

# **Type A Medicated Article**

**Do Not Feed Undiluted** 

Feedlot Cattle: A. For improved feed efficiency (cattle fed in confinement for slaughter).

- B. For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii.
- Dairy Cows: A. For increased milk production efficiency (production of marketable solids-corrected milk per unit of feed intake).

#### Pasture Cattle (Slaughter, stocker, feeder, and dairy and beef replacement heifers):

- A. For increased rate of weight gain.
- B. For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii.

#### Mature Reproducing Beef Cows:

- A. For improved feed efficiency when receiving supplemental feed.
- B. For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii.
- **Goats: A.** For the prevention of coccidiosis caused by Eimeria crandallis, Eimeria christenseni, and Eimeria ninakohlyakimovae in goats maintained in confinement.

#### Calves (excluding veal calves):

A. For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii.

**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 high concentrations of monensin has been fatal to cattle and could be fatal to goats. Must be thoroughly mixed in feeds before use. Do not exceed the levels of monensin recommended in the 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 concentration of monensin in the 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.

# YOU MAY NOTICE:

- Reduced voluntary feed intake in dairy cows fed monensin. This reduction increases with higher doses of monensin fed. Rule out monensin as the cause of reduced feed intake before attributing to other causes such as illness, feed management, or the environment.
- Reduced milk fat percentage in dairy cows fed monensin. This reduction increases with higher doses of monensin fed.
- Increased incidence and treatment of cystic ovaries and metritis in dairy cows fed monensin.
- Reduced conception rates, increased services per animal, and extended days open and corresponding calving intervals in dairy cows fed monensin.

Have a comprehensive and ongoing nutritional, reproductive and herd health program in place when feeding monensin to dairy cows.

**WARNING:** When mixing and handling **Rumensin 80**, use protective clothing, impervious gloves and a dust mask. Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse with water.

Avoid moisture and excessive heat. Not to be used after date printed at top of bag. \*Elanco  $^{\circ}$ , Rumensin  $^{\circ}$ , and the diagonal color bar are trademarks of Eli Lilly and Company.

Elanco Animal Health, A Division of Eli Lilly and Company, Indianapolis, IN 46285, USA

To report adverse effects, access medical information, or obtain additional product information, call 1-800-428-4441

# **Directions for use** Read All Directions Carefully Before Mixing and Feeding

# Active Drug Ingredients: Monensin Granulated, USP, 80 g monensin activity per pound.

#### I. Feedlot Cattle:

- A. For improved feed efficiency. Feeding Directions: Thoroughly mix Rumensin 80 to make one ton of complete feed that provides 5 to 30 g/ton monensin on a 90% dry matter basis (Table 1). Feed complete feed (5 to 30 g/ton) continuously to growing finishing beef cattle to provide not less than 50 nor more than 360 mg monensin per head per day.
- **B.** For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii. Feeding Directions: Feed continuously (10 to 30 g/ton) to provide 0.14 to 0.42 mg per pound of body weight per day, depending upon severity of challenge, up to a maximum of 360 mg of monensin per head per day.

#### II. Dairy Cows:

- A. For increased milk production efficiency (production of marketable solids-corrected milk per unit of feed intake). Feeding Directions: Feed continuously to dry and lactating dairy cows a total mixed ration ("complete feed") containing 11 to 22 g/ton monensin on a 100% dry matter basis (Table 2).
- III. Pasture Cattle (slaughter, stocker, feeder, and dairy and beef replacement heifers):
  - A. For increased rate of weight gain. Feeding Directions: Feed at the rate of not less than 50 nor more than 200 mg per head per day in not less than one pound of Type C Medicated Feed; or after the 5th day, feed at the rate of 400 mg per head per day every other day in not less than 2 pounds of Type C Medicated Feed. The monensin concentration in the Type C Medicated Feed must be between 25 and 400 grams per ton. During the first 5 days, cattle should receive no more than 100 mg per day contained in not less than 1 pound of feed. Do not self feed.

# B. For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii. Feeding Directions: Feed at a rate to provide 0.14 to 0.42 mg per pound body weight per day, depending upon severity of challenge, up to a maximum of 200 mg per head per day. The monensin concentration in Type C Medicated Feed must be between 25 and 400 g/ton. During the first 5 days, cattle should receive no more than 100 mg per day contained in not less than 1 pound of feed.

#### C. Free-Choice (Self-Fed) Supplements.

Free-choice supplements must be formulated to provide not less than 50 nor more than 200 mg monensin per head per day (manufacturers of Type C free-choice feeds from this product require a Medicated Feed Mill License Application approved by the FDA).

- IV. Mature Reproducing Beef Cows (on pasture or in dry lot):
- A. For improved feed efficiency when receiving supplemental feed. Feeding Directions: Feed continuously at a rate of 50 to 200 mg per head per day. Blend into a minimum of 1 pound of Type C Medicated Feed and either hand feed or mix into the total ration. Feed (other than the Type C Medicated Feed containing Rumensin) can be restricted to 95% (of normal requirements) when 50 mg of monensin activity is fed, and to 90% at 200 mg. Cows on pasture or in dry lot must receive a minimum of 1 pound of Type C Medicated Feed per head per day. Additionally, a minimum of 16 pounds (air-dry basis) of roughage such as silage, haylage, ammoniated straw, hay or equivalent feedstuffs should be fed in order to meet NRC recommendations for mature reproducing beef cows to gain 0.25 to 0.75 pounds per head per day. Standing, dried winter range forage may not be of adequate quality to result in improved efficiency when supplemented with Rumensin. During the first 5 days, pastured cattle should receive no more than 100 mg per day contained in not less than 1 pound of feed. Do not self feed.
- **B.** For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii. Feeding Directions: Feed at a rate of 0.14 to 0.42 mg per pound of body weight per day, depending upon severity of challenge, up to a maximum of 200 mg per head per day. During the first 5 days, pastured cattle should receive no more than 100 mg per day contained in not less than 1 pound of feed.
- V. Goats:
- A. For prevention of coccidiosis caused by Eimeria crandallis, Eimeria christenseni and Eimeria ninakohlyakimovae. Feeding Directions: Feed complete feed (20 g/ton) continuously to goats as the sole ration. Feed only to goats maintained in confinement.
- VI. Calves (excluding veal calves):
- A. For the prevention and control of coccidiosis due to Eimeria bovis and Eimeria zuernii. Feed at a rate of 0.14 to 1.00 mg per pound of body weight per day, depending upon severity of challenge, up to a maximum of 200 mg of monensin per head per day. The monensin concentration in Type C Medicated Feed must be between 10 and 200 g/ton.

# VII. Type B or C Medicated Feed Mixing Directions (Dry and Liquid):

# A. Dry or Liquid

Thoroughly mix the following amounts of **Rumensin 80** to make one ton of Type B or C Medicated Feed to provide the levels shown in Table 1. Dry Only - **An Intermediate blending step should be performed to insure an adequate mix.** 

# **B. Liquid Limitations**

**1.** The supplement pH must be between 4.3 - 7.1.

2. Stored liquid Type B Medicated Feeds containing **Rumensin:** For liquid feeds stored in recirculating tank systems: Recirculate immediately prior to use for not less than 10 minutes, moving not less than 1 percent of the tank contents per minute from the bottom of the tank to the top. Recirculate daily as described even when not used. • For liquid feeds stored in mechanical, air or other agitation-type tank systems: Agitate immediately prior to use for not less than 10 minutes creating a turbulence at the bottom of the tank that is visible at the top. Agitate daily as described even when not used.

**CAUTION:** Inadequate mixing (recirculation or agitation) of **monensin** Liquid Type B or C Medicated Feeds has resulted in increased **monensin** concentration which has been fatal to cattle and could be fatal to goats.• If feed refusals containing monensin are fed to other groups of cattle, the concentration of monensin in the refusals and amount of refusals fed should be taken into consideration to prevent monensin overdosing.

