

NIH-31 Modified Open Formula Mouse/Rat Sterilizable Diet

Product Description- 7013 is a fixed formula, autoclavable diet manufactured with high quality ingredients and designed to support growth and reproduction of rodents. 7013 is supplemented with additional vitamins to ensure nutritional adequacy after autoclaving. **Also available irradiated (7913).**

Ingredients (in descending order of inclusion)- Ground wheat, ground corn, ground oats, wheat middlings, fish meal, dehulled soybean meal, soybean oil, dehydrated alfalfa meal, corn gluten meal, dicalcium phosphate, brewers dried yeast, calcium carbonate, iodized salt, choline chloride, magnesium oxide, kaolin, ferrous sulfate, menadione sodium bisulfite complex (source of vitamin K activity), manganous oxide, thiamin mononitrate, niacin, calcium pantothenate, vitamin E acetate, vitamin A acetate, copper sulfate, zinc oxide, riboflavin, pyridoxine hydrochloride, vitamin B₁₂ supplement, vitamin D₃ supplement, calcium iodate, biotin, folic acid, cobalt carbonate.

Standard Product Form: **Pellet**

Macronutrients		
Crude Protein	%	18.0
Fat (ether extract) ^a	%	6.2
Carbohydrate (available) ^b	%	45.0
Crude Fiber	%	4.0
Neutral Detergent Fiber ^c	%	13.6
Ash	%	6.2
Energy Density ^d	kcal/g (kJ/g)	3.1 (13.0)
Calories from Protein	%	23
Calories from Fat	%	18
Calories from Carbohydrate	%	59

Minerals		
Calcium	%	1.1
Phosphorus	%	1.0
Non-Phytate Phosphorus	%	0.7
Sodium	%	0.3
Potassium	%	0.6
Chloride	%	0.5
Magnesium	%	0.2
Zinc	mg/kg	47
Manganese	mg/kg	155
Copper	mg/kg	13
Iodine	mg/kg	2
Iron	mg/kg	270
Selenium	mg/kg	0.30

Amino Acids		
Aspartic Acid	%	1.5
Glutamic Acid	%	3.2
Alanine	%	1.1
Glycine	%	1.0
Threonine	%	0.7
Proline	%	1.5
Serine	%	0.9
Leucine	%	1.4
Isoleucine	%	0.8
Valine	%	0.8
Phenylalanine	%	0.8
Tyrosine	%	0.7
Methionine	%	0.4
Cystine	%	0.3
Lysine	%	0.8
Histidine	%	0.4
Arginine	%	1.0
Tryptophan	%	0.2

Vitamins		
Vitamin A ^{e, f}	IU/g	24.2
Vitamin D ₃ ^{e, g}	IU/g	4.2
Vitamin E	IU/kg	45
Vitamin K ₃ (menadione)	mg/kg	22
Vitamin B ₁ (thiamin)	mg/kg	76
Vitamin B ₂ (riboflavin)	mg/kg	7
Niacin (nicotinic acid)	mg/kg	87
Vitamin B ₆ (pyridoxine)	mg/kg	9
Pantothenic Acid	mg/kg	39
Vitamin B ₁₂ (cyanocobalamin)	mg/kg	0.06
Biotin	mg/kg	0.30
Folate	mg/kg	2
Choline	mg/kg	1890

Fatty Acids		
C16:0 Palmitic	%	0.9
C18:0 Stearic	%	0.2
C18:1ω9 Oleic	%	1.3
C18:2ω6 Linoleic	%	2.5
C18:3ω3 Linolenic	%	0.3
Total Saturated	%	1.2
Total Monounsaturated	%	1.5
Total Polyunsaturated	%	2.8

Other		
Cholesterol	mg/kg	50

^a Ether extract is used to measure fat in pelleted diets, while an acid hydrolysis method is required to recover fat in extruded diets. Compared to ether extract, the fat value for acid hydrolysis will be approximately 1% point higher.

^b Carbohydrate (available) is calculated by subtracting neutral detergent fiber from total carbohydrates.

^c Neutral detergent fiber is an estimate of insoluble fiber, including cellulose, hemicellulose, and lignin. Crude fiber methodology underestimates total fiber.

^d Energy density is a calculated estimate of *metabolizable energy* based on the Atwater factors assigning 4 kcal/g to protein, 9 kcal/g to fat, and 4 kcal/g to available carbohydrate.

^e Indicates added amount but does not account for contribution from other ingredients.

^f 1 IU vitamin A = 0.3 µg retinol

^g 1 IU vitamin D = 25 ng cholecalciferol

For nutrients not listed, insufficient data is available to quantify.

Nutrient data represent the best information available, calculated from published values and direct analytical testing of raw materials and finished product. Nutrient values may vary due to the natural variations in the ingredients, analysis, and effects of processing.