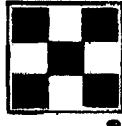


Appendix IV
Feed Analysis Reports



ISOFLAVONE PROFILE

PRODUCT: **CERTIFIED RODENT DIET**

Code: **5002**

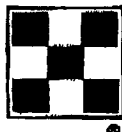
Lot Number: **JUN 24 02 1B 1**

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

PRODUCT: CERTIFIED RODENT DIET

Code: 5002

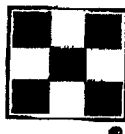
Lot Number: JUN 24 02 1B 2

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

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

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

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.

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
Arginine, %	1.13
Cystine, %	0.27
Glycine, %	0.86
Histidine, %	0.49
Isoleucine, %	1.03
Leucine, %	1.58
Lysine, %	1.18
Methionine, %	0.43
Phenylalanine, %	0.88
Tyrosine, %	0.59
Threonine, %	0.78
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
Nitrogen-Free Extract (by difference), %	55.0
Starch, %	36.3
Glucose, %	0.25
Fructose, %	0.30
Sucrose, %	3.13
Lactose, %	1.11
Total Digestible Nutrients, %	77.0
Gross Energy, kcal/gm	4.04
Physiological Fuel Value⁵, kcal/gm	3.41
Metabolizable Energy, kcal/gm	3.10
Minerals	
Ash, %	5.8
Calcium, %	0.80
Phosphorus, %	0.60
Phosphorus (non-phytate), %	0.34
Potassium, %	0.86
Magnesium, %	0.21

Sulfur, %	0.25
Sodium, %	0.30
Chlorine, %	0.47
Fluorine, ppm	13
Iron, ppm	210
Zinc, ppm	76
Manganese, ppm	75
Copper, ppm	11
Cobalt, ppm	0.6
Iodine, ppm	0.77
Chromium, ppm	2.0
Selenium, ppm	0.25

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, hemicellulose 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.