# Directions for Use: Read All Directions Carefully Before Mixing and Feeding

	centration in Medicated	Amount of Rumensin 80 Needed per ton		
Fe	ed <sup>a</sup>			
grams/ton	mg/lb feed	lbs.	Grams	
5	2.5	0.06	27	
20	10	0.25	113	
30	15	0.37	168	
400	200	5.0	2268	
1200	600	15.0	6804	

# Table 1. Mixing Directions for Feedlot Cattle Feeds

<sup>a</sup>90% dry matter basis

Amount of Ru	imens	in 80 to mak	а Тур	eВ	Amo	unt of Typ	be B to add t	to total mixed rati	on, lb
Desired monens	in						Desired	monensin concentra	tion,
concentration	ncentration Amount of Rumensin 80		Dry matter o	f	g/ton	in total mixed ratior	I <sub>C</sub>		
n Type B feed,	g/ton <sup>b</sup>	needed per te	on of Type	e B, Ib	total mixed i	ration, %	6 11 15		
					55		24.20	33.00	48.40
500		6.25			60		26.40	36.00	52.80
					65		28.60	39.00	57.20
					55		8.40	11.46	16.8
1440		18			60		9.17	12.50	18.33
					65		9.93	13.54	19.86
					55		2.7	3.7	5.4
4,500		56.25			60		2.9	4.0	5.9
					65		3.2	4.3	6.4
					55		1.5	2.1	3.0
8,000		100			60		1.7	2.3	3.3
					65		1.8	2.4	3.6
Amount of Type	B neede	ed to produce th	e total mix	ed ration v	vith desired level of	of monensin	is as follows:		
((Desir	ed level	of monensin in	total mixe	d ration g/t	on) X (% dry matt	er of total m	ixed ration)/g/to	n of monensin in Type	B) X 2000
			•		•		•	the total mixed ration	۱.
		iution would be	a ratio of 1		e B Medicated Fe	ea:Unmedic	ated Feed.		
<sup>C</sup> 100% dry matter	basis								

#### Net Weight lb on bag or bulk

#### Monensin Medicated Dairy Cattle Feed Type B Medicated Feed

#### For Use in Dairy Cattle Feeds Only Do Not Feed Undiluted

#### IMPORTANT: MUST BE THOROUGHLY MIXED INTO FEED BEFORE USE

For Increased Milk Production Efficiency (production of marketable solids-corrected milk per unit of feed intake).

#### **Active Drug Ingredient**

Monensin sodium	40 to 80,000 g/	ton*
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## **Guaranteed Analysis**

Crude Protein, not less than	%
Non-Protein Nitrogen (NPN) <sup>1</sup> , not more than	%
Crude Fat, not less than	
Crude Fiber, not more than	%
Acid Detergent Fiber, not more than	%
Calcium, not less than	0
Calcium, not more than	
Phosphorus, not less than	%
Salt <sup>2</sup> , not less than	%
Salt <sup>2</sup> , not more than	
Sodium <sup>3</sup> , not less than	%
Sodium <sup>3</sup> , not more than	%
Potassium, not less than	
Selenium, not less than	ppm
Vitamin A <sup>2,4</sup> , not less than	I.U./lb

<sup>1</sup>When added.

<sup>2</sup> If added

<sup>3</sup>Shall be guaranteed only when total sodium exceeds that furnished by the maximum salt guarantee. <sup>4</sup>Other than precursors of Vitamin A.

## Ingredients

Each ingredient must be named in accordance with the names and definitions adopted by the Association of American Feed Control Officials.

#### **Mixing Directions**

Thoroughly mix monensin Type B Medicated Feed into one ton of total mixed ration ("complete feed") according to the table below to obtain the correct concentration in the Type C Medicated Feed (11 to 22 g/ton monensin in total mixed ration, 100% dry matter basis). [Use only the portion of the table below that is applicable to the concentration of monensin in the Type B Medicated Feed you manufacture.]

	Desired monensin concentration,						
Amount of monensin	Dry matter of	g/ton of					
in Type B, g/ton <sup>b</sup>	total mixed ration, %	11	15	22			
	55	24.2	33.0	48.4			
500	60	26.4	36.0	52.8			
	65	28.6	39.0	57.2			
	55	2.7	3.7	5.4			
4500	60	2.9	4.0	5.9			
	65	3.2	4.3	6.4			
	55	2.0	2.8	4.0			
6,000	60	2.2	3.0	4.4			
	65	2.4	3.3	4.8			

#### Amount of Type B to add to total mixed ration<sup>a</sup>, lb

<sup>a</sup>Amount of Type B needed to produce the total mixed ration with desired level of monensin is as follows:

((Desired level of monensin in total mixed ration g/ton) X (% dry matter of total mixed ration)/g/ton of monensin in Type B) X 2000 <sup>b</sup>It is recommended that Type B feeds containing more than 1440 g/ton be further diluted before mixing into the total mixed ration.

