# carbaryl

#### ALWAYS READ AND FOLLOW THE LABEL

Information on this page is not to be substituted for label directions

# Active Ingredient (a.i.): carbaryl

Target Pest Category: insecticide

#### **Examples of Trade Names:**

Sevin, Later's Potato & Tomato Dust, Wilson Cutworm & Sowbug Bait, Eco Bran

#### Types of Formulation:

Aqueous dispersions, baits, dusts, flowables, granules, wettable powders, emulsifiable, soluble, and suspension concentrates.

#### **Chemical Family:**

Carbamate

#### What it is:

Carbaryl is a broad-spectrum insecticide that kills insects by contact and stomach poisoning. It has slight systemic activity, and has some impact on plant growth (depending on dosage and application timing).

#### **How it works** (Mode of Action):

Carbaryl attacks the nervous system by interfering with nerve transmission. Insects begin dying in 24-48 hours; residual activity varies between 5-10 days depending on insect, dosage and crop.

## Toxicity based on pure active ingredient:

Species	LD <sub>50</sub> /LC <sub>50</sub>	Relative Toxicity*
Mammal (female rat)	LD <sub>50</sub> Oral : 500 mg/kg	Moderately toxic
Mammal (rabbit)	LD <sub>50</sub> Dermal: >2000 mg/kg	Slightly toxic
Bird (Mallard duck)	LD <sub>50</sub> >2179 mg/kg	Practically non-toxic
Bees (topical)	LD <sub>50</sub> 1 µg/bee	Highly toxic
Fish (trout) (96 hour)	LC <sub>50</sub> 1.3 mg/L	Moderately toxic
Other beneficial species	-	Toxic to beneficials

<sup>\*</sup>For description of relative toxicity categories please click here.

#### What it controls:

Carbaryl controls over 100 species of insects on fruit, forests, lawns, nuts, ornamentals, shade trees, and other crops, as well as on poultry, livestock and pets. Note: the specific crop-pest or livestock-pest combination must be on the label.

## **Application Timing:**

Timing of application depends on the insect pest to be controlled. Consult label for application information. Monitor pests to assess need for repeat applications.



**Food and Fisheries** 

#### **Mixing Instructions:**

- Only prepare only the required amount of spray on the day of application.
- Do NOT store mixtures overnight.
- o Agitate, stir, or re-circulate all carbaryl sprays prior to use.
- Do not tank mix with other products unless previous experience shows the mixture is effective and does not cause high residues or injury to plants.

#### **Application Tips:**

- Do not apply to blooming crops if bees are foraging in the treatment area.
- Repeated applications of carbaryl can cause pest mite populations to increase to damaging levels.
- o Carbaryl can cause apples to drop if applied within 30 days of bloom.

#### Storage:

- o Store in a tightly closed container.
- Do not ship or store near food, feed, seed and fertilizers.
- o Store in cool, dry, locked, wellventilated area without floor drain.
- Do not store where temperatures frequently exceed 37°C.
- Dry formulations can withstand freezing.

#### Applicator Safety and Re-entry:

- Avoid breathing dust or spray mist.
- Avoid contact with eyes, skin or clothing. Wear regular long sleeved work clothing and head covering.
- Do not eat, drink, or use tobacco while working with carbaryl.
- o Re-entry interval is 48 hours for most crops.
- Wash thoroughly after handling.

#### **Environmental Considerations:**

- Carbaryl is very toxic to predatory insects and mites.
- o Carbaryl is toxic to honey and leafcutter bees and other flower-visiting insects.

#### **Resistance Management:**

- o Carbaryl belongs to the Group 1A insecticide classification.
- o Follow appropriate resistance management program.

#### **Integrated Pest Management:**

o Minimize use of carbaryl where pest management programs include biological control.

#### **Pesticide Labels:**

 Labels for pesticides registered in Canada can be found on the Pest Management Regulatory Agency (PMRA) label search web page: http://www.eddenet.pmra-arla.gc.ca/4.0/4.01.asp

Last Updated: August/2004