

2025

Commercial Feed Label Guarantee Guidance

NOTE: The California Department of Food and Agriculture's (CDFA) Safe Animal Feed Education Program (SAFE) guidance materials are provided for educational purposes only and do not guarantee adequacy of procedures or compliance with regulations.

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Introduction

The details of a commercial feed label are important in communicating the quality, composition, and intended safe use of feed. The consumer-buyer expects the feed label to provide meaningful information regarding the nutrient composition of the feed. Small livestock operations, large livestock operations, horse owners, and 4-H/FFA youth rely on the feed label guaranteed analysis to balance the nutritional needs of their livestock.

There are numerous requirements for commercial feed labels regulated by the Commercial Feed Regulatory Program (CFRP) under the California commercial feed law (Food and Agricultural Code, Division 7, Chapter 6) and regulations (California Code of Regulations, Title 3, Division 4, Chapter 2, Subchapter 2). The complete text of <u>California's commercial feed law</u> and regulations is available on CFRP's website. For ease of reference, the Safe Animal Feed Education Program (SAFE) has created three additional guides summarizing requirements for feed labels in California:

- California Commercial Feed Labeling Guide
- Label Review Checklist
- SAFE Medicated Feed Label Guidance

One of the basic requirements of a commercial feed label is a guaranteed analysis. The guaranteed analysis ensures that consumer-buyers can rely on the nutrient composition stated by the seller when purchasing feed.

This document provides SAFE's recommended guidance to help feed manufacturers label products with a guaranteed analysis that is compliant with law and regulations and meaningful to the consumer-buyer.

Definitions

Commercial feed includes all materials which are intended for use as feed or for mixing in feed except preparations which are manufactured and distributed for feeding to domestic pets, such as dogs, cats, and birds.

Formula feed means two or more ingredients, proportioned, mixed, and processed according to specifications.

Premix means a concentrated uniform mixture of one or more micro-ingredients, such as vitamins and minerals, and diluent and/or carrier which must be diluted through further manufacturing prior to feeding. Premixes are used to facilitate uniform dispersion of the micro-ingredients in a large mix.



Label means a display of written, printed, or graphic matter upon, or affixed to, the container in which a commercial feed is distributed, or on the invoice or delivery slip which accompanies a commercial feed.

Consumer-buyer means any person not licensed with the department who purchases commercial feed from a manufacturer or distributor of such feed for use in feeding animals.

What to Include in the Guaranteed Analysis

All guarantees shall apply to the whole feed rather than any single ingredient and shall be based on a recognized laboratory method of determination. Misleading and indefinite statements concerning ingredients and value of ingredients of the feed are prohibited, such as the terms "better," "high," "increased," "greater," "low," "decreased," and "less," and all guarantees shall be stated in percent unless expressly provided to the contrary. All guarantees must be on an "as-is/ as-fed" basis, NOT a 100% dry matter basis.

The basic requirements of a guaranteed analysis are outlined in the <u>California Commercial</u> <u>Feed Labeling Guide</u> and include:

- Minimum percentage of crude protein.
- Minimum percentage of crude fat.
- Maximum percentage of crude fiber.
- Maximum percentage of ash.
 - Ash may be substituted with minimum and maximum percentage of calcium, minimum percentage of phosphorous, and maximum percentage of sodium (or salt).
 - If ash is over 9.0 percent, then the above-mentioned shall also be guaranteed on the label (if there are ingredients added which contain those nutrients).
- Maximum percentage of moisture or minimum percentage of dry matter when moisture exceeds 15.0 percent.

Labeling for Special Purposes

There may be additional or alternative requirements for the guaranteed analysis depending on the composition of the feed, including, but not limited to:

 Single ingredient products often require additional guarantees as specified in the ingredient definition provided in <u>California Code of Regulations, Title 3, Division 4,</u> <u>Chapter 2, Subchapter 2, Article 14 Recognized Official Names</u>. However, a single ingredient is not required to guarantee maximum percentage of ash unless it is specified in the definition. (Example Label 1)



