

NIH SPECIFICATION

Open Formula Laboratory Rabbit Diet (NIH-09)

Ingredients

<u>Ingredients</u>	<u>Percentage by Weight</u>
Alfalfa meal (17% protein)	28.00
Ground oat hulls	22.50
Soybean meal (49% protein)	13.00
Ground barley	14.75
Wheat middlings	6.00
Wheat bran	7.00
Dried whey	2.00
Dried molasses	1.50
Brewer's dried yeast	1.00
Salt	.50
Soybean oil	.50
Dicalcium phosphate	1.25
Ground limestone	1.50
Vitamin and Mineral premixes	.50
	<u>100.00</u>

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

Vitamin Fortification per 2000 lb. of product

<u>Vitamin</u>	<u>Amount</u>	<u>Source</u>
Vitamin A	6,000,000 I.U.	Stabilized Vitamin A palmitate or acetate
Vitamin D ₃	2,000,000 I.U.	D-activated animal sterol
Vitamin B ₁₂ supplement	10,000 mcg	
dl alpha-tocopheryl acetate	40.0 g.	
Vitamin K	2.8 g.	Menadione activity
Biotin	120.0 mg.	d-Biotin
Choline	480.0 g.	Choline chloride
Folic Acid	2.4 g.	
Niacin	20.0 g.	
Pantothenic acid	6.0 g.	d-Calcium pantothenate
Pyridoxine	4.5 g.	Pyridoxine hydrochloride
Riboflavin supplement	3.0 g.	
Thiamin	4.0 g.	Thiamin mono nitrate
Methionine hydroxyanalogue	1000.0 g.	

Mineral Fortification per 2000 lb product

<u>Mineral</u>	<u>Amount</u>	<u>Source</u>
Cobalt	1.4 g.	Cobalt Carbonate
Copper	6.5 g.	Copper sulfate
Iron	20.0 g.	Iron sulfate
Magnesium	160.0 g.	Magnesium oxide
Manganese	20.0 g.	Manganous oxide
Zinc	20.0 g.	Zinc oxide
Iodine	1.0 g.	Calcium iodate

These concentrations of vitamins and minerals shall be added to the ration via two separate (vitamin and mineral) premixes. The final formulation may be adjusted so the total amount of ingredients will equal 100%. 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.

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	16.50
Crude fat	%	Minimum	2.40
Crude fiber	%	Maximum	16.80
Ash	%	Maximum	8.00

Amino Acids (% of total diet)

	Minimum
Arginine	.85
Lysine	.75
Methionine	.30
Cystine	.20
Tryptophan	.19
Glycine	.68
Histidine	.30
Leucine	1.00
Isoleucine	.85
Phenylalanine	.70
Tyrosine	.48
Threonine	.63
Valine	.78

Minerals

Calcium	%	Minimum	1.26
Phosphorous	%	"	.60
Potassium	%	"	1.30
Sodium	%	"	.30
Magnesium	%	"	.28
Iron	PPM	"	340.00
Zinc	PPM	"	48.00
Manganese	PPM	"	60.00
Copper	PPM	"	16.00
Cobalt	PPM	"	1.50
Iodine	PPM	"	1.10

Vitamins

Vitamin A	IU/g	Minimum	10.0(6) *
Vitamin D	IU/g	"	2.00
Alpha-tocopherol	PPM	"	80.00
Thiamin	PPM	"	8.00
Riboflavin	PPM	"	8.00
Niacin	PPM	"	65.00
Pantothenic Acid	PPM	"	22.00
Choline	PPM	"	1700.00
Pyridoxine	PPM	"	9.50
Folic Acid	PPM	"	4.00
Biotin	PPM	"	0.25
Vitamin B ₁₂	mcg/Kg	"	10.00
Vitamin K	PPM	"	3.00

* TRUE VITAMIN A ACTIVITY BY HPLC METHOD