

Substance name: Hexaflumuron

EC Number: 401-400-1

CAS Number: 86479-06-3

Evaluating competent authority: Portugal

HEXAFLUMURON Bait against termites

Subterranean termites are very common in South Europe and particularly in Spain. They cause important damages to structures of buildings (pillars, beams, covers, etc), carpentry elements (doors, windows, floors), and wooden goods (furniture, libraries, archives).

In Spain, subterranean termites are widespread throughout the geography due to Weather conditions: warm temperature combined with the amount of humidity. Although there are not official data, the damages of termites' action in Spain have been estimated in 600 million EUR yearly, according to 2012 data.

Treatment of extensive urban areas such as architectonic ensembles or residential compounds (historical areas of towns, suburbs, villages, etc) attacked by termites requires a comprehensive and methodic approach to control the problem of damaged buildings. It is needed to monitor surroundings and consider all kind of impacts including social, economic and environmental impact.

For the treatment of extensive urban areas, two methods can be considered:

1.- Liquid chemical barrier system: which consists on a set of injections of liquid chemicals into the soil to create a barrier around the buildings to protect. This barrier not needs to be continuous to block termites entrance, although it is suggested; but needs high amounts of chemical active ingredients (a.i.). The termites are damaged when a.i. enter in contact with termites body and affects their physiology causing dead.

2.- Bait system: baits are installed of around the buildings or areas to protect and close to termites' galleries. The active ingredient is contained into cellulose bait. It is not injected into the soil, but it is offered to termites that must eat it. The a.i. used in baiting system affects termite's physiology causing their dead. An important fact of this treatment is that the effect of a.i. is delayed some days to weeks, so termites do not relate the bait (food) with its effect (dead). Moreover, once the termite colonies have been controlled, baits are removed.

Experience using Hexaflumuron:

I have been the responsible of the first global treatment of a village in Spain (Palenciana – Córdoba) using Hexaflumuron (Sentritech system). The village was severely damaged with more than 200 houses attacked by subterranean termites. The area occupied by affected buildings was

more than 50000 m²; we have monitored all treatment phases, installing 2000 baiting stations. After eight month treatment, termite activity has been disappeared. Twelve year late the treated area remains free of termites. Approximately 120 kg of cellulose bait was ingested by termites, but containing only 600 g of pure Hexaflumuron.

Currently my research is focused into the baiting system, searching for attractive ingredients which can improve the effectivity of the bait.

Conclusions:

In summary, this treatment is particularly efficient eliminating whole colonies, and at the same time it's safe for humans and environment. We consider it must be positively taken into consideration by the members of the Commission, as a positive advice for its evaluation.

Hexaflumuron absence in the market can cause a gap in termite control, from either a quantitative or a qualitative point of view. The problems caused by this pest are not only linked to the amount of affected buildings but also the relevance of some of them.

We are strongly convinced that Spanish historical heritage and villages need this tool an effective mean for preventing attack of termites and so we request to retain EU authorization of hexaflumuron to ensure the product is available to limit the termite's irreparable damage. We hope that you will take our concerns into consideration and ensure that this safe product can be approved.

Yours sincerely,

Dr. Miquel Gaju Ricart
Researcher and Professor at the Cordoba University.