- Maximum percentage of sodium must be guaranteed if more than 0.5 percent sodium is added. (Example Label 2)
- Minimum and maximum parts per million (ppm) guarantee of selenium is required when the feed contains more than 0.3 ppm added selenium. **(Example Label 2)**
- Formula feed containing non-protein nitrogen (NPN) must include the maximum percentage of equivalent crude protein from NPN immediately below the guarantee for minimum crude protein. (Example Label 2)
- When the feed is sold primarily for drug, mineral, or vitamin content, the required guarantees may be replaced with guarantees pertinent to the special purpose of the feed. (Example Label 2)
- Numerical value shall be guaranteed for any special quality claimed, including vitamin potency, amino acid content, or special mineral content. **(Example Label 3)**
- Liquid feed supplements (molasses based) shall include the minimum percentage of total sugar expressed as invert and maximum percentage of moisture or the minimum percentage of dry matter. Guarantees for crude fat or crude fiber are not required in liquid feed when there is less than 1 percent of either constituent. (Example Label 3)
- The absolute quantity of each drug must be guaranteed and shall be guaranteed in milligrams per pound when the statement of dosage is in milligrams. (Example Label 3)

Species Specific Guarantees

In addition to the basic guarantees required under the California commercial feed laws and regulations, it is common for feed manufacturers to voluntarily include guarantees which elevate marketing of the product and provide information desired by consumers. SAFE encourages the practice of guaranteeing all relevant nutritional components of the formula feed on the label. The Association of American Feed Control Officials (AAFCO) provides guidance on what nutritional components to guarantee for each species and class of animal **(Table 1)** in their <u>Feed Labeling Guide</u>. Many states have adopted these label guarantee requirements.

Table 1. National guidelines for nutrient guarantees by species according to AAFCO Feed Labeling Guide, with adjustments for compliance with California's commercial feed law and regulations*

				Con	nplete a	and Su	pplem	ent Fee	eds ^a			Mine	eral Fe	eds ^a
Nutrient	Swine	Poultry	Beef	Dairy	Equine	Goat	Sheep	Duck/ Geese	Fish	Rabbit	Veal/Herd Milk Replacer	Beef	Dairy	Equine
Crude Protein, min %	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
NPN, max %	No	No	b	b	No	b	b	No	No	No	No	No	No	No
Lysine, min %	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
Methionine, min %	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No
Crude Fat, min %	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Crude Fiber, max %	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	g	Yes	No	No	No
ADF, max %	No	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No
NDF, max %	No	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No
Calcium, min and max %	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	b	b	Yes
Phosphorus, min %	Yes	Yes	Yes	Yes	Yes	Yes	Yes	b	Yes	Yes	Yes	b	b	Yes
Salt, min and max %	b	b	b	No	No	b	b	с	No	b	No	b	b	b
Sodium, min and max %	С	С	с	No	No	с	С	No	No	С	No	с	С	Yes
Magnesium, min %	No	No	No	No	No	No	No	No	No	No	No	b	b	No
Potassium, min %	No	No	Yes	No	No	No	No	No	No	No	No	b	b	No
Copper, min ppm (d)	No	No	No	No	b	е	f	No	No	No	No	b	No	b
Selenium, min ppm (d)(h)*	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	b	b	Yes
Zinc, min ppm (d)	No	No	No	No	Yes	No	No	No	No	No	No	b	No	Yes
Vitamin A, min IU/Ib	No	No	b	b	b	b	b	No	No	b	b	b	b	b

a: Typically, if the feed is not intended or represented to be a principal source of the nutrient then a guarantee is not required but can be voluntarily provided by the guarantor.

b: Guarantee required only when nutrient source is added, except when the feed is intended, represented, or serves as a principal source of the nutrient.

c: Sodium guarantee required only when total sodium exceeds that furnished by the maximum salt guarantee.

d: Guarantee shall be stated in ppm when less than 10,000 ppm and in percentage when concentration is 10,000 ppm (1%) or greater.

e: Minimum and maximum in parts per million (ppm) (if added).

f: Copper minimum and maximum guarantee for sheep required when added or level exceeds 20 ppm.

g: Rabbit feeds require minimum and maximum crude fiber guarantees (range not to exceed 5.0 units).

h: *Minimum and maximum required when more than 0.3 ppm selenium is added.

*Ash is not included in this table. If the label does not include guarantees for calcium, phosphorus, and sodium or salt, then an ash maximum percentage guarantee shall be included on California feed labels.



Additional Guarantee Guidance from AAFCO

The AAFCO Feed Labeling Guide also provides minimum guidelines for guarantees of grain mixtures (with or without molasses) and feeds other than those for specific species described in Table 1. These guidelines are predominantly consistent with California's commercial feed laws and regulations to include crude protein, crude fat, crude fiber, non-protein nitrogen (if added), total sugars as invert (molasses products), calcium, phosphorus, and salt (if added). Although AAFCO does not include an ash guarantee, the requirement for calcium, phosphorus, and salt would be sufficient in lieu of an ash guarantee.

