



TOPINSECT

MEALWORMS

The mealworm beetle (*Tenebrio molitor*) is a species of darkling beetle or Tenebrionidae.

The four life-stages of this insect are: beetle – egg – larva – pupa.

The beetle is not as well-known as his larva (mealworm). The latter is considered both a plague insect and an important food source for birds, reptiles and especially captive animals. Only the larval stage of this species is sold as a food source on a large scale, while the beetle is less suited for this purpose but still accepted as feed by reptiles and amphibians. Beetles can easily be grown by letting the worms pupate.

In nature, the mealworm eats mouldered wood but he also likes wheat meal which makes him a plague for grain and meal processing companies. The mealworm is offered as feed to captive arthropods like bird spiders, scorpions and praying mantises. Next to these animals, the worm can also be used as a food source for insect-eating birds, several reptiles, amphibians and some fishes. Not all birds, reptiles and fishes like its relatively hard armour containing a lot of chitin.

In our farms, the mealworm is bred on a mixture of wheat, wheat bran and vegetables without any added growth promoters or chemicals.

Due to the boiling and shock freezing process on our equipment, the mealworms are disposed of all bacteria and become virtually sterile. The remaining fraction of bacteria and fungus is well below the standards which apply to human and animal food. This is frequently verified through analysis. The double process makes the worms also better digestible for animals.

Feeding Directions

Topinsect insects should always be defrosted before being offered to animals. An insect which is still frozen could cause stomach or intestinal cramps.

Never offer an animal more defrosted insects than it can eat. If too many insects are offered, they'll not be eaten and their quality will decrease rapidly.

How defrosting Topinsect insects?

- Spread the insects out in a thin layer in a warm room for about a quarter of an hour.
- If you wish to accelerate the defrosting process, you should put the insects in a kitchen sieve with fine mesh and wash them with cold or tepid water.

How offering defrosted Topinsect insects?

To birds, reptiles and amphibians:

- Always use clean dishes or jars
- Do not place the insects in direct sunlight or under a lamp in a terrarium and cover the dishes to put them in the shadow. Due to the high temperature and high protein percentage, the feed will dry out and the decomposition (rot) accelerates. A steak in the sun will neither be long edible.
- It is recommended to offer smaller parts several times per day in case of warm weather.

To fishes:

- The Topinsect insects can be thrown in the aquarium or pond once they are defrosted.
- The following rule also applies here: never offer more insects than necessary because insects which are not eaten immediately will sink to the bottom and rot.

Analyses

	In Fresh	In Dry Matter
Fluid	6,8 %	0%
Dry Material	35,2 %	0 %
Raw ashes	1,3 %	3,7 %
Protein	17,6 %	50,0 %
Fat	12,6 %	35,8 %
Carbohydrates	3,7 %	10,5 %
Starch	0 %	0%

Packaging

1 litre package or in bulk; 13 x 1 litre

1 litre of Mealworms is approximately 500 gm.

Store at -18°C

Distributed by:

