

# MERIT<sup>®</sup> SOLUPAK<sup>®</sup>

## INSECTICIDE

### 75% Wettable Powder in Water Soluble Packets

FOR FOLIAR AND SYSTEMIC CONTROL OF THE LARVAE OF EUROPEAN CHAFER, JAPANESE BEETLE, AND BLACK TURFGRASS ATAENIUS BEETLE AND SUPPRESSION OF EUROPEAN CRANE FLY LARVAE (LEATHERJACKETS) IN TURFGRASS INCLUDING SOD FARM.

#### COMMERCIAL

GUARANTEE: Imidacloprid ..... 75%

REGISTRATION NO. **25932** PEST CONTROL PRODUCTS ACT

**READ THE LABEL BEFORE USING  
KEEP OUT OF REACH OF CHILDREN**



**CAUTION POISON**

**CAUTION EYE IRRITANT**

**DO NOT SELL WATER SOLUBLE PACKETS SEPARATELY**

KEEP WATER SOLUBLE PACKETS IN THIS CONTAINER AND STORE IN A COOL, DRY PLACE BUT NOT BELOW FREEZING

**CONTAINS FOUR 45 g WATER SOLUBLE PACKETS**

**TOTAL NET CONTENTS: 180 Grams**

Bayer CropScience Inc.\*  
Suite 200, 160 Quarry Park Blvd. S.E.  
Calgary, Alberta T2C 3G3  
Telephone: 1-888-283-6847

\*Bayer Environmental Science  
A Division of Bayer CropScience

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Wear long-sleeved shirt, long pants, and chemical-resistant gloves when handling. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children or pets off treated area until spray is dry.

### **RESTRICTIONS**

Do not graze treated areas or use clippings from treated areas for feed or forage.  
Do not plant any food crop within one year of a treatment.

### **ENVIRONMENTAL HAZARDS**

Do not apply within 30 metres of environmentally sensitive areas such as lakes, streams, rivers or other aquatic systems. Do not apply to terrains where there is a potential for surface run-off to enter aquatic systems.

Do not mix, load or clean equipment within 30 metres of wellheads or aquatic systems. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product is highly toxic to aquatic invertebrates.  
Apply this product only in accordance with this label.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

### **FIRST AID**

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** No specific antidote is available. Treat the patient symptomatically.

#### **STORAGE AND DISPOSAL**

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

**DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal.

1. Thoroughly empty the contents of the container into the application device.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

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### **DIRECTIONS FOR USE**

Read these entire DIRECTIONS FOR USE AND GENERAL INFORMATION before using MERIT SOLUPAK Insecticide.

#### **APPLICATION TO TURFGRASS:**

MERIT SOLUPAK Insecticide can be used for the control of soil inhabiting life stages of European chafer beetle, Japanese beetle, and Black Turfgrass Ataenius beetle and the suppression of European Crane fly larvae (leatherjackets). MERIT SOLUPAK Insecticide can be used as directed on turfgrass in sites such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields, and sod farms.

The active ingredient in MERIT SOLUPAK Insecticide has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on monitoring of the site, previous records or experiences, current season adult trapping or other methods. Applications should be made prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall (5 -10 mm) to move the active ingredient through the thatch. Avoid overwatering (more than 20 mm). Avoid runoff or puddling of irrigation water following application.

The treated turf area must be in such a condition that the rainfall or irrigation water will penetrate vertically into the soil profile, which will ensure an adequate distribution of the active ingredient. Avoid application of MERIT SOLUPAK Insecticide to turfgrass areas which are waterlogged or saturated, which will not allow penetration of the active ingredient into the plant root zone.

Apply MERIT SOLUPAK Insecticide ONLY ONCE per year as directed by this label.

#### **Application Equipment for Use on Turfgrass**

Apply MERIT SOLUPAK Insecticide in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

**MIXING:** The enclosed packets are water soluble and will dissolve completely in water. After opening outer bag, drop the required number of unopened inner packets into the spray tank as directed. Do not excessively handle water soluble packets or expose to moisture since this may cause breakage. Do not allow packets to become wet prior to mixing spray solution. Do not handle with wet hands. Reseal outer bag to protect remaining packets.

While recirculating and with the agitator running, add the required number of water soluble packets, as determined under 'Recommended Applications', to the spray tank as you continue filling the tank to the desired level of water. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within a few minutes. Cooler water temperatures increase the time needed for the inner packets to dissolve completely.

Do not apply through any irrigation system.

**Do not apply by aerial application.**

Do not apply when wind speeds are greater than 12 –15 km per hour at site of application.

In sod farms, DO NOT re-enter treated areas until residues have dried.

RECOMMENDED APPLICATIONS			
CROP	PEST	DOSAGE MERIT SOLUPAK INSECTICIDE	REMARKS
Turf grasses on home lawns, business and office complexes, shopping complexes, multi-family residential complexes, airports, cemeteries, parks, playgrounds, athletic fields, golf courses and sod farms	<b>For Control of the Larval Stage:</b> Japanese beetle,  European chafer beetle  Black turfgrass ataenius.	10 packets/1.2 ha  or  1 packet/1200 m <sup>2</sup>	For optimum control, make application prior to egg hatch of the target pest(s). Consult your local Agricultural (Horticultural) Advisor for more specific information regarding timing of application.
	<b>For Suppression of the Larval Stage:</b>  European Crane Fly*		* For suppression of early fall larval stages of crane fly (larvae known as leatherjackets) apply MERIT SOLUPAK Insecticide to turfgrass areas known to be infected with leatherjackets. Application timing should commence when adult crane flies take flight in August and September and begin laying eggs.

Be sure to read \*APPLICATION EQUIPMENT\* Section of this label.

**NOTE:** For optimum control, irrigation or rainfall should occur within 24 hours after application to move the active ingredient through the thatch. On golf courses, irrigate treated areas following application. Avoid mowing turf or lawn area until after irrigation or rainfall has occurred so that uniformity of application will not be affected. Apply MERIT SOLUPAK Insecticide only once per year as directed by this label. If an application of MERIT SOLUPAK Insecticide was applied to a turfgrass area earlier in the summer season for Japanese beetle or European chafer or Black turfgrass ataenius, do not re-apply for leatherjacket suppression in the same year.

**RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, please note that Merit Solupak Insecticide contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to Merit Solupak Insecticide and other Group 4 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action, but specific

for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of Merit Solupak Insecticide or other Group 4 insecticides with different groups that control the same pests in a field.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Before applying Merit Solupak Insecticide, correctly identify the pest and ensure economic and agronomic thresholds are met as recommended by local provincial or IPM specialists.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Bayer CropScience via internet at [www.bayercropscience.ca](http://www.bayercropscience.ca) or phone 1-888-283-6847.

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