The AAFCO Feed Labeling Guide is consistent with California's commercial feed laws and regulations in recognizing that guarantees such as crude protein, crude fat, crude fiber, vitamins, and minerals <u>are not required when the commercial feed is intended for</u> <u>purposes other than to furnish one or more of those nutrients, or they are of minor</u> <u>significance relative to the primary purpose of the feed, or the feed is neither formulated</u> <u>for nor represented in any manner to supplement the nutrient or serve as a principal</u> <u>source of the nutrient.</u>

The AAFCO Feed Labeling Guide provides additional guidelines which are not specified in California's commercial feed law and regulations, including:

- A commercial feed intended to provide a specialized nutritional source for use in the manufacture of other feeds (e.g., vitamin/mineral premix, base mix, etc.), must state its intended purpose and guarantee those nutrients relevant to such stated purpose.
- Minimum and maximum percentage of total sodium only when sodium exceeds that furnished by the salt guarantee.
- Total sugars as invert for products being sold primarily for their sugar content.
- Viable lactic acid producing microorganisms for use in silages.
- Guarantees for microorganisms shall be stated in colony forming units (CFU) per units consistent with directions for use, and the species shall be listed in order of predominance.
- Guarantees for enzymes shall be stated in units of enzymatic activity per units consistent with the directions for use, and the source organism shall be specified.
- Guarantees for dietary starch, sugars, and fructans shall be guaranteed as maximum percentage if the labeling contains a claim in any manner.



Guaranteed Analysis Challenges

What is a Guarantee by Law?

The guaranteed analysis must accurately represent the feed and is subject to surveillance sampling, analysis, and enforcement action by CFRP. The guaranteed analysis section of the feed label is not only communicating the intended composition of the feed to the consumer but is also ensuring truth and accuracy in the labeling under law.

A feed sample analysis which fails to the meet the guarantees stated on the label will be in violation of California Code of Regulations, Title 3, Section 2696(d); "All guarantees stated on the label shall accurately represent the composition and/or quality of the commercial feed."

A feed sample analysis in egregious violation may result in the commercial feed being considered adulterated pursuant to Food and Agricultural Code (FAC) Section 15041(c); **"if its composition differs from, or quality falls below, that which it is purported or is represented to possess by its labeling."** CFRP determines appropriate enforcement action based on several factors, including severity of the discrepancy and risk to feed safety.

A commercial feed is considered <u>mislabeled</u> "**if its labeling is false or misleading in any particular**" (FAC 15031(a)). It would be false and misleading to label a feed in a manner that does not represent the formulation. A feed label could meet all minimum requirements and meet the guarantees upon sample analysis, yet also be mislabeled due to the following misleading guaranteed analysis labeling practices:

- Setting a minimum guarantee excessively low in comparison to the feed's actual formulated target.
- Setting a maximum guarantee excessively high in comparison the feed's actual formulated target.
- Setting a minimum and maximum guarantee with an excessive range around the feed's actual formulated target.

It is equally as important to ensure label guarantees are accurate to the formulated target, as it is important to ensure the final product is manufactured to meet the label specifications.



What is "Normal" Variation in Feed?

In contrast, label guarantees are required as minimum and/or maximum for a reason. There are numerous sources of variation which could impact the final composition of a formula feed, and therefore the manufacturer is not expected to guarantee at the exact formulated level. It is acceptable to adjust the label guarantee to account for minor variation due to batching and ingredient sourcing. However, not all variation is considered "normal." Much of the potential variation in manufacturing formula feeds can be addressed with a well-executed quality assurance plan. For example, agricultural commodities such as corn and soybean meal undoubtedly vary between years, months, and supplier origin. In one study, the crude protein of corn and soybean meal ranged from 5.3%-8.3% and 44.1%-51.5%, respectively (Alhotan et al., 2014).

The best recommendation to account for variability in ingredients is to conduct routine sampling and testing of incoming ingredients to have accurate values as well as an understanding of the variability that may exist between lots of the ingredients.

In addition, equipment limitations or manufacturing errors in batching and mixing can contribute to variability within one lot of feed. The manufacturing system should be able to produce within batch variability of less than 10% coefficient of variation (Herrman and Behnke, 1994). More information can be found in the <u>SAFE Guidance on Testing Mixer</u> <u>Efficiency</u>. It is the responsibility of the feed manufacturer to ensure ingredient specifications are accurate, equipment performance allows for an efficient mix consistency, and employees are trained to avoid errors in batching.

