

Product Description- 7004 is a fixed formula, autoclavable diet manufactured with high quality ingredients. It is designed with higher fat content for colonies which might benefit from increased energy density. 7004 is supplemented with additional vitamins to ensure nutritional adequacy after autoclaving. **Related code 7904 (irradiated).**

Ingredients (in descending order of inclusion)- Ground wheat, ground corn, dehulled soybean meal, porcine fat (preserved with BHA), dried whey, casein, brewers dried yeast, porcine meat and bone meal, soybean hulls, calcium carbonate, iodized salt, magnesium oxide, choline chloride, DL-methionine, calcium propionate, menadione sodium bisulfite complex (source of vitamin K activity), ferrous sulfate, vitamin E acetate, thiamin mononitrate, calcium pantothenate, niacin, manganous oxide, copper sulfate, zinc oxide, vitamin A acetate, pyridoxine hydrochloride, riboflavin, vitamin D₃ supplement, vitamin B₁₂ supplement, folic acid, biotin, calcium iodate, cobalt carbonate, lecithin.

Standard Product Form: **Pellet**

Macronutrients		
Crude Protein	%	17.2
Fat (ether extract) ^a	%	11.4
Carbohydrate (available) ^b	%	45.2
Crude Fiber	%	2.8
Neutral Detergent Fiber ^c	%	9.3
Ash	%	5.9
Energy Density ^d	kcal/g (kJ/g)	3.5 (14.6)
Calories from Protein	%	20
Calories from Fat	%	29
Calories from Carbohydrate	%	51

Minerals		
Calcium	%	0.9
Phosphorus	%	0.6
Non-Phytate Phosphorus	%	0.3
Sodium	%	0.4
Potassium	%	0.6
Chloride	%	0.7
Magnesium	%	0.3
Zinc	mg/kg	55
Manganese	mg/kg	75
Copper	mg/kg	23
Iodine	mg/kg	3
Iron	mg/kg	175
Selenium	mg/kg	0.07

Amino Acids		
Aspartic Acid	%	1.3
Glutamic Acid	%	2.8
Alanine	%	0.7
Glycine	%	0.9
Threonine	%	0.7
Proline	%	1.2
Serine	%	1.0
Leucine	%	1.3
Isoleucine	%	0.8
Valine	%	0.9
Phenylalanine	%	0.9
Tyrosine	%	0.6
Methionine	%	0.4
Cystine	%	0.3
Lysine	%	1.0
Histidine	%	0.4
Arginine	%	1.1
Tryptophan	%	0.2

Vitamins		
Vitamin A ^{e, f}	IU/g	37.0
Vitamin D ₃ ^{e, g}	IU/g	3.0
Vitamin E	IU/kg	155
Vitamin K ₃ (menadione)	mg/kg	100
Vitamin B ₁ (thiamin)	mg/kg	118
Vitamin B ₂ (riboflavin)	mg/kg	17
Niacin (nicotinic acid)	mg/kg	132
Vitamin B ₆ (pyridoxine)	mg/kg	19
Pantothenic Acid	mg/kg	107
Vitamin B ₁₂ (cyanocobalamin)	mg/kg	0.11
Biotin	mg/kg	0.86
Folate	mg/kg	8
Choline	mg/kg	2140

Fatty Acids		
C16:0 Palmitic	%	2.4
C18:0 Stearic	%	1.7
C18:1ω9 Oleic	%	4.6
C18:2ω6 Linoleic	%	1.5
C18:3ω3 Linolenic	%	0.1
Total Saturated	%	4.1
Total Monounsaturated	%	4.6
Total Polyunsaturated	%	1.7

Other		
Cholesterol	mg/kg	100

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

www.inotivco.com/shelf-life-of-diets-used-in-research

^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.