 $^{\rm C}$  100% dry matter basis

#### Caution

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 feed undiluted. Feeding undiluted or mixing errors resulting in high concentrations of Monensin has been fatal to cattle. If feed refusals containing monensin are fed to other groups of cattle, the concentration of monensin in the refusals and amount of refusals fed should be taken into consideration to prevent monensin overdosing. Must be thoroughly mixed in feeds before use.

#### You May Notice

- Reduced voluntary feed intake in dairy cows fed monensin. This reduction increases with higher doses of monensin fed. Rule out monensin as the cause of reduced feed intake before attributing to other causes such as illness, feed management, or the environment.
- Reduced milk fat percentage in dairy cows fed monensin. This reduction increases with higher doses of monensin fed.
- Increased incidence and treatment of cystic ovaries and metritis in dairy cows fed monensin.
- Reduced conception rates, increased services per animal, and extended days open and corresponding calving intervals in dairy cows fed monensin.

Have a comprehensive and ongoing nutritional, reproductive and herd health program in place when feeding monensin to dairy cows.

#### Warning

A withdrawal time has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

#### Manufactured By

Blue Bird Feed Mill Any town, USA 12345 \*Final printed label on formulated Type B medicated feed must bear a single drug concentration.

#### Net Weight lb on bag or bulk

#### Monensin Medicated Dairy Cattle Feed Liquid Type B Medicated Feed

## For Use in Dairy Cattle Feeds Only Do Not Feed Undiluted

#### IMPORTANT: MUST BE THOROUGHLY MIXED INTO FEED BEFORE USE

For Increased Milk Production Efficiency (production of marketable solids-corrected milk per unit of feed intake)

## **Active Drug Ingredient**

Monensin sodium ......40 to 1440 g/ton\*

#### **Guaranteed Analysis**

Crude Protein, not less than	
Non-Protein Nitrogen (NPN) <sup>1</sup> , not more than	%
Crude Fat, not less than	%
Crude Fiber, not more than	%
Acid Detergent Fiber, not more than	
Calcium, not less than	%
Calcium, not more than	
Phosphorus, not less than	%
Salt <sup>2</sup> , not less than	%
Salt <sup>2</sup> , not more than	%
Sodium <sup>3</sup> , not less than	%
Sodium <sup>3</sup> , not more than	%
Potassium, not less than	%
Selenium, not less than	ppm
Vitamin A <sup>2,4</sup> , not less than	I.U./lb
рН	

<sup>1</sup>When added.

<sup>2</sup> If added

<sup>3</sup>Shall be guaranteed only when total sodium exceeds that furnished by the maximum salt guarantee. <sup>4</sup>Other than precursors of Vitamin A.

#### Ingredients

Each ingredient must be named in accordance with the names and definitions adopted by the Association of American Feed Control Officials.

#### **Mixing Directions**

Thoroughly mix monensin Type B Medicated Feed into one ton of total mixed ration ("complete feed") according to the table below to obtain the correct concentration in the Type C Medicated Feed (11 to 22 g/ton monensin in total mixed ration, 100% dry matter basis). [Use only the portion of the table below that is applicable to the concentration of monensin in the Type B Medicated Feed you manufacture.]

For liquid feeds stored in recirculating tank systems: Recirculate immediately prior to use for not less than 10 minutes, moving not less than 1 percent of the tank contents per minute from the bottom of the tank to the top. Recirculate daily as described even when not used.

For liquid feeds stored in mechanical, air or other agitation-type tank systems: Agitate immediately prior to use for not less than 10 minutes, creating a turbulence at the bottom of the tank that is visible at the top. Agitate daily as described even when not used.

	Desired monensin concentration,						
Amount of monensin	Dry matter of	g/ton					
in Type B, g/ton	total mixed ration, %	11	15	22			
	55	121.0	165.0	242.0			
100	60	132.0	180.0	264.0			
	65	143.0	195.0	286.0			
	55	24.2	33.0	48.4			
500	60	26.4	36.0	52.8			
	65	28.6	39.0	57.2			
	55	8.4	11.5	16.8			
1,440	60	9.2	12.5	18.3			
	65	9.9	13.5	19.9			

Amount of Type B to add to total mixed ration<sup>a</sup>, lb

<sup>a</sup>Amount of Type B needed to produce the total mixed ration with desired level of monensin is as follows:

((Desired level of monensin in total mixed ration, g/ton) X (% dry matter of total mixed ration)/g/ton of monensin in Type B) X 2000 <sup>b</sup> 100% dry matter basis

#### Caution

Inadequate mixing or agitation of monensin liquid type B medicated feed has resulted in increased monensin concentration, which has been fatal to cattle. 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 feed undiluted. Feeding undiluted or mixing errors resulting in high concentrations of monensin has been fatal to cattle. If feed refusals containing monensin are fed to other groups of cattle, the concentration of monensin in the refusals and amount of refusals fed should be taken into consideration to prevent monensin overdosing. Must be thoroughly mixed in feeds before use.