Additional sources of variation include the random act of sampling procedure and normal laboratory analytical variation. Variation due to sampling is minimized through proven and effective sampling methods. This is the reason the CFRP only obtains official samples using official sampling methods. In addition, when interpreting the lab analyses, the CFRP considers the known analytical variation. For these reasons, a label guarantee should not factor in excess variability for the purposes of analytical variation or sampling.

Despite a well-executed quality assurance plan, there can still be some "normal" variation from the formula specification between batches. Therefore, setting label guarantees requires balance between accurately communicating the intended formulation of the feed to the consumer, and allowing for *normal* variation around that target.



How to Set the Guaranteed Minimum and/or Maximum Values

A meaningful and lawful label guarantee should be close enough to the intended formula specification that it truly acts as a guarantee of the manufacturer's quality assurance plan. The following sections will provide guidelines in setting label guarantees for the various nutritional components of a feed label guaranteed analysis. The tables below include the units in which the nutrient should be guaranteed (%, ppm, IU/Ib., etc.), when to include the guaranteed, and recommendations for setting the guaranteed value(s).

Note: In addition to feed and food safety considerations, SAFE analyzed label and lab analyses of all CFRP samples obtained in 2023 to determine that the following recommendations were reasonably attainable by industry.

Analysis	Guaranteed Units	Required on Label?	Recommendations
Crude Protein (CP)	Minimum %	Yes, except for special purpose feeds which have insignificant protein.	The minimum guarantee should be within 2 percentage points of the expected composition. In feeds over 30% CP up to 6 percentage points may be acceptable.
Non-protein Nitrogen (NPN)	Maximum % Equivalent CP from NPN	Only when added, directly beneath the CP guarantee.	The maximum % equivalent CP from NPN should not exceed the minimum CP% guarantee. In feeds which only source of CP is NPN, the maximum % CP equivalent from NPN should not exceed the minimum CP% by more than 6 percentage points.
Crude Fat (Fat)	Minimum %	Yes, except for special purpose feed which have insignificant fat.	The minimum guarantee should be within 2 percentage points of the expected composition. In feeds over 20% Fat, up to 6 percentage points may be acceptable.

Protein, Fat, Fiber, Ash, and Moisture



Analysis	Guaranteed Units	Required on Label?	Recommendations
Crude Fiber (CF)	Maximum %	Yes, except for special purpose feeds which have insignificant fiber.	The maximum guarantee should be within 5 percentage points of the formulated target of complete feeds. There is no recommendation for CF in ingredients or high fiber by-product mixes. See Table 1 footnote (g) for rabbit food requirements.
Ash	Maximum %	Yes in formula feeds, except if Ca, Na, and P guarantees are used in lieu of.	No recommendation.
Moisture	Maximum %, or Minimum % of Dry Matter	Required when moisture is 15% or greater.	No recommendation.

Minerals, Vitamins, and Amino Acids

Analysis	Guaranteed Units	Required on Label?	Recommendations
Calcium	m Minimum and Maximum %	,	When the minimum is below 2.5%, the maximum should not exceed the minimum by more than 0.5 percentage point.
			When the minimum is between 2.5% and 5.0%, the maximum should not exceed the minimum by more than 1 percentage point.
			When the minimum is over 5.0%, the maximum should not exceed the minimum by more than 20% of the minimum, and in no case by more than 5 percentage points.



Analysis	Guaranteed Units	Required on Label?	Recommendations
Phosphorus	Minimum %	Yes, when Ash is over 9%, and recommended for most species (Table 1).	When the minimum is below 2.5%, the expected composition should not exceed the minimum by more than 0.5 percentage point.
			When the minimum is between 2.5% and 5.0%, the expected composition should not exceed the minimum by more than 1 percentage point.
			When the minimum is over 5.0%, the expected composition should not exceed the minimum by more than 20% of the minimum, and in no case by more than 5 percentage points.
Sodium, Salt	Minimum and Maximum %	Yes, when Ash is over 9% or added sodium is over 0.5%, and as recommended in Table 1. See Table 1 footnote (c).	When the minimum is below 2.5%, the maximum should not exceed the minimum by more than 0.5 percentage point.
			When the minimum is between 2.5% and 5.0%, the maximum should not exceed the minimum by more than 1 percentage point.
		(~).	When the minimum is over 5.0%, the maximum should not exceed the minimum by more than 20% of the minimum, and in no case by more than 5 percentage points.



