NSN-8710-00-900-1230

NIH SPECIFICATION
Open Formula Guinea Pig Diet (NIH-34M)

Ingredients

Ingredients	Percentage by weight
Alfalfa Meal (17% protein)	35.00
Soybean Meal (49% protein)	12.00
Ground whole oats	25.25
Ground whole wheat	23.60
Soybean oil	1.50
Dicalcium phosphate	0.50
Calcium carbonate	1.00
Salt	0.75
Premixes	0.40
	100.00

Ingredients shall be ground to pass through a U.S. Standard Screen No. 16 prior to mixing.

Vitamin Fortification Per Ton (2,000 lbs.) of Finished Product

Vitamin	Amount	Source
A	6,000,000 IU	Stabilized Vitamin A Palmitate or acetate
D_3	2,000,000 IU	D-Activated animal sterol
K	4.5 g	Menadione activity
dl Alpha-tocopheryl acetate	20.0 g	
Biotin	0.2 g	
Choline	480.0 g	Choline chloride
Folic Acid	4.4 g	
Niacin	10.0 g	
Pantothenic Acid	10.0 g	d Calcium panto-thenate
Pyridoxine	4.5 g	Pyridoxine hydro-chloride
Riboflavin supplement	3.0 g	
Thiamin	4.0 g	Thiamin mono-nitrate
B_{12} supplement	10,000 mcg.	
Vitamin C	900 g[1]	Coated ascorbic acid
Methionine-hydroxyanalogue	454 g	

[1]Contractors are authorized to adjust this value so that vitamin C concentration in the diet conforms to the Nutrient Standards of this Specification after the manufacturing process is complete.

Mineral Fortification Per Ton (2,000 lbs.) of Finished Product

Mineral	Amount	Source
Cobalt	1.4 g.	Cobalt carbonate
Copper	6 g.	Copper sulfate
Manganese	36 g.	Manganese oxide
Zinc	18 g.	Zinc oxide
Iodine	1 g.	Calcium iodate

These concentrations of vitamins and minerals shall be added to the ration via two separate (vitamin and mineral) premixes. For the mineral fortification, the actual amount of each element required is specified. Therefore, the contractor shall adjust the amount of each compound used in the premix according to its mineral concentration.

Nutrient Standards

Micro Analysis - At the time of manufacturing the total calculated concentration of nutrients in the ration from natural ingredients and from the fortifications shall be as follows:

Crude protein	%	Minimum	17.0
Crude fat	%	Minimum	3.4
Crude fiber	%	Maximum	13.5
Ash	%	Maximum	8.5

Amino Acids (% of total diet)	Minimum
Arginine	.90
Lysine	.80
Methionine	.25
Cystine	.25
Tryptophan	.25
Glycine	.90
Histidine	.30
Leucine	1.30
Isoleucine	.90
Phenylalanine	.85
Tyrosine	.55
Threonine	.60
Valine	.90

Minerals

Calcium	%	Minimum	.90
Phosphorous	%	"	.40
Potassium	%	"	1.15
Sodium	%	"	.40
Magnesium	%	"	.15
Iron	PPM	"	220.00
Manganese	PPM	"	70.00
Zinc	PPM	"	32.00
Copper	PPM	"	15.00
Cobalt	PPM	"	1.00
Iodine	PPM	"	1.00

Vitamins

Vitamin A	IU/g	Minimum	15.0(6.0)*
Vitamin D	IU/g	"	2.0
Alpha-tocopherol	PPM	"	70.0
Thiamin	PPM	"	6.0
Riboflavin	PPM	"	6.0
Niacin	PPM	"	40.0
Pantothenic Acid	PPM	"	25.0
Choline	PPM	"	1800.0
Pyridoxine	PPM	"	6.0
Folic	PPM	"	6.0
Biotin	PPM	"	0.4
Vitamin C	PPM	"	840.0
Vitamin B_{12}	mcg/kg	"	10.0
Vitamin K	PPM	"	4.0

* TRUE VITAMIN A ACTIVITY BY HPLC METHOD