

Pesticide Safety

The *Guide to Vegetable Crop Protection 2005* contains information on personal protection when mixing or applying products. It is important to avoid accidental contamination by wearing protective equipment and frequently laundering clothing worn when handling products.

Safe Use of Herbicides, Fungicides and Insecticides

Herbicides, fungicides and insecticides are classified according to the use hazard and risk involved.

The categories of hazard are:

- toxicity
- flammability
- explosive potential
- corrosivity

The degree of risk is represented by symbols taken from common traffic sign shapes represented by the stop, caution and yield signs. The signal word for each of the signs is danger (high risk), warning (moderate risk) and caution (low risk). Where the risk is minimal, no designation is required. The label on the container will carry the appropriate signs for the protection of the user. Degree of risk information for herbicides, insecticides and fungicides used in fruit crops are summarized in tables entitled "Relative Toxicities and Protective Equipment" and located just prior .

LD₅₀ values are used to rate the toxicity of pesticides. The LD₅₀ refers to the dose of pesticide (in mg per kg of the test animal's body weight) that is lethal to 50 percent of the group of test animals. For example, if a pesticide has a LD₅₀ value of 10 mg/kg, and the test animals each weigh 1kg, then 50 percent of the animals would die if they each ate 10 mg of the pesticide.



Figure 1. Degree of risk and hazard symbols

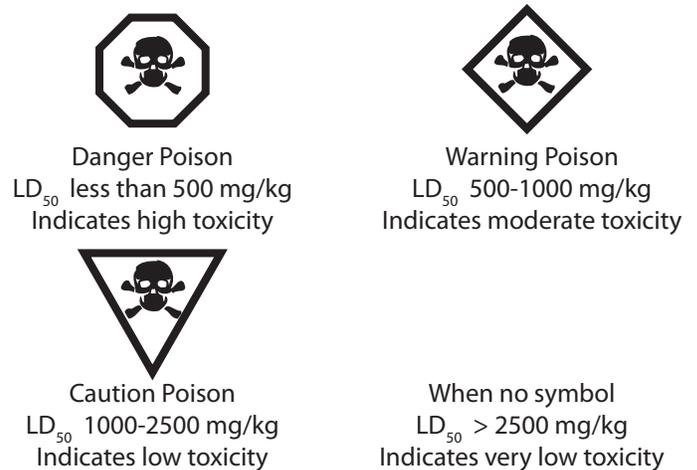


Figure 2. Oral LD50 values as they relate to the Risk/Hazard symbols

Different types of protective equipment are required for pesticides that differ in toxicity. Special equipment requirements are described on the product label, but in general, the following precautions must be taken when using pesticides of different hazard ratings.

Danger Poison - requires goggles, respirator, gloves and skin protection, avoid fumes and spray mist.

Warning Poison - requires goggles, gloves and skin protection, avoid fumes and spray mist. **Caution**

Poison - requires gloves and skin protection, avoid fumes and spray mist.

The absence of a hazard symbol on a pesticide label indicates low toxicity to mammals. Nevertheless, protective clothing should be worn when using pesticides that do not have a hazard symbol.