**Substance name: Hexaflumuron**

EC Number: 401-400-1

CAS Number: 86479-06-3

Evaluating competent authority: Portugal

**HEXAFLUMURON Bait against termites**

Subterranean termites can cause significant damages to structures of buildings (pillars, beams, covers, etc), carpentry elements (doors, windows, floors), and wooden goods (furniture, libraries, archives).

In Spain, subterranean termite activity has been detected through most regions in the Spanish continental territory, and in Balearic Islands. **Damages of termites’ action in Spain have been estimated in 600 million EUR yearly , according to study from 2012.**

Treatment of big 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. But we need also to monitor surroundings and consider all kind of impacts including social, economic and environmental impact.

In case of treatment of an extensive urban area, two methods are commonly considered:

Liquid chemical barrier system: it consists on a set of injections of liquid chemicals into the soil to create a barrier around the buildings to protect. This barrier needs to be continuous to block termites entrance.

Baits system: Installation of baits around the bulding to protect and close termites’ galleries. Active ingredient is contained into the baits made of cellulose. It is not injected into the soil, but needs to be eaten by termites to control the colony. After finalization of treatment, baits are removed.

Using injection of chemical to control termites in significant urban areas can entail toxicity problems and environmental risks such as contamination of subterranean water and diverting product to non controlled areas. In addition, physical barrier must be continuous in order to be efficient, and earth movements can break the required homogeneity.

Therefore, bait treatment is the most adequate system to control termites in a big urban area. Currently, there is a work group leader by the Spanish Ministry of Agriculture and compounded of experts in termite control. This group is finalizing a document that recommends the use of bait treatment for controlling termites in big urban areas. It is planned that the conclusions of this work group will be conveyed to local authorities as a guide for solving termites’ problems.

Currently there are only two active ingredients for use in termite baits, and we strongly believe that it is important to keep alternative active ingredients in termite baits available that are effective on all termite species.

Dow Agrosciences’ hexaflumuron formulation (SENTRITECH Termite Colony Elimination System) used in baits:

1) is able to control all the subterranean termite species present in Europewith very low concentration of the active substance: the formulation consists of hexaflumuron coated cellulose placed inside plastic tubes or cages at a concentration of 0.5 w/w for each bait. The total amount used per site in Spain is between 3 y 10 g a.i. with an average of 7 grams. The total volume of hexaflumuron yearly used in Europe (including La Reunion and Guadeloupe) is very small (< 20 kg / year).

Efficacy of hexaflumurón to control termites in big urban areas have been successfully proven in numerous villages and towns through Spain (more than 60 urban areas). Among others:

* Andalucía: Illora, Vistoria, Priego de Cordoba, Palenciana, Marbella
* Aragón: Tarazona (Zaragoza), Luoien (Huesca)
* Basque Country: Azkoitia, Irala (Bilbao)
* Castilla y León: Agreda (Soria)
* Madrid
* Navarra: Tudela, Cabanillas

2) Furthermore, the exposure to humans, animals, environment is practically negligible:

* treatments are only made by professional pest control operators (PCO);
* the site owner signs a contract with the PCO and all steps, from installation to de-installation after colony elimination, are documented.
* hexaflumuron coated cellulose is only placed on in-ground stations when termites are present (firstly only untreated wood monitor are placed) and installation of above ground stations (with hexaflumuron) are only placed on known termite pathways.
* at the end of the efficacy period the traps and remaining product are collected by the pest control operator and disposed of appropriately. Once successful termite elimination has been achieved at a site, as a general rule the site does not need to be re-treated. hexaflumuron releases are considered to be minimal during use and due to the specific properties of hexaflumuron (low water solubility and high sorption to soil), it is not likely to contaminate surface or groundwater.
* As said, the active substance is used in very few quantities, and it's used in the bait that prevents it to be reached by children or domestic animals. Having into account that human toxicity is low, a person of 60 Kg should need to consume 60 kg of hexaflumuron coated cellulose to reach the DL50 (30 grams a.i. in one dose) which is highly improbable.