## You May Notice

- Reduced voluntary feed intake in dairy cows fed monensin. This reduction increases with higher doses of monensin fed. Rule out monensin as the cause of reduced feed intake before attributing to other causes such as illness, feed management, or the environment.
- Reduced milk fat percentage in dairy cows fed monensin. This reduction increases with higher doses of monensin fed.
- Increased incidence and treatment of cystic ovaries and metritis in dairy cows fed monensin.
- Reduced conception rates, increased services per animal, and extended days open and corresponding calving intervals in dairy cows fed monensin.

Have a comprehensive and ongoing nutritional, reproductive and herd health program in place when feeding monensin to dairy cows.

#### Warning

A withdrawal time has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

## Manufactured By

Blue Bird Feed Mill

#### Any town, USA 12345

#### Expiration: 8 weeks after manufacture

\*Final printed label on formulated Type B medicated feed must bear a single drug concentration.

#### Net Weight lb on bag or bulk

# Monensin Medicated Dairy Cattle Feed Type C Medicated Feed

#### For Use in Dairy Cattle Feeds Only

For Increased Milk Production Efficiency (production of marketable solids-corrected milk per unit of feed intake).

## **Active Drug Ingredient**

Monensin sodium	11	to	22	g/ton	*
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## **Guaranteed Analysis**

Crude Protein, not less than	
Non-Protein Nitrogen (NPN) <sup>1</sup> , not more than	%
Crude Fat, not less than	%
Crude Fiber, not more than	%
Acid Detergent Fiber, not more than	%
Calcium, not less than	%
Calcium, not more than	%
Phosphorus, not less than	
Salt <sup>2</sup> , not less than	%
Salt <sup>2</sup> , not more than	
Sodium <sup>3</sup> , not less than	%
Sodium <sup>3</sup> , not more than	%
Potassium, not less than	
Selenium, not less than	ppm
Vitamin A <sup>2,4</sup> , not less than	

<sup>1</sup>When added.

<sup>2</sup> If added

<sup>3</sup>Shall be guaranteed only when total sodium exceeds that furnished by the maximum salt guarantee. <sup>4</sup>Other than precursors of Vitamin A.

#### Ingredients

Each ingredient must be named in accordance with the names and definitions adopted by the Association of American Feed Control Officials.

## **Feeding Directions**

Feed continuously to dry and lactating dairy cows a total mixed ration ("complete feed") containing 11 to 22 g/ton monensin on a 100% dry matter basis.

#### Caution

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. Feeding undiluted or mixing errors resulting in high concentrations of monensin has been fatal to cattle. If feed refusals containing monensin are fed to other groups of cattle, the concentration of monensin in the refusals and amount of refusals fed should be taken into consideration to prevent monensin overdosing. Must be thoroughly mixed in feeds before use. A withdrawal time has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

#### You May Notice

- Reduced voluntary feed intake in dairy cows fed monensin. This reduction increases with higher doses of monensin fed. Rule out monensin as the cause of reduced feed intake before attributing to other causes such as illness, feed management, or the environment.
- Reduced milk fat percentage in dairy cows fed monensin. This reduction increases with higher doses of monensin fed.
- Increased incidence and treatment of cystic ovaries and metritis in dairy cows fed monensin.
- Reduced conception rates, increased services per animal, and extended days open and corresponding calving intervals in dairy cows fed monensin.

Have a comprehensive and ongoing nutritional, reproductive and herd health program in place when feeding monensin to dairy cows.

#### Warning

A withdrawal time has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

## **Manufactured By**

# Blue Bird Feed Mill

## Any town, USA 12345

Expiration Date: 30 days after manufacture

\*Final printed label on formulated Type C medicated feed must bear a single drug concentration.