

Plant protection products

The plant protection products (or crop protection products) are chemical substances used to protect crops from pest agents attacks (for example molds, mushrooms, insects, pests, weeds) increasing yields and availability of food products. However, the toxicity of some has always represented an immediate risk both for those who manipulate them and for the consumers of the treated products. The awareness of their danger has led to an increasingly strict regulation regarding production, distribution and use of these substances. The use of crop protection products is regulated by targeted measures that make producers implement safety systems, and operators use them in a controlled way.

With this new concept, new European directives and regulations concerning the measures to be adopted have been issued : from periodic inspection of the machines for the distribution of products to the use of organic and integrated control techniques.

Plant protection products are made up of active substances and adjuvants.

The active substances aim to:

1. protect plants from harmful organisms or prevent their effects;
2. favor or regulate the vital processes of plants;
3. eliminate unwanted plants;
4. eliminate parts of plants to curb and avoid their undesired growth.

The adjuvants as bathers and emulsifiers encourage the action and the effectiveness of active substances.

Plant protection products can be classified as:

1. Insecticides that fight insects;
2. Fungicides that are used against molds and fungi;
3. Herbicides that eliminate all weeds.

Moreover, they are distinguished in ectophyte products that act remaining on the surface of the plant and endophyte products that penetrate more or less deeply into the plant tissues and therefore more dangerous.

Finally, there is a Community classification which, from the point of view of toxicology, distinguishes the plant protection products into : very toxic, harmful and irritating.

The authorization and the achievement of a specific license are required to purchase and use these substances.

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