NSN-8710-00-509-7915

NIH07 RODENT DIET FORMULATION SPECIFICATION
Open Formula Rat and Mouse Diet (NIH-07)

Ingredients

Ingredients	Percentage by weight
Dried skim milk	5.00
Fish meal (60% protein)	10.00
Soybean meal (49% protein)	12.00
Alfalfa meal (dehydrated 17% protein)	4.00
Corn gluten meal (60% protein)	3.00
Ground #2 yellow shelled corn	24.25
Ground hard winter wheat	23.00
Wheat middlings	10.00
Brewer dried yeast	2.00
Dry molasses	1.50
Soy oil	2.50
Salt	0.50
Dicalcium phosphate	1.25
Ground limestone	0.50
Choline Cl-70	0.10
Mineral Premix	0.15
Vitamin Premix	0.25
	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	5,500,000 I.U.	Stabilized Vitamin A Palmitate or acetate
D_3	4,600,000 I.U.	D activated animal sterol
K	2.8 g.	dimethylpyrimidinol bisulfite
dl alpha-tocopheryl Acetate	20.0 g.	
Folic Acid	2.2 g.	
Niacin	30.0 g.	
d pantothenic acid	18.0 g.	d Calcium

			pantothenate
Riboflavin supplement	3.4	g	
Thiamin	10.0	g.	Thiamin mono nitrate
B_{12} supplement	45,400.0	mcg	
Pyridoxine	5.9	g.	Pyridoxine hydrochloride
Biotin	140.0	mg	d Biotin

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

Mineral	Amount	Source
Cobalt	0.4 g.	Cobalt carbonate
Copper	4.0 g.	Copper sulfate
Iron	120.0 g.	Iron sulfate
Manganese	60.0 g.	Manganous oxide
Zinc	16.0 g.	Zinc oxide
Iodine	1.4 g.	Calcium iodate

These concentrations of vitamins and minerals shall be added to the ration via two separate (vitamin and mineral) premixes. In the case of 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 - The total calculated concentration of nutrients in the ration from ingredients and from the fortifications at the time of manufacture should be as follows:

Crude protein	%	Minimum	23.5
Crude fat	%	Minimum	5.0
Crude fiber	%	Maximum	4.5
Linoleic Acid	%	Minimum	0.7
Ash	%	Maximum	7.5

Amino Acids (% of total diet)

	Minimum
Arginine	1.25
Lysine	1.20
Methionine	.50
Cystine	.35
Tryptophan	.25
Glycine	1.10
Histidine	.50
Leucine	1.80
Isoleucine	1.10
Phenylalanine	1.10
Tyrosine	.75
Threonine	.90
Valine	1.20

Minerals

Calcium	%	Minimum	1.20
Phosphorous	%		.95
Potassium	%		.80
Sodium	%		.33
Magnesium	%		.15
Chloride	%		.05
Iron	PPM		250.00
Zinc	PPM		45.00
Manganese	PPM		80.00
Copper	PPM		10.00
Cobalt	PPM		0.70
Iodine	PPM		1.80
Molybdenum	PPM		0.15
Selenium	PPM		0.15

Vitamins

Vitamin A	IU/g	Minimum	10.0(5.0)*
Vitamin D	IU/g	"	4.0
Alpha-tocopherol	PPM	"	35.0
Thiamin	PPM	"	14.0
Riboflavin	PPM	"	7.0
Niacin	PPM	"	80.0
Pantothenic Acid	PPM	"	20.0
Choline	PPM	"	2000.0
Pyridoxine	PPM	"	10.0
Folic Acid	PPM	"	3.0

Biotin	PPM	"	0.3
Vitamin B_{12}	ug/kg	"	60.0
Vitamin K	PPM	"	3.0

* TRUE VITAMIN A ACTIVITY BY HPLC METHOD