

FRONT OF
BAG



IGR Minerals[®]

To prevent the breeding of horn flies in the manure of treated cattle.

A pesticidally active mineral feed for beef and dairy cattle containing methoprene* insect growth regulator for continuous feeding during the fly season.

ACTIVE INGREDIENT: methoprene (Isopropyl(E,E)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate)*	0.02%
INERT INGREDIENTS:	99.98%
	TOTAL 100.00%

GUARANTEED ANALYSIS

Calcium (Ca), not less than	13.2%
Calcium (Ca), not more than	15.8%
Phosphorus (P), not less than	7.0%
Salt (NaCl), not less than	25.0%
Salt (NaCl), not more than	30.0%
Iodine (I), not less than	0.015%
Vitamin A, not less than 200,000 International Units per pound.	

FEED INGREDIENTS

Vitamin A Acetate, D-Activated Animal Sterol (Source of Vitamin D₃—Stability Improved), Dicalcium Phosphate, Defluorinated Phosphate, Calcium Carbonate, Soybean Meal, Salt, Ferrous Sulfate, Iron Oxide, Calcium Iodate, Cobalt Carbonate, Silicon Dioxide, Copper Carbonate, Mineral Oil, Petrolatum, Cane Molasses, Ethylenediamine Dihydriodide, Manganous Oxide, Zinc Oxide, Magnesium Oxide, Sodium Selenite.

Assemble equipment in operating position prior to use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110 % of volume capacity of the equipment by mixing the product in a ratio of 1 oz. product with 20 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 2 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

CLEAN-IN-PLACE METHOD - Thoroughly clean equipment after use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110 % of volume capacity of the equipment by mixing the product in a ratio of 1 oz. product with 20 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

SPRAY/FOG METHOD - Preclean all surfaces after use. Use a 200 ppm available chlorine solution to control bacteria, mold or fungi and a 600 ppm solution to control bacteriophage. Prepare a 200 ppm sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 1 oz. product with 20 gallons of water. Prepare a 600 ppm solution by thoroughly mixing the product in a ratio of 3 oz. product with 20 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with a 600 ppm solution with a 200 ppm solution.

SANITIZATION OF POROUS FOOD CONTACT SURFACES

RINSE METHOD - Prepare a 600 solution by thoroughly mixing 3 oz. of this product with 20 gallon of water. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse and do not soak equipment overnight.

IMMERSION METHOD - Prepare a 600 ppm solution by thoroughly mixing, in an immersion tank, 3 oz. of this product with 20 gallons of water. Clean equipment in the normal manner. Prepare a 200 ppm sanitizing solution

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MoorMan's IGR Minerals: INSTRUCTIONS FOR FEEDING

Free-Choice Feeding (self-feeding)

Make sure cattle are not starved for minerals or salt by providing them before feeding MoorMan's IGR Minerals. Then remove salt or mineral supplement and start continuous feeding of MoorMan's IGR Minerals in the spring before horn flies appear on cattle and continue feeding until cold weather restricts horn fly activity.

The recommended consumption of MoorMan's IGR Minerals is 0.25 lb (¼ lb) to 0.5 lb (½ lb) per 100 lb of body weight per month. Place MoorMan's IGR Minerals near watering or loafing areas and provide one feeder for 15 to 20 head. Put out only a 5-7 day supply of MoorMan's IGR Minerals at one time and protect it from

If consumption of MoorMan's IGR Minerals is above 0.5 lb (½ lb) per 100 lb of body weight per month, reduce the number of feeding stations or relocate feeders in areas frequented less by cattle.

If consumption of MoorMan's IGR Minerals is below 0.25 lb (¼ lb) per 100 lb of body weight per month, increase the number of feeding stations or relocate in areas more frequented by cattle.

Mixed Ration Feeding (hand-feeding)

When cattle are on supplemental feeds or if mineral consumption is not as recommended, mix MoorMan's IGR Minerals with other non-medicated feeds and feed daily to provide 0.25 lb (¼ lb) to 0.5 lb (½ lb) of MoorMan's IGR Minerals per 100 lb of body weight per month. Start continuous feeding in the spring before horn flies appear on cattle and continue feeding until cold weather restricts horn fly activity.

STORAGE AND DISPOSAL

Do not contaminate water or food by storage or disposal.

STORAGE: Store in dry area. Do not contaminate with pesticides or fertilizer.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

LOT
NO.

IMMERSION METHOD - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 3 oz. of this product with 20 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

SPRAY/FOG METHOD - After cleaning, sanitize non-food contact surfaces with 600 ppm available chlorine by thoroughly mixing the product in a ratio of 3 oz. of this product with 20 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

SEWAGE & WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting wastewater disinfection.

1. Mixing: It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. Contacting: Upon flash mixing, the flow through the system must be maintained.
3. Dosage/Residual Control: Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should

*As the insect growth regulator, ALTOSID[®], a trademark of
ZOECON CORPORATION
US Pats. 3,904,662 & 3,912,815

Use this product only as specified on the back of the bag.

Keep out of reach of children.

CAUTION

Moorman Mfg. Co., General Office, Quincy, Illinois 62301-3496

EPA REG. NO. 1157-41 EPA Est. 1157-IL-1

650-Pr

Net Wt. 50 Lb

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ACCEPTED
AUG 28 1987
U.S. Dept. of Agriculture
Federal Insecticide, Fungicide, and Rodenticide Act
is delisted, for the pesticide
registered under
EPA Reg. No. 1157-4

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