

Global 2019 19% Protein Extruded Rodent Diet



Harlan Teklad Global 2019 extruded rodent diet is specifically designed to improve reproduction and performance of genetically engineered mice and performance-challenged research models.

Benefits of Global 2019 Extruded Rodent Diet:

- **Extruded form for improved palatability and digestibility.**
- **Nine percent fat content for high performance (benefits lactating females and their offspring).**
- **Extruded, sterilizable 2019 (2019S), reduces clumping and hardness after autoclaving.**
- **Available in irradiated format (2919).**



More important, perhaps, is what is NOT in this diet:

- NO Alfalfa Meal
- NO Soybean Meal
- NO Fish Meal
- NO Animal Fat
- NO Meat Meals or Meat By-Products
- Minimal Cholesterol
- Lower, More Appropriate Protein Levels

The elimination of alfalfa and soybean meal minimizes levels of naturally occurring phytoestrogens such as genistein, daidzein and coumestrol. The presence of nitrosamines (known carcinogens) are eliminated by the exclusion of animal by-products, including animal fat and fish meal. This modernization of diet composition addresses multiple emerging nutritional concerns with proactive solutions.

Packaging

2019 and 2019S - 15 kg bags

2919 - 10 kg bag

- 5 pound and 3 pound vacuum pouches (15 lbs./case)



Access to excellence

2019 Teklad Global 19% Protein Extruded Rodent Diet



Product Description—2019 Teklad Global 19% Protein Extruded Rodent Diet is designed and manufactured with the same high quality ingredients in both the United States and throughout Europe. It is a fixed formula diet containing 19% protein and 9% fat. The diet meets the nutrient requirements of gestation, lactation and early growth of rats and mice. It is particularly useful for poorly breeding strains of rodents and genetically engineered stocks and strains. The absence of phytoestrogen sources such as alfalfa and soybean meal means that this diet is particularly useful for reproductive toxicology. The absence of animal protein and fish meal eliminates the presence of nitrosamines. The diet is provided in extruded form which ensures that despite its high fat content, it remains firm with minimal wastage. Also available as Autoclavable (2019S), Irradiated (2919), and Certified (2019C).

Ingredients—Ground wheat, ground corn, corn gluten meal, wheat middlings, soybean oil, calcium carbonate, brewers dried yeast, dicalcium phosphate, L-lysine, iodized salt, magnesium oxide, choline chloride, DL-methionine, L-tryptophan, niacin, vitamin A acetate, biotin, thiamin mononitrate, vitamin D₃ supplement, folic acid, menadione sodium bisulfite complex (source of vitamin K activity), vitamin E supplement, vitamin B₁₂ supplement, riboflavin, calcium pantothenate, calcium propionate, pyridoxine hydrochloride, ferrous sulfate, manganese oxide, zinc oxide, copper sulfate, calcium iodate, cobalt carbonate, chromium potassium sulfate.

Average Nutrient Composition

Crude Protein	%	19.20
Crude Oil	%	9.80
Crude Fiber	%	3.60
Ash	%	4.80
Carbohydrate	%	55.24
Starch	%	43.71
Sugar	%	4.16
Digestible Energy	K cal/g (MJ/kg)	3.6 (14.98)
Metabolizable Energy	K cal/g (MJ/kg)	3.5 (14.74)
Calories from Protein	%	20.70
Calories from Oil	%	23.70
Calories from Carbohydrate	%	55.60

Minerals

Calcium	%	0.87
Phosphorus	%	0.61
Sodium	%	0.16
Potassium	%	0.40
Chloride	%	0.37
Magnesium	%	0.20
Zinc	mg/kg	64.28
Manganese	mg/kg	95.16
Copper	mg/kg	14.75
Iodine (added)	mg/kg	7.98
Iron	mg/kg	228.45
Selenium	mg/kg	0.18
Cobalt	mg/kg	0.63
Chromium	mg/kg	0.54

Amino Acids

Aspartic Acid	%	1.09
Glutamic Acid	%	3.76
Alanine	%	1.21
Glycine	%	0.71
Threonine	%	0.62
Proline	%	1.82
Serine	%	0.88
Leucine	%	2.37
Isoleucine	%	0.82
Valine	%	0.92
Phenylalanine	%	1.08
Tyrosine	%	0.50
Phe + Tyr	%	1.56
Methionine	%	0.45
Cystine	%	0.32
Met + Cyst	%	0.77
Lysine	%	0.90
Histidine	%	0.42
Arginine	%	0.81
Tryptophan	%	0.20
Available Lysine	%	0.80

Vitamins

Vitamin A	iu/g	153.6
Retinol	mg/kg	4.66
Vitamin D ₃	iu/g	1.53
Cholecalciferol	µg/kg	38.31
Vitamin E (a-tocopherol)	mg/kg	114.93
Vitamin K ₃ (menadione)	mg/kg	51.13
Vitamin B ₁ (thiamine)	mg/kg	1.587
Vitamin B ₂ (riboflavin)	mg/kg	1.452
Avail. Niacin (nicotinic acid)	mg/kg	60.43
Vitamin B ₆ (pyridoxine)	mg/kg	17.79
Pantothenic Acid	mg/kg	31.99
Vitamin B ₁₂ (cyanocobalamin)	mg/kg	0.08
Avail. Biotin	mg/kg	0.32
Folate	mg/kg	3.48
Vitamin C	mg/kg	—
Choline	mg/kg	1256.74
B Carotene	mg/kg	60.5
Inositol	mg/kg	1282.80

Fatty Acids

SATURATED		
C4:0 Butyric	g/kg	0.00
C6:0 Caproic	g/kg	0.00
C8:0 Caprylic	g/kg	0.00
C10:0 Capric	g/kg	0.00
C12:0 Lauric	g/kg	0.68
C14:0 Myristic	g/kg	0.14
C15:0 Pentadecanoic	g/kg	0.00
C16:0 Palmitic	g/kg	112.5
C17:0 Margaric	g/kg	0.00
C18:0 Stearic	g/kg	3.08
C20:0 Arachidic	g/kg	0.23
C22:0 Behenic	g/kg	0.07
C24:0 Lignoceric	g/kg	0.00
MONO-UNSATURATED		
C16:1 w7 Palmitoleic	g/kg	0.14
C17:1 w8 Heptadecenoic	g/kg	0.00
C18:1 w9 Oleic	g/kg	22.23
C20:1 w9 Gadoleic	g/kg	0.51
C22:1 w9 Erucic	g/kg	0.05
POLYUNSATURATED		
C18:2 w6 Linoleic	g/kg	51.52
C18:3 w3 Linolenic	g/kg	56.4
C18:4 w3 Octadecatetraenoic	g/kg	0.01
C20:2 w6 Eicosadienoic	g/kg	0.00
C20:3 w6 Eicosatrienoic	g/kg	0.00
C20:4 w6 Arachidonic	g/kg	0.00
C20:5 w3 Eicosapentanoic	g/kg	0.00
C22:5 w3 Clupanodonic	g/kg	0.00
C22:6 w3 Docosahexaenoic	g/kg	0.00

Nutrient levels are calculated from raw material data and are adjusted to 10% moisture level in the diet. Reported nutrient values may vary due to the inherent variability in laboratory analysis.

Standard Product Form: Extruded

Access to excellence