

**Product Description-** 8604 is a fixed formula, non-autoclavable diet manufactured with high quality ingredients designed to support growth and reproduction of rodents. Exclusion of alfalfa reduces chlorophyll, improving optical imaging clarity. Typical isoflavone concentrations (daidzein + genistein aglycone equivalents) range from 575 to 870 mg/kg. **Related codes 8904 (irradiated) and 8728C (certified).**

**Ingredients** (in descending order of inclusion)- Dehulled soybean meal, wheat middlings, flaked corn, ground corn, fish meal, cane molasses, ground wheat, dried whey, soybean oil, brewers dried yeast, dicalcium phosphate, calcium carbonate, iodized salt, choline chloride, magnesium oxide, ferrous sulfate, vitamin E acetate, menadione sodium bisulfite complex (source of vitamin K activity), manganous oxide, copper sulfate, zinc oxide, niacin, thiamin mononitrate, vitamin A acetate, vitamin D<sub>3</sub> supplement, calcium pantothenate, pyridoxine hydrochloride, riboflavin, vitamin B<sub>12</sub> supplement, calcium iodate, folic acid, biotin, cobalt carbonate.

Macronutrients		
Crude Protein	%	24.3
Fat (ether extract) <sup>a</sup>	%	4.7
Carbohydrate (available) <sup>b</sup>	%	40.2
Crude Fiber	%	4.0
Neutral Detergent Fiber <sup>c</sup>	%	12.4
Ash	%	7.6
Energy Density <sup>d</sup>	kcal/g (kJ/g)	3.0 (12.6)
Calories from Protein	%	32
Calories from Fat	%	14
Calories from Carbohydrate	%	54

Minerals		
Calcium	%	1.4
Phosphorus	%	1.1
Non-Phytate Phosphorus	%	0.7
Sodium	%	0.3
Potassium	%	1.0
Chloride	%	0.5
Magnesium	%	0.3
Zinc	mg/kg	80
Manganese	mg/kg	100
Copper	mg/kg	25
Iodine	mg/kg	2
Iron	mg/kg	300
Selenium	mg/kg	0.34

Amino Acids		
Aspartic Acid	%	2.3
Glutamic Acid	%	4.1
Alanine	%	1.4
Glycine	%	1.3
Threonine	%	0.9
Proline	%	1.6
Serine	%	1.6
Leucine	%	1.9
Isoleucine	%	1.0
Valine	%	1.1
Phenylalanine	%	1.1
Tyrosine	%	0.9
Methionine	%	0.4
Cystine	%	0.4
Lysine	%	1.4
Histidine	%	0.6
Arginine	%	1.5
Tryptophan	%	0.3

#### Standard Product Form: Pellet

Vitamins		
Vitamin A <sup>e, f</sup>	IU/g	12.6
Vitamin D <sub>3</sub> <sup>e, g</sup>	IU/g	2.4
Vitamin E	IU/kg	120
Vitamin K <sub>3</sub> (menadione)	mg/kg	40
Vitamin B <sub>1</sub> (thiamin)	mg/kg	27
Vitamin B <sub>2</sub> (riboflavin)	mg/kg	8
Niacin (nicotinic acid)	mg/kg	63
Vitamin B <sub>6</sub> (pyridoxine)	mg/kg	13
Pantothenic Acid	mg/kg	21
Vitamin B <sub>12</sub> (cyanocobalamin)	mg/kg	0.05
Biotin	mg/kg	0.38
Folate	mg/kg	3
Choline	mg/kg	2530
Fatty Acids		
C16:0 Palmitic	%	0.7
C18:0 Stearic	%	0.1
C18:1ω9 Oleic	%	0.9
C18:2ω6 Linoleic	%	1.9
C18:3ω3 Linolenic	%	0.2
Total Saturated	%	0.9
Total Monounsaturated	%	1.1
Total Polyunsaturated	%	2.1
Other		
Cholesterol	mg/kg	50

**Shelf life:** With proper storage, diet is suitable for use out to 9 months.

[www.inotivco.com/shelf-life-of-diets-used-in-research](http://www.inotivco.com/shelf-life-of-diets-used-in-research)

<sup>a</sup> 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.

<sup>b</sup> Carbohydrate (available) is calculated by subtracting neutral detergent fiber from total carbohydrates.

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

<sup>d</sup> 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.

<sup>e</sup> Indicates added amount but does not account for contribution from other ingredients.

<sup>f</sup> 1 IU vitamin A = 0.3 µg retinol

<sup>g</sup> 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.