GROUP 3 INSECTICIDE

# FORCE® 3.0G INSECTICIDE

**AGRICULTURAL** 

**GRANULAR** 

A SOIL-APPLIED INSECTICIDE FOR CONTROL OF CORN ROOTWORM, BLACK CUTWORM, WIREWORMS AND SEEDCORN MAGGOT IN FIELD, SWEET, AND SEED CORN

#### **GUARANTEE:**

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



# POTENTIAL SKIN SENSITIZER CALL A DOCTOR IMMEDIATELY IN CASE OF ACCIDENT

REGISTRATION NO. **23917**PEST CONTROL PRODUCTS ACT

NET CONTENTS: 20 kg, 22.7 kg

### Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, Ontario N1G 4Z3

Telephone: 1-877-964-3682

# WARNING READ THE LABEL BEFORE USING KEEP OUT OF REACH OF CHILDREN AND ANIMALS

**DANGER** - may be fatal if swallowed **POTENTIAL SKIN SENSITIZER** 

**NEVER** transfer to an other container

**STORE** tightly closed in the original package away from children and animals

#### **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.

#### **FIRST AID**

**IN CASE OF POISONING,** contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**If swallowed,** call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

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 centre or doctor for treatment advice.

**If on skin or clothing,** take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre 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 centre or doctor for further treatment advice.

#### TOXICOLOGICAL INFORMATION

This product contains tefluthrin, a synthetic pyrethroid insecticide. Symptoms of ingestion include nausea, vomiting, and abdominal pain. Large doses may cause tremor, weakness, or ataxia. Treat symptomatically. In case of exposure to skin of face or other sensitive areas, some individuals may feel a tingling or numbness. This is a transitory effect and does not cause harm to skin.

#### **PRECAUTIONS**

Wear protective clothing including chemical resistant coveralls over a single layer (long-sleeved shirt, long pants, socks plus boots) with chemical resistant gloves and safety goggles or face shield with a suitable respirator when handling this product. Rinse gloves before removing.

Avoid contact of the product with skin and eyes.

Avoid breathing dust.

Wash hands and face thoroughly after using this product and before eating, drinking, or smoking.

Remove contaminated clothing immediately after use and wash separately from other laundry before re-use.

Do not eat, drink, or smoke while using the product.

Do not contaminate feed, food, or water supplies.

Keep the following personal protective equipment immediately available for use in case of emergency (*i.e.* a broken package, spill, or equipment breakdown): chemical-resistant coveralls, chemical-resistant gloves, chemical-resistant head gear and a respirator.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at <a href="https://www.croplife.ca">www.croplife.ca</a>.

#### **ENVIRONMENTAL HAZARDS**

Prevent contamination of ponds, waterways or ditches with this product. Do not apply FORCE® 3.0G Insecticide to fields with significