

Pesticides

By definition, a pesticide is any thing that is intended to prevent, destroy, repel, attract or manage a pest. The pests may be insects, plant disease causing organisms, weeds, snails, slugs, rodents. Pesticides are grouped according to the pests they control, their chemical structure or how they work and affect the target pest. Insecticides, fungicides, herbicides and rodenticides are all different types of pesticides.

Pesticides are an important tool to manage pest problems around the home, garden and in agriculture. But when not used correctly, they can harm people, contaminate water or soil and harm beneficial or non-target organisms in the environment.

The principle component of a pesticide that controls the target pest is called the active ingredient. To create a pesticide, the manufacturer mixes the active ingredient with liquid or dry formulants to create a pesticide formulation, making the active ingredient easier to apply, more suitable for storage and maybe also more attractive to the pest.

An individual pesticide usually has 3 different names:

1. the product name – the name the manufacturer gives their particular pesticide product (which is displayed on the product label);
2. the common name – the name of the active ingredient in the pesticide;
3. the chemical name – the name given to the chemical structure of the active ingredient in the pesticide.

The following should also be considered when assisting customers to select an appropriate formulation:

- effectiveness against the pest;
- habits of the pest;
- the size and type of areas to be treated;
- the type of application equipment the customer will be using;
- the danger of drift and runoff (pesticide dissolved in water and flowing onto other surfaces, land or water).

In an ambitious work programme launched in 1992, the European Commission started a review process for all active ingredients used in plant protection products (pesticides) within the European Union. In a review process based on scientific assessments, each applicant had to prove that a substance could be used safely regarding a set of criteria comprehending human health, environment, ecotoxicity and residues in the food chain. If a pesticide is approved under 91/414/EEC, it is placed on Annex 1 of the same Directive and may be used throughout Member States. If it is not approved it might, nevertheless, be granted “essential use” derogations for some crops and Member States.

In other cases, the substance is banned or severely restricted without any space for “essential use” derogations.

As of December 2006, 115 substances were approved and placed in Annex 1 of Directive 91/414/EEC. Most substances are approved for a period of 10 years but in some cases the European Commission proposed a shorter period of approval to reflect the hazardous nature of the substances and give them a priority in the revision.