. Monensin medicated cattle feed is safe for use in cattle only. Consumption by unapproved species may result in toxic reactions. Do not exceed levels of Monensin recommended in feeding directions, as reduced average daily gains may result. Feeding undiluted or mixing errors resulting in higher concentrations of Monensin has been fatal to cattle. Must be thoroughly mixed in feeds before use. Do not feed undiluted. Use as directed. Consumption of this product by sheep and goats may result in copper toxicity.

Manufactured By
GRO-TEC, INC.
10324 W US HWY 36
MODOC, IN 47358

NET WT 50 LB (22.7 kg)

LOT#



Rumensin®

Rumensin® (monensin) is a proven management tool that optimizes your investment by improving cattle weight gain and feed efficiency, even as the quality of forage changes from year to year.¹

ADDITIONAL SELLING WEIGHT — For pennies per head per day, Rumensin delivers 20 lbs or more per head of additional selling weight during a 100-day grazing period for stocker cattle.¹

COCCIDIOSIS PREVENTION AND CONTROL — Rumensin is the most potent feed ingredient available that kills coccidiosis parasites at three different stages in the life cycle^{2,3} instead of simply slowing their development. Additionally, it is more efficacious at lower doses compared to other ionophores.⁵

ONLY IONOPHORE APPROVED FOR BEEF COWS — Rumensin improves feed efficiency in beef cows, reducing their feed requirements 5 to 10 percent while maintaining body weight with no negative impacts on reproductive performance.⁴ Rumensin also improves average daily gain in replacement heifers, resulting in fewer days to first estrus — which can result in improved lifetime productivity.⁵



For pennies per head per day, stocker producers with the Rumensin® advantage can achieve 20 pounds or more per head of additional selling weight during a 100-day grazing period.⁶

RUMENSIN INDICATIONS & LABEL DIRECTIONS

INDICATIONS: For increased rate of weight gain and the prevention and control of coccidiosis due to *Eimeria bovis* and *Eimeria zuernii* in growing cattle on pasture or in dry lot. For improved feed efficiency when receiving supplemental feed and the prevention and control of coccidiosis due to *Eimeria bovis* and *Eimeria zuernii* in mature reproducing beef cows.

STORAGE: Store at or below 25°C (77°F). Excursions permitted to 37°C (99°F). Not to be used after date printed at top of bag.

The label contains complete use information, including cautions and warnings. Always read, understand and follow the label and use directions.

Rumensin: Growing cattle on pasture or in drylot (stockers, feeders, and dairy and beef replacement heifers)

For increased rate of weight gain: Feed 50 to 200 mg/hd/d of monensin in at least 1.0 lb of Type C medicated feed. Or, after the 5th day, feed 400 mg/hd/d every other day in at least 2.0 lbs of Type C medicated feed. The Type C medicated feed must contain 15 to 400 g/ton of monensin (90% DM basis).

For the prevention and control of coccidiosis: Feed at a rate to provide 0.14 to 0.42 mg/lb of body weight/d of monensin up to a maximum of 200 mg/hd/d. The Type C medicated feed must contain 15 to 400 g/ton of monensin (90% DM basis).

Rumensin: Mature reproducing beef cows

For improved feed efficiency when receiving supplemental feed: Feed continuously at a rate of 50 to 200 mg/hd/d of monensin. Cows on pasture or in drylot must receive a minimum of 1.0 lb of Type C medicated feed/hd/d. Do not self-feed.

For the prevention and control of coccidiosis: Feed at a rate of 0.14 to 0.42 mg/lb of body weight/d of monensin up to a maximum of 200 mg/hd/d.