



# TOPINSECT

## BUFFALO WORMS

**Buffalo worms are the larvae of *Alphitobius Diaperinus* and are very nutritious due to their high protein percentage and low fat percentage. Besides, these worms are rather tasty (nut flavour), and especially small birds are mad about them.**

Buffalo worms are also less hard than e.g. mealworms and are therefore better digestible. Our farms breed buffalo worms on a mixture of grains and vegetables without any added growth promoters or chemicals.

Due to the boiling and shock freezing process on our equipment, the buffaloworms 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.

The four phases of this insect are: beetle – egg – larva – pupa.

The buffalo beetle (*Alphitobius Diaperinus*) is a beetle from the family *Tenebrionidae*. The larva is far more known than the beetle and is called the buffalo worm. The buffalo beetle resembles to the *Tenebrio molitor* as for its shape and behaviour, but is nevertheless smaller. He is on top shiny black, below reddish brown, and the antennas and legs are brownish. The thorax surface is covered with rough dots.

In nature, the beetle and the worm are more likely to be found in the southern Europe and in warmer areas all over the world. Their food varies quite a bit: from animal corpses and rotting trunks to grains. They mainly feed themselves with micro-organisms which can be found on these places. Micro-organisms such as fungus have a high protein percentage (just think of mushrooms).

Commercial poultry farms often consider the buffalo beetle as a plague because of their reputation to affect the stables' insulation.

### 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	72.5 %	0%
Dry Material	27,5 %	0 %
Raw ashes	1,0 %	3,6%
Protein	17,6%	64,0%
Fat	7,7	28,0
Carbohydrates	1,2%	4,4 %
Starch	0%	0%

### Packaging

1 litre package or in bulk; 13 x 1 litre.

1 litre of Buffalo worms is approximately 425 gm.

**Store at -18°C**

Distributed by:

