

## Insects

| Diet ingredient          | Cricket,<br>domestic, adult | Earthworm | Fruit fly | Mealworm<br>larvae | Mealworm<br>beetle |
|--------------------------|-----------------------------|-----------|-----------|--------------------|--------------------|
| Moisture (%)*, **        | 69.0                        | 80.0      | 70.4      | 62.4               | 61.4               |
| Gross Energy (kcal/kg)   | 5340                        | 4650      | 5120      | 6490               | 5790               |
| Crude Protein (%)        | 64.9                        | 62.2      | 70.1      | 52.7               | 63.7               |
| Crude fat (%)            | 13.8                        | 17.7      | 12.6      | 32.8               | 18.4               |
| Ash (%)                  | 5.7                         | 5.0       | 4.5       | 3.2                | 3.1                |
| Total Carbohydrate (%)   | ***                         |           |           |                    |                    |
| Crude Fiber (%)          |                             |           |           |                    |                    |
| Sugars (%)               |                             |           |           |                    |                    |
| Starch (%)               |                             |           |           |                    |                    |
| Ca (mg/kg)               | 1400                        | 17200     | 1000      | 1100               | 700                |
| P (mg/kg)                | 9900                        | 9000      | 10500     | 7700               | 7800               |
| Fe (mg/kg)               | 58.0                        | 4133.0    | 138.0     | 43.0               | 77.0               |
| Cu (mg/kg)               | 28.0                        | 18.0      | 18.0      | 19.0               | 22.0               |
| Mn (mg/kg)               | 31.0                        | 142.0     | 39.0      | 14.0               | 10.0               |
| Zn (mg/kg)               | 188.0                       | 250.0     | 171.0     | 100.0              | 113.0              |
| Se (mg/kg)               | 0.6                         | 0.9       | 0.1       | 0.3                | 0.3                |
| Mg (mg/kg)               | 1300                        | 1400      | 800       | 2200               | 1900               |
| Na (mg/kg)               | 4900                        | 200       | 4200      | 1400               | 1600               |
| K (mg/kg)                | 12900                       | 600       | 10600     | 9100               | 9200               |
| Vit C (mg/kg)            |                             |           |           |                    |                    |
| Thiamin (mg/kg)          |                             |           |           |                    |                    |
| Riboflavin (mg/kg)       |                             |           |           |                    |                    |
| Niacin (mg/kg)           |                             |           |           |                    |                    |
| Pantothenic acid (mg/kg) |                             |           |           |                    |                    |
| Pyridoxine (mg/kg)       |                             |           |           |                    |                    |
| Folate (mg/kg)           |                             |           |           |                    |                    |
| Oxalate (mg/kg)          |                             |           |           |                    |                    |
| Choline (mg/kg)          |                             |           |           |                    |                    |
| Vit B12 (ug/kg)          |                             |           |           |                    |                    |
| Retinol (ug/kg)          |                             |           |           |                    |                    |
| β carotene (mg/kg)       |                             |           |           |                    |                    |
| Vit E (mg/kg)            |                             |           |           |                    |                    |
| Vit K (mg/kg)            |                             |           |           |                    |                    |

\*All nutrients, except moisture, are presented on a Dry Matter basis for accurate comparison

\*\*Data gathered from Bernard, Allen and Ullrey, 1997. Feeding captive insectivorous animals: nutritional aspects of insects as food. NAG <http://www.nagonline.net/Technical%20Papers/NAGFS00397Insects-JONIFEB24,2002MODIFIED.pdf>

\*\*\*Blank entries reflect lack of data

Updated 12/08