

Appendix IV
Feed Analysis Reports



ISOFLAVONE PROFILE

PRODUCT: **CERTIFIED RODENT DIET**

Code: 5002

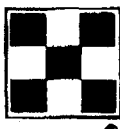
Lot Number: JUN 24 02 1B 1

Isoflavone Profile

Total Daidzein (Aglycone Units)	145	ppm
Total Genistein (Aglycone Units)	161	ppm
Total Glycitein (Aglycone Units)	35	ppm
Total All Forms (Aglycone Units)	341	ppm

For additional information concerning the report contact the Quality Department at Richmond, In. (Angela Crutcher) 765-962-9561 ext. 229

For additional information concerning the analytical results contact Dr. Dorrance Haught at 314-768-4362.



ISOFLAVONE PROFILE

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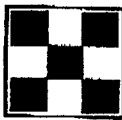
Lot Number: JUN 24 02 1B 2

Isoflavone Profile

Total Daidzein (Aglycone Units)	146	ppm
Total Genistein (Aglycone Units)	163	ppm
Total Glycitein (Aglycone Units)	37	ppm
Total All Forms (Aglycone Units)	346	ppm

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ISOFLAVONE PROFILE

PRODUCT: CERTIFIED RODENT DIET

Code: 5002

Lot Number: JUN 24 02 1B 3

Isoflavone Profile

Total Daidzein (Aglycone Units)	149	ppm
Total Genistein (Aglycone Units)	166	ppm
Total Glycitein (Aglycone Units)	38	ppm
Total All Forms (Aglycone Units)	353	ppm

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PRODUCT: CERTIFIED RODENT DIET
Code: 5002 Lot Number: DEC 02 02 2B

SAMPLE: # 1

IFSP

Isoflavone profile, saponification

Daidzin	199	ppm
Daidzein	7.0	ppm
Total Daidzein Compounds	206	ppm
Genistin	219	ppm
Genistein	2.0	ppm
Total Genistein Compounds	221	ppm
Glycitin	52.0	ppm
Glycitein	2.0	ppm
Total Glycitein Compounds	54	ppm
Total Isoflavones	481	ppm
Daidzin (Aglycone Units)	122	ppm
Daidzein (Aglycone Units)	7.0	ppm
Total Daidzein (Aglycone Units)	129	ppm
Genistin (Aglycone Units)	137	ppm
Genistein (Aglycone Units)	2.0	ppm
Total Genistein (Aglycone Units)	139	ppm
Glycitin (Aglycone Units)	33.0	ppm
Glycitein (Aglycone Units)	2.0	ppm
Total Glycitein (Aglycone Units)	35.0	ppm
Total Isoflavones (Aglycone Units)	303	ppm

For additional information concerning the report contact the Quality Department at Richmond, In. (Virgil Strobel) 765-962-9561 ext. 225 (email - virgil_strobel@purina-mills.com)

For additional information concerning the analytical results contact Dr. Dorrance Haught at 314-768-4362. (email - dorrance_haught@purina-mills.com)

PRODUCT: CERTIFIED RODENT DIET
Code: 5002 Lot Number: DEC 02 02 2B

SAMPLE: # 2

IFSP

Isoflavone profile, saponification

Daidzin	191	ppm
Daidzein	7.0	ppm
Total Daidzein Compounds	198	ppm
Genistin	212	ppm
Genistein	3.0	ppm
Total Genistein Compounds	215	ppm
Glycitin	50.0	ppm
Glycitein	2.0	ppm
Total Glycitein Compounds	52	ppm
Total Isoflavones	465	ppm
Daidzin (Aglycone Units)	117	ppm
Daidzein (Aglycone Units)	7.0	ppm
Total Daidzein (Aglycone Units)	124	ppm
Genistin (Aglycone Units)	133	ppm
Genistein (Aglycone Units)	3.0	ppm
Total Genistein (Aglycone Units)	136	ppm
Glycitin (Aglycone Units)	32.0	ppm
Glycitein (Aglycone Units)	2.0	ppm
Total Glycitein (Aglycone Units)	34.0	ppm
Total Isoflavones (Aglycone Units)	294	ppm

For additional information concerning the report contact the Quality Department at Richmond, In. (Virgil Strobel) 765-962-9561 ext. 225 (email - virgil_strobel@purina-mills.com)

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PRODUCT: CERTIFIED RODENT DIET
Code: 5002 Lot Number: DEC 02 02 2B

SAMPLE: # 3

IFSP

Isoflavone profile, saponification

Daidzin	179	ppm
Daidzein	6.0	ppm
Total Daidzein Compounds	185	ppm
Genistin	197	ppm
Genistein	2.0	ppm
Total Genistein Compounds	199	ppm
Glycitin	46.0	ppm
Glycitein	2.0	ppm
Total Glycitein Compounds	48	ppm
Total Isoflavones	432	ppm
Daidzin (Aglycone Units)	109	ppm
Daidzein (Aglycone Units)	6.0	ppm
Total Daidzein (Aglycone Units)	115	ppm
Genistin (Aglycone Units)	123	ppm
Genistein (Aglycone Units)	2.0	ppm
Total Genistein (Aglycone Units)	125	ppm
Glycitin (Aglycone Units)	29.0	ppm
Glycitein (Aglycone Units)	2.0	ppm
Total Glycitein (Aglycone Units)	31.0	ppm
Total Isoflavones (Aglycone Units)	271	ppm

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Certified Rodent Diet

5002*

DESCRIPTION

Certified Rodent Diet is a Constant Nutrition™ formulation that has yielded highly favorable results for the maintenance, growth and reproduction of rats and mice. It has been developed as a complete life-cycle diet that can also be used by breeders to assure animals do not develop undesirable tissue residues of contaminants. A sample of this product will have been assayed prior to shipment.

