



Diet

SF01-017

Low Iron, Semi-Pure Rodent Diet

A semi-pure diet formulation for laboratory rats and mice based on AIN-93G.

- Iron content has been decreased to <10 mg Fe / Kg diet by exclusion of any added Fe to the trace mineral premix.
- In addition higher purity minerals have been used to minimise trace level contamination of iron in this raw material.
- The careful selection of raw materials has allowed us to reduce dietary iron in this diet from what was previously achieved. Recent analysis of this diet has shown that the average Fe level in this diet is 2.5mg/Kg
- The generally recognised minimum iron requirement in rats and mice is 35 mg Fe / Kg diet for maintenance and growth and 75 mg Fe / kg diet during pregnancy and lactation. Diets showing clear symptoms of iron deficiency are generally in the range of 2 - 10 mg Fe / Kg diet.
- Whilst this diet has an iron concentration less than known requirements, it was not designed as a diet leading to rapid symptoms of iron deficiency.
- The pelletised diet has an increased iron content than the powder form. Typically in the range of 15 - 20 mg Fe / Kg.

| Calculated Nutritional Parameters | |
|---|--------------|
| Protein | 19.40% |
| Total Fat | 7.00% |
| Crude Fibre | 4.70% |
| AD Fibre | 4.70% |
| Digestible Energy | 16.3 MJ / Kg |
| % Total calculated digestible energy from lipids | 16.0% |
| % Total calculated digestible energy from protein | 21.0% |

| Diet Form and Features |
|---|
| <ul style="list-style-type: none"> • Semi pure diet. 12 mm diameter pellets. • Pack size 5 Kg, vacuum packed in oxygen impermeable plastic bags, under nitrogen. Bags are packed into cardboard cartons to protect them during transit. Smaller pack quantity on request. • Diet suitable for irradiation but not suitable for autoclave. • Lead time 2 weeks for non-irradiation or 4 weeks for irradiation. |

| Ingredients | | Calculated Total Minerals | |
|-------------------------------------|----------|---------------------------|------------|
| Casein (Acid) | 200 g/Kg | Calcium | 0.47% |
| Sucrose | 100 g/Kg | Phosphorous | 0.32% |
| Canola Oil | 70 g/Kg | Magnesium | 0.10% |
| Cellulose | 50 g/Kg | Sodium | 0.14% |
| Wheat Starch | 406 g/Kg | Chloride | 0.16% |
| Dextrinised Starch | 132 g/Kg | Potassium | 0.40% |
| DL Methionine | 3.0 g/Kg | Sulphur | 0.23% |
| LR Calcium Carbonate | 11 g/Kg | Iron | <5 mg/Kg |
| Sodium Chloride | 2.6 g/Kg | Copper | 6.6 mg/Kg |
| AIN93 Trace Minerals Excluding Iron | 1.4 g/Kg | Iodine | 0.22 mg/Kg |
| LR Potassium Citrate | 2.5 g/Kg | Manganese | 20 mg/Kg |
| LR Potassium Dihydrogen Phosphate | 6.9 g/Kg | Cobalt | No data |
| LR Potassium Sulphate | 1.6 g/Kg | Zinc | 36 mg/Kg |
| LR Magnesium Oxide | 0.3 g/Kg | Molybdenum | 0.15 mg/Kg |
| Choline Chloride (75%) | 2.5 g/Kg | Selenium | 0.3 mg/Kg |
| AIN93 Vitamins | 10 g/Kg | Cadmium | No data |
| | | Chromium | 1.0 mg/Kg |
| | | Fluoride | 1.0 mg/Kg |
| | | Lithium | 0.1 mg/Kg |
| | | Boron | 3.0 mg/Kg |
| | | Nickel | 0.55 mg/Kg |
| | | Vanadium | 0.1 mg/Kg |

| Calculated Amino Acids | |
|------------------------|-------|
| Valine | 1.30% |
| Leucine | 1.80% |
| Isoleucine | 0.90% |
| Threonine | 0.80% |
| Methionine | 0.80% |
| Cystine | 0.05% |
| Lysine | 1.50% |
| Phenylalanine | 1.00% |
| Tyrosine | 1.00% |
| Tryptophan | 0.30% |

| Calculated Total Vitamins | | Calculated Fatty Acid Composition | |
|----------------------------------|-------------|-----------------------------------|---------|
| Vitamin A (Retinol) | 4 000 IU/Kg | Myristic Acid 14:0 | No data |
| Vitamin D (Cholecalciferol) | 1 000 IU/Kg | Palmitic Acid 16:0 | 0.40% |
| Vitamin E (a Tocopherol acetate) | 75 mg/Kg | Stearic Acid 18:0 | 0.10% |
| Vitamin K (Menadione) | 1 mg/Kg | Palmitoleic Acid 16:1 | No data |
| Vitamin C (Ascorbic acid) | None added | Oleic Acid 18:1 | 4.20% |
| Vitamin B1 (Thiamine) | 6.1 mg/Kg | Gadoleic Acid 20:1 | 0.10% |
| Vitamin B2 (Riboflavin) | 6.3 mg/Kg | Linoleic Acid 18:2 n6 | 1.30% |
| Niacin (Nicotinic acid) | 30 mg/Kg | a Linolenic Acid 18:3 n3 | 0.70% |
| Vitamin B6 (Pryridoxine) | 7 mg/Kg | Arachadonic Acid 20:4 n6 | No data |
| Pantothenic Acid | 16.5 mg/Kg | EPA 20:5 n3 | Trace |
| Biotin | 200 ug/Kg | DHA 22:6 n3 | No data |
| Folic Acid | 2 mg/Kg | Total n3 | 0.78% |
| Inositol | None added | Total n6 | 1.33% |
| Vitamin B12 (Cyancobalamin) | 103 ug/Kg | Total Mono Unsaturated Fats | 4.30% |
| Choline | 1670 mg/K | Total Polyunsaturated fats | 2.11% |
| | | Total Saturated fats | 0.49% |

Calculated data uses information from typical raw material composition. It could be expected that individual batches of diet will vary from this figure. **Diet post treatment by irradiation or auto clave could change these parameters.**

We are happy to provide full calculated nutritional information for all of our products, however we would like to emphasise that these diets have been specifically designed for manufacture by Specialty Feeds.