



# Sevin® T&O

**Active Ingredients:** carbaryl 480 g/L

**Group:** 1A insecticide

**Mode of Action:** controls through contact and or ingestion

**Formulation:** liquid suspension

**Signal Word:** caution

**Best Uses:** White grubs including: European Chafer, Japanese beetle, and European Crane Fly larvae (leatherjackets), ants, chinch bugs, cutworms, and sod webworm

Sevin® T&O provides excellent control of both surface and subsurface feeding insect pests.

## Attributes of Sevin T&O

- Outstanding as a curative control measure (after the problem has been determined)
- Low soil persistence
- Favourable applicator and environmental record
- Effectiveness is not compromised by high temperatures
- Has a half-life in the soil of approximately 7 – 10 days
- Not prone to breakdown by UV radiation
- Suitable alternative to organophosphate insecticides

## How to apply Sevin T&O

Apply Sevin T&O during the late summer or fall. If the larvae are effectively destroyed, it should not be necessary to treat the same area the following spring. Sevin T&O can be applied in the spring but may not provide the same level of performance given the life cycle of the insect and environmental conditions.

## Application Tips

For effective control of grubs it is critical that the application be watered in (with at least 1/2 inch of water). Preferably this should be done within a four hour period (before the product has an opportunity to dry to the surface of the lawn) or at the very least within 12 hours.

- Where dry soils exist, irrigate prior to application
- Where heavy thatch exists, aerate prior to application
- Where possible, target applications to control younger (1st or 2nd) instar grubs

Sevin T&O is sensitive to alkaline water pH's. When mixed in water that has a pH of 8 the half-life of Sevin T&O is 2.5 days (half-life of Sevin T&O increases to 20 days in water that has a pH of 7). It is good practice to have your water tested for pH. Where necessary, a commercial pH buffering agent can be added to increase tank life of Sevin T&O.

Avoid application to non-turf areas. Sevin T&O may stain interlocking brick driveways, concrete sidewalks and other types of hard surfaces.

CROP	INSECT	SPECIFIC DIRECTIONS
Turf (Ornamental and Sports)	Ants Chinch bugs Cutworms (climbing) Earwigs Fall armyworm Fleas Leafhoppers Millipedes Mosquitoes Sod webworms	Apply 210 to 290 mL of Sevin T&O Insecticide in 6 to 15 L spray volume per 100 m <sup>2</sup> of turf.  Mow lawn and apply spray. Do not water for 2 days after treatment. Repeat in 2 to 3 weeks if necessary.
Turf	European Chafer*, Japanese Beetle* (suppression of population)	Where small areas of turf are being treated, apply 210 to 290 mL of Sevin T&O Insecticide in 6 to 15 L spray volume per 100 m <sup>2</sup> of turf.  Alternatively, apply 210 to 290 mL of Sevin T&O Insecticide in 1.5 to 3 L spray volume per 100 m <sup>2</sup> of turf and irrigate following application to ensure movement of Sevin T&O Insecticide into the root zone. Remove excessive thatch and irrigate 24 hours before treatment if soil is dry. Contact local agricultural representative for treatment thresholds and timing of application.  *To optimize control of European Chafer and Japanese Beetle apply Sevin T&O Insecticide to the early instar stage of the grub.
Turf (Golf Course)	Leatherjackets (larvae of crane flies; <i>Tipula oleracea</i> and <i>T. paludosa</i> )	Apply a single treatment of 200 mL of Sevin T&O Insecticide in 6 to 15 L spray volume per 100 m <sup>2</sup> of turf. Mow golf course turf and apply spray. Do not water for 2 days after treatment.  Alternatively, where small areas of turf are being treated, apply in 1.5 to 3 L spray volume per 100 m <sup>2</sup> of turf and irrigate following application to ensure movement of Sevin T&O Insecticide into the root zone.  Remove excessive thatch and irrigate 24 hours before treatment if soil is dry. To ensure effective use of insecticide, monitor turf for the abundance of larvae of <i>T. paludosa</i> and <i>T. oleracea</i> . Treatment should be considered at densities at or above 270 larvae per m <sup>2</sup> .  To optimize control of leatherjackets apply Sevin T&O Insecticide to late instar larvae. Contact local agricultural representative for treatment thresholds and timing of application. Do not allow public use of treated areas during applications or until sprays have dried.
Turf	Leatherjackets (larvae of crane flies; <i>Tipula oleracea</i> and <i>T. paludosa</i> )	Apply one treatment per year of 200 mL of Sevin T&O Insecticide in 6 to 15 L spray volume per 100 m <sup>2</sup> of turf. Mow turf and apply spray. Do not water for 2 days after treatment.  Alternatively, where small areas of turf are being treated, apply in 1.5 to 3 L spray volume per 100 m <sup>2</sup> of turf and irrigate following application to ensure movement of Sevin T&O Insecticide into the root zone.  Remove excessive thatch and irrigate 24 hours before treatment if soil is dry. To ensure effective use of insecticide, monitor turf for the abundance of larvae of <i>T. paludosa</i> and <i>T. oleracea</i> . Treatment should be considered at densities at or above 270 larvae per m <sup>2</sup> .