Features and Benefits

- Each package is assayed for environmental contaminants prior to shipment
- Preanalysis monitoring assures maximum diet control
- Fulfills GLP requirements

Product Forms Available

- Oval pellet, 10 mm x 16 mm x 25 mm length (3/8"x5/8"x1")
- Meal (ground pellets)

GUARANTEED ANALYSIS

Crude protein not less than	20.0%
Crude fat not less than	4.5%
Crude fiber not more than	5.5%
Ash not more than	7.0%
Added minerals not more than	2.5%

INGREDIENTS

Ground corn, dehulled soybean meal, ground wheat, fish meal, wheat middlings, brewers dried yeast, cane molasses, wheat germ, dried beet pulp, dehydrated alfalfa meal, ground oats, dried whey, ground soybean hulls, soybean oil, calcium carbonate, casein, salt, dicalcium phosphate, choline chloride, DL-methionine, cholecalciferol, vitamin A acetate, pyridoxine hydrochloride, dl-alpha tocopheryl acetate, thiamin mononitrate, nicotinic acid, calcium pantothenate, riboflavin, cyanocobalamin, folic acid, manganous oxide, zinc oxide, ferrous carbonate, copper sulfate, zinc sulfate, calcium iodate, cobalt carbonate.

FEEDING DIRECTIONS

Feed ad libitum to rodents. Plenty of fresh, clean water should be available to the animals at all times. Refer to the "Animal Care and Biological Values" section of this manual for detailed feeding directions.

Rats- All rats will eat varying amounts of feed depending on their genetic origin. Larger strains will eat between 15-30 grams per day. Smaller strains will eat between 12-15 grams per day. Feeders in rat cages should be designed to hold two to three days supply of feed at one time.

Mice-Adult mice will eat 4 to 5 grams of pelleted ration daily. Some of the larger strains may eat as much as 8 grams per day per animal. Feed should be available on a free choice basis in wire feeders above the floor of the cage.

Hamsters-Adults will eat 10 to 14 grams per day.

CHEMICAL COMPOSITION¹

Nutrients²

Protein, %	20.1	Sulfur, %	0.25
Arginine, %	1.13	Sodium, %	0.30
Cystine, %	0.27	Chlorine, %	0.47
Glycine, %	0.86	Fluorine, ppm	13
Histidine, %	0.49	Iron, ppm	210
Isoleucine, %	1.03	Zinc, ppm	76
Leucine, %	1.58	Manganese, ppm	75
Lysine, %	1.18	Copper, ppm	11
Methionine, %	0.43	Cobalt, ppm	0.6
Phenylalanine, %	0.88	Iodine, ppm	0.77
Tyrosine, %	0.59	Chromium, ppm	2.0
Threonine, %	0.78	Selenium, ppm	0.25
Tryptophan, %	0.24		
Valine, %	1.05		
Serine, %	1.01		
Aspartic Acid, %	2.19		
Glutamic Acid, %	4.20		
Alanine, %	1.24		
Proline, %	1.47		
Taurine, %	0.01		
Fat (ether extract), %	4.5		
Fat (acid hydrolysis), %	5.1		
Cholesterol, ppm	150		
Linoleic Acid, %	2.15		
Linolenic Acid, %	0.16		
Arachidonic Acid, %	<0.01		
Omega-3 Fatty Acids, %	0.34		
Total Saturated Fatty Acids, %	0.86		
Total Monounsaturated Fatty Acids, %	1.14		
Fiber (Crude), %	4.6		
Neutral Detergent Fiber ³ , %	13.8		
Acid Detergent Fiber ⁴ , %	5.9		

Vitamins

Carotene, ppm	5.6
Vitamin K (as menadione), ppm	0.4
Thiamin Hydrochloride, ppm	16
Riboflavin, ppm	8.0
Niacin, ppm	95
Pantothenic Acid, ppm	17
Choline Chloride, ppm	1800
Folic Acid, ppm	4.0
Pyridoxine, ppm	6.0
Biotin, ppm	0.13
B ₁₂ , mcg/kg	20
Vitamin A, IU/gm	18
Vitamin D ₃ (added), IU/gm	2.2
Vitamin E, IU/kg	66

Calories provided by:

Protein, %	23.585
Fat (ether extract), %	11.880
Carbohydrates, %	64.535

*Product Code

1. Based on the latest ingredient analysis information. Since nutrient composition of natural ingredients varies, analysis will differ accordingly.
2. Nutrients expressed as percent of ration except where otherwise indicated. Moisture content is assumed to be 10.0% for the purpose of calculations.
3. NDF = approximately cellulose, hemi-cellulose and lignin.
4. ADF = approximately cellulose and lignin.
5. Physiological Fuel Value (kcal/gm) = Sum of decimal fractions of protein, fat and carbohydrate (use Nitrogen Free Extract) x 4,9,4 kcal/gm respectively.

Minerals

Ash, %	5.8
Calcium, %	0.80
Phosphorus, %	0.60
Phosphorus (non-phytate), %	0.34
Potassium, %	0.86
Magnesium, %	0.21