Analysis	Guaranteed Units	Required on Label?	Recommendations
Selenium	Minimum and As Maximum recommended ppm Table 1. When more than 0.3		When the selenium minimum guarantee is under 1 ppm, the maximum should not exceed the minimum by more than 0.5 ppm.
		ppm is added, then minimum and maximum is required.	When the selenium minimum guarantee is between 1 ppm and 5 ppm, the maximum should not exceed the minimum by more than 1 ppm.
			When the selenium minimum guarantee is between 5 ppm and 25 ppm, the maximum should not exceed the minimum by more than 2.5 ppm.
			When the selenium minimum guarantee is between 25 and 50 ppm, the maximum should not exceed the minimum by more than 5 ppm.
			When the selenium minimum guarantee is over 50 ppm the maximum should not exceed the minimum by more than 10% of the minimum.
Potassium, Magnesium	Minimum %	As recommended in Table 1.	When the minimum is below 2.5%, the expected composition should not exceed the minimum by more than 0.5 percentage point.
			When the minimum is between 2.5% and 5.0%, the expected composition should not exceed the minimum by more than 1 percentage point.
			When the minimum is over 5.0%, the expected composition should not exceed the minimum by more than 20% of the minimum, and in no case by more than 5 percentage points.



Analysis	Guaranteed Units	Required on Label?	Recommendations
Zinc, Copper	Minimum ppm	As recommended in Table 1.	When the minimum guarantee is under 1 ppm, the expected composition should not exceed the minimum by more than 0.5 ppm.
			When the minimum guarantee is between 1 ppm and 5 ppm, the expected composition should not exceed the minimum by more than 1 ppm.
			When the minimum guarantee is between 5 ppm and 25 ppm, the expected composition should not exceed the minimum by more than 2.5 ppm.
			When the minimum guarantee is between 25 and 50 ppm, the expected composition should not exceed the minimum by more than 5 ppm.
			When the minimum guarantee is over 50 ppm the expected composition should not exceed the minimum by more than 10% of the minimum.



Analysis	Guaranteed Units	Required on Label?	Recommendations	
Manganese, Iron, Chromium, Cobalt,	Minimum ppm when concentration is less than	Footnote 1	When the minimum guarantee is under 1 ppm, the expected composition should not exceed the minimum by more than 0.5 ppm.	
Molybdenum, Sulfur, and all other minerals	10,000 ppm, or as percentage if concentration is greater than 10,000		When the minimum guarantee is between 1 ppm and 5 ppm, the expected composition should not exceed the minimum by more than 1 ppm.	
	ppm (1%).	-		When the minimum guarantee is between 5 ppm and 25 ppm, the expected composition should not exceed the minimum by more than 2.5 ppm.
				When the minimum guarantee is between 25 and 50 ppm, the expected composition should not exceed the minimum by more than 5 ppm.
			When the minimum guarantee is over 50 ppm the expected composition should not exceed the minimum by more than 10% of the minimum.	
Vitamin A	Minimum IU/lb	As recommended in Table 1	The expected composition should not exceed the minimum guarantee by more than 10% of the minimum.	
Vitamin D, Vitamin E	Minimum IU/Ib	Footnote 1	The expected composition should not exceed the minimum guarantee by more than 10% of the minimum.	
Lysine, Methionine	Minimum %	As recommended in Table 1	No recommendation.	

Footnote 1: SAFE recommends based on AAFCO guidelines; when vitamins and/or minerals are included in a feed intended for the further manufacture of others feed and/or intended to provide a specialized nutritional source (e.g., premix or supplement), an intended purpose and guarantee of those vitamins and/or minerals relevant to such purpose should be stated.



Example Labels

Example Label 1. Labels of various single ingredient products with guaranteed specifications required in the definition. Items marked with (*) denote specific label requirements of <u>California Code of Regulations</u>, <u>Title 3</u>, <u>Division 4</u>, <u>Chapter 2</u>, <u>Subchapter 2</u>, <u>Article 14 Recognized Official Names</u>.

