

# **DISTILLERS** **OPTIMIZER™**

**#350K, #352K**

## **PROFILE**

CRYSTALYX® Distillers Optimizer™ is a unique, nutrient-dense, palatable, free-choice supplement designed to complement diets that use corn by-products such as distillers grains or corn gluten meal. Distillers Optimizer™ is an easy way to balance the mineral and vitamin needs of your herd when corn by-products are fed.



## **RESULTS BY THE BARREL®**

### **CRYSTALYX® Distillers Optimizer™**

In order to balance the phosphorus levels that are in corn by-products, CRYSTALYX® Distillers Optimizer™ contains an increased amount of readily available calcium. Balancing calcium and phosphorus while meeting animal requirements is critical for growing calves, stockers and replacement heifers, as well as for beef cows in gestation, before and after calving, and during lactation.

### **Trace Mineral Fortification**

CRYSTALYX® Distillers Optimizer™ features a blend of Zinpro's® chelated organic trace minerals from Availa-4® to help increase bioavailability. High bioavailability is important to combat the antagonistic effects of high sulfur levels in corn by-products.

### **Polioencephalomalacia: "Brainers"**

High sulfur levels commonly associated with corn by-products, have been linked to a specific toxicity referred to as polioencephalomalacia (PEM). Affected cattle are also called "Brainers". PEM can be a result of high levels of sulfur from corn by-products that cause a sulfide neurotoxicity similar to thiamin deficiency. A key feature of CRYSTALYX® Distillers Optimizer™ is the fortification with organic, chelated trace minerals that are more biologically available to your herd in addition to thiamin fortification. This specific fortification package can help overcome negative effects that sulfur has demonstrated by interacting with thiamin and trace mineral absorption and use.

### **Consistent, Dependable, Safe Manufacturing**

The unique manufacturing process and QA standards for all CRYSTALYX® products, including Distillers Optimizer™ is unmatched in the industry. The three heavy hitters of the CRYSTALYX® Quality Assurance program include:

Dependable	- FCI (contains no RUPP—Restricted Use Protein Products)
Consistent	- ISO 9000 (documented QA Program)
Safe	- HACCP (food safety program)

Leave the details of the programs to us and be assured Distillers Optimizer™ is dependable, consistent and safe.

**Beef**

## **FEEDING APPLICATIONS:**

### **Beef**

- Beef cattle (cows, calves, stockers or replacement heifers) that are supplemented with corn by-products such as corn gluten feed, distillers grains, wet cake (e.g., wet distillers grains) or steep liquor.

## **ABOUT THE PRODUCT:**

### **Corn By-Product Feeding**

Recent changes in the ethanol industry have increased the availability of associated corn processing by-products. These by-products are useful in supplementing beef diets, including cows, calves, stockers and replacement heifers. Key nutrients can become deficient when feeding corn by-products because of mineral imbalances that antagonize the utilization of other minerals. When fed at high levels, certain corn by-products have led to toxic conditions.

Corn by-products are good sources of energy, protein and some minerals, particularly phosphorus. Other nutrients are often imbalanced and require supplemental sources of key nutrients for optimal animal performance.

Common corn by-products from the ethanol industry include distillers dried grains with solubles (DDGS), distillers solubles or wet cake. By-products from the wet corn milling sweetener process are steep liquor and corn gluten feed. Whether these by-products are in dry, wet or liquid form, they all have similar nutrient profiles that require specific fortification to help balance animal requirements and avoid reduced performance or potential toxicities.

### **Product Numbers**

**#350K** – Distillers Optimizer™, 250 lb

**#352K** – Distillers Optimizer™, 125 lb

**CRYSTALYX® 10-1400**

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## NUTRIENT ANALYSIS:

Crude Fat, min .....	3.0%
Crude Fiber, max .....	2.0%
Calcium (Ca), min .....	14.0%
Calcium (Ca), max.....	16.0%
Phosphorus (P), min.....	None Added
Salt (NaCl).....	None Added
Potassium (K), min .....	2.0%
Magnesium (Mg), min .....	3.0%
Cobalt (Co), min .....	15 ppm
Copper (Cu), min .....	1,500 ppm
Iodine (I), min.....	75 ppm
Manganese (Mn), min.....	5,250 ppm
Selenium (Se), min .....	16.5 ppm
Zinc (Zn), min.....	4,500 ppm
Vitamin A, min .....	200,000 IU/lb
Vitamin D <sub>3</sub> , min.....	20,000 IU/lb
Vitamin E, min .....	200 IU/lb
Thiamin, min .....	400 mg/lb

## INGREDIENTS:

Molasses products, calcium carbonate, magnesium oxide, hydrolyzed vegetable oil, manganese sulfate, manganese amino acid complex, zinc sulfate, zinc amino acid complex, copper sulfate, copper chloride, copper amino acid complex, ethylenediamine dihydriodide, calcium iodate, cobalt glucoheptonate, cobalt carbonate, sodium selenite, vitamin A acetate, vitamin D<sub>3</sub> supplement, vitamin E supplement, thiamin mononitrate, vitamin B<sub>12</sub> supplement, menadione dimethylpyrimidinol bisulfite, niacin, riboflavin, calcium pantothenate, choline chloride.



**DEPENDABLE • CONSISTENT • SAFE**

**CRYSTALYX® Distillers Optimizer™**

## FEEDING DIRECTIONS:

CRYSTALYX® Distillers Optimizer™ mineral supplement is designed for self-feeding to all classes of beef cattle. Use as a source of calcium, vitamins and trace minerals to complement diets that use corn by-products such as Distillers Grains or Corn Gluten Meal. This product **does not** provide enough supplemental magnesium to aid in the prevention of grass tetany.

Place containers in areas that achieve desired supplement intake. Once acceptable intake levels have been achieved, the containers may be moved to under-utilized pasture areas to improve grazing distribution. Feed at the rate of one (1) container for every 40 to 75 head of mature animals, with a minimum of two (2) containers in each pasture to ensure proper accessibility. Free-choice consumption will depend on the number of animals per container, the size of the animals, seasonal weather conditions, as well as, quality, source and availability of other feeds. Cattle may consume from 0.15 to 0.40 lbs. per-head, per-day. Manage the number of animals per container to achieve a 0.25 lb. intake per-head, per-day.

ALL CONSUMPTION FIGURES STATED HERE ARE APPROXIMATE. PROVIDE FREE ACCESS TO FRESH, CLEAN WATER AT ALL TIMES. DISTILLERS OPTIMIZER™ MINERAL SUPPLEMENT CONTAINS NO ADDED SALT. PROVIDE SALT FREE-CHOICE.

**CAUTION: USE ONLY AS DIRECTED.**

**NOTE:** CRYSTALYX® Brand Supplements provide a continuous availability of nutrients and are designed as a supplement to the animal's diet. When quantity or quality of other feedstuffs are limited, supplemental nutrients, in addition to those provided by CRYSTALYX® Brand Supplements may be required. In situations where additional nutrients are needed, contact your CRYSTALYX® representative for specific recommendations.

**WARNING: THIS PRODUCT, WHICH CONTAINS ADDED COPPER, SHOULD NOT BE FED TO SHEEP OR ANY SPECIES THAT HAVE A LOW TOLERANCE TO SUPPLEMENTAL COPPER.**

[WWW.CRYSTALYX.COM](http://WWW.CRYSTALYX.COM)

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**NEW 2/07**