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 could determine a drastic decrease 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,

**LARGE URBAN AREAS TREATED WITH SENTRITECH:**

* *Pueblo de Palenciana (Córdoba)*
* *Barrio de Irala (Bilbao)*
* *Pueblo de Illora (Córdoba)*
* *Pueblo de Espejo (Córdoba)*
* *Pueblo de la Victoria (Córdoba)*
* *Villas Turísticas Priego (Córdoba)*
* *El barrio de la ciudad cooperativa de Sant Boi.*
* *El Barrio Arzobispo Armanyà de Vilanova i La Geltrú.*
* *Ayuntamiento de Orio Colonia “A” y “B”*
* *Ayto de Cabanillas Casco urbano*
* *Barrio de Iralla II Bilbao*
* *Ayto de Agreda, Casco Urbano.*
* *Ayto de Tarazona- Soria*
* *Ayto de Tembleque, Toledo*
* *Casco Urbano Ayuntamiento de Askoitia*
* *Ayto Agreda,*
* *Ayto Benamejí Córdoba*
* *AYTO ILLORA , Casco Antiguo*
* *AYTO ILLORA II FASE ILLORA*
* *Pueblo Espejo, Córdoba*
* *Ayto La Victoria Córdoba*
* *Ayto Villanueva de Córdoba*
* *Ayto Cabanillas Navarra*
* *Ayto Pinillas, Navarra*
* *Tudela , Navarra*

**HISTORICAL BUILDINGS TREATED WITH SENTRITECH**

* *Teatro Reina Sofía de Benavente (Zamora)*
* *Capilla Ba Ñobre (Miño)*
* *Catedral de Santiago de Compostela*
* *Parroquia de Fuenterrabía*
* *Parroquia Cerbón (Soria)*
* *Catedral De Tuí (Pontevedra)*
* *Catedral de Valladolid*
* *Catedral de Orense*
* *Parroquia de Campillo de Aragón (Zaragoza)*
* *Parroquia de San Salvador (Valladolid)*
* *Parroquia de la Sierra (Alava)*
* *Lonja de Valencia*
* *Cripta Güell (Barcelona)*
* *Teatro Principal (Valencia)*
* *Teatro López de Ayala (Badajoz)*
* *Palacio de la Diputación (Badajoz)*
* *Parador Nacional de Guadalupe (Cáceres)*
* *Palacio Mirabell de Guadalupe (Cáceres)*
* *Conservatorio de Música (Badajoz)*
* *Laboratorio agroalimentario de Sevilla*
* *Jefatura Tráfico Sevilla*

*Centro de Salud (Islas Baleares)*

* *Laboratorio Regional Pecuario (Cuenca)*
* *Iglesia Santa Maria Arenys del Mar Barcelona*
* *Esglesia de Beget (Girona)*
* *Fundación Selgas Fagade la Quinta*
* *Eglesia y rectoría de la cripta de la Colonia Güell. Santa Coloma de Cervelló.*
* *Iglesia San Juan Bautista Avila*
* *Parroquia San Esteban del Valle Avila*
* *El Museo Verdaguer (Casa Joana) de Vallvidrera.*
* *Diversos edificios y la Villa Universitaria de la Universidad Autónoma de Bellaterra.*
* *El Conservatorio de Música de Badalona.*
* *La Facultad de Náutica de la Universidad de Barcelona.*
* *La Facultad de Ingeniería Industrial de la Universidad de Barcelona.*
* *El edificio del ayuntamiento de Vilafranca del Penedés*
* *Ermita San Roque, Burjasot Valencia*
* *Edificio Emborronat, Pza. San Roque Burjasot Valencia*
* *Patronato Turismo Ayuntamiento Pizarra Málaga*
* *Museo Basílica Tardoromana Ceuta*
* *Ctro. Salud Mairena Aljarafe (Sevilla)*

*Mary Paz Rguez-Suarez*

*Jefa de Farmacia del Centro Zoosanitario del Aymto. de Sevilla*