Vegetable Oil

*Total Fatty Acids (Min) 90%
*Unsaponifiable Matter (Max)2%
*Insoluble Impurities (Max)1%
*Free Fatty Acids (Max)1%
*Moisture (Max)0.5%

Whole Cottonseed

Crude Protein (Min)	.15%
Crude Fiber (Max)	.30%
*Moisture (Max)	.13%
*Ash (Max)	7%
Crude Fat (Min)	. 14%
*Free Fatty Acids in Oil (Max)	. 15%
*Foreign Material (Max)	2%

Almond Hulls

Crude Protein (Min) 3.5%
Crude Fat (Min) 1.5%
*Crude Fiber (Max) 15%
*Ash (Max)9%
*Moisture (Max) 13%

Dried Buttermilk

Crude Protein (Min)3	0%
*Moisture (Max)	8%
*Ash (Max)1	3%
*Milk Fat (Min)5% Using the Roese-Gottlieb method	

Condensed Whey Permeate

*Total Whey Product Solids (Min)	12%
*Crude Protein (Min)	1%
*Equivalent Crude Protein from Non-Protein Nitrogen (Max)	0.5%
*Lactose (Min)	25%
*Ash (Max)	5%
Moisture (Max)	



Example Label 2. Formula feed which contains selenium added over 0.3 ppm, non-protein nitrogen, sodium over 0.5 %, sodium greater than value furnished from salt, and sold primarily for mineral and vitamin content.

123 Beef Supplement For beef cattle	
Guaranteed Analysis	
Crude Protein (Min)	
Crude Protein (Max) Equivalent from Non-protein Nitroger	า 15.0%
Calcium (Min)	
Calcium (Max)	
Phosphorous (Min)	
Salt (Min)	
Salt (Max)	
Sodiùm (Ńax)	
Magnesium (Min)	
Potassium (Min)	
Zinc (Min)	
Copper (Min)	
Selenium (Mín)	
Selenium (Max)	
Vitamin A (Min)1	00.000 IU/Ib

Ingredients: dicalcium phosphate, monocalcium phosphate, salt, sodium bicarbonate, ground almond shell (max 20%), urea, manganous oxide, zinc oxide, ferrous sulfate, magnesium phosphate, copper sulfate, vitamin A supplement, cholecalciferol (source of Vitamin D3), iron oxide, choline chloride, biotin, sodium selenite, thiamine mononitrate, copper oxide, manganese sulfate, vitamin E supplement, mineral oil.

Feeding Directions: Directions for use must be followed carefully. Feed at a rate of 1 lb. per head per day. This feed contains 4.5 ppm selenium. Do not feed as more than 6.5% of the total daily ration to maintain 0.3 ppm selenium in the total diet. Consumption should be carefully controlled until animals become adjusted to the feed. Additional care should be exercised with starved, stressed or debilitated animals.

WARNING: EXCESSIVE CONSUMPTION MAY RESULT IN ADVERSE TOXIC REACTION USE ONLY AS DIRECTED

Caution: Follow label directions: Feeding added selenium at levels in excess of 0.3 ppm in the total diet is prohibited.

Caution: CONSUMPTION OF THIS PRODUCT BY SHEEP MAY RESULT IN COPPER TOXICITY.

Manufactured By: ABC Milling 123 Somewhere St. Nowhere, CA 95601 50 lbs. (22.6 kg)



Example Label 3. Liquid medicated feed with special qualities claimed.

Product No.345 with Vitamins and Minerals MEDICATED			
For increased milk production efficiency (production of man feed intake) in dairy cows.			
Active Drug Ingredient: Monensin (as monensin sodi	um)220 g/ton		
Guaranteed Analysis			
Crude Protein minimum			
Calcium minimum			
Calcium maximum			
Sodium maximum			
Phosphorous minimum			
Zinc minimum	100 ppm		
Copper minimum			
Vitamin A			
Vitamin E			
Vitamin D			
Total Sugar (as invert) minimum			
Moisture maximum			
Ingredients: Cane molasses, condensed whey solubles,			

Ingredients: Cane molasses, condensed whey solubles, ground limestone, sodium hydroxide, zinc sulfate, xantham gum, ethylenediamine dihydroiodide, cobalt sulfate, copper betain, manganese methionine complex, manganese sulfate, zinc methionine complex, Vitamin E supplement, Vitamin A supplement, Vitamin D3 supplement.

Directions for Use...... insert adequate directions for use.

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 feed undiluted. 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.

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 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 period has not been established for this monensin in pre-ruminating calves. Do not use monensin in calves to be processed for veal.

Manufactured By: ABC Milling 123 Somewhere St. Nowhere, CA 95601 50 lbs. (22.6 kg)



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Additional Resources

AAFCO Feed Labeling Guide

California Commercial Feed Labeling Guide

Label Review Checklist

SAFE Medicated Feed Label Guidance

California Feed Laws and Regulations