

## Teklad Global 14% Protein Rodent Maintenance Diet

**Product Description-** 2014 is a fixed formula, non-autoclavable diet manufactured with high quality ingredients and designed to promote longevity and normal body weight in rodents. 2014 does not contain alfalfa or soybean meal, thus minimizing the occurrence of natural phytoestrogens. Typical isoflavone concentrations (daidzein + genistein aglycone equivalents) range from non-detectable to 20 mg/kg. Exclusion of alfalfa reduces chlorophyll, improving optical imaging clarity. Absence of animal protein and fish meal minimizes the presence of nitrosamines.

**Also available certified (2014C) and irradiated (2914). For autoclavable diet, refer to 2014S (Sterilizable).**

### Macronutrients

Crude Protein	%	14.3
Fat (ether extract) <sup>a</sup>	%	4.0
Carbohydrate (available) <sup>b</sup>	%	48.0
Crude Fiber	%	4.1
Neutral Detergent Fiber <sup>c</sup>	%	18.0
Ash	%	4.7
Energy Density <sup>d</sup>	kcal/g (kJ/g)	2.9 (12.1)
Calories from Protein	%	20
Calories from Fat	%	13
Calories from Carbohydrate	%	67

### Minerals

Calcium	%	0.7
Phosphorus	%	0.6
Non-Phytate Phosphorus	%	0.3
Sodium	%	0.1
Potassium	%	0.6
Chloride	%	0.3
Magnesium	%	0.2
Zinc	mg/kg	70
Manganese	mg/kg	100
Copper	mg/kg	15
Iodine	mg/kg	6
Iron	mg/kg	175
Selenium	mg/kg	0.23

### Amino Acids

Aspartic Acid	%	0.9
Glutamic Acid	%	2.9
Alanine	%	0.9
Glycine	%	0.7
Threonine	%	0.5
Proline	%	1.2
Serine	%	0.7
Leucine	%	1.4
Isoleucine	%	0.6
Valine	%	0.7
Phenylalanine	%	0.7
Tyrosine	%	0.4
Methionine	%	0.3
Cystine	%	0.3
Lysine	%	0.7
Histidine	%	0.4
Arginine	%	0.8
Tryptophan	%	0.2

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

Standard Product Form: **Pellet**

### Vitamins

Vitamin A <sup>e, f</sup>	IU/g	6.0
Vitamin D <sub>3</sub> <sup>e, g</sup>	IU/g	0.6
Vitamin E	IU/kg	120
Vitamin K <sub>3</sub> (menadione)	mg/kg	20
Vitamin B <sub>1</sub> (thiamin)	mg/kg	12
Vitamin B <sub>2</sub> (riboflavin)	mg/kg	6
Niacin (nicotinic acid)	mg/kg	54
Vitamin B <sub>6</sub> (pyridoxine)	mg/kg	10
Pantothenic Acid	mg/kg	17
Vitamin B <sub>12</sub> (cyanocobalamin)	mg/kg	0.03
Biotin	mg/kg	0.26
Folate	mg/kg	2
Choline	mg/kg	1030

### Fatty Acids

C16:0 Palmitic	%	0.5
C18:0 Stearic	%	0.1
C18:1ω9 Oleic	%	0.7
C18:2ω6 Linoleic	%	2.0
C18:3ω3 Linolenic	%	0.1
Total Saturated	%	0.6
Total Monounsaturated	%	0.7
Total Polyunsaturated	%	2.1

### Other

Cholesterol	mg/kg	--
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<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.

Teklad Diets are designed and manufactured for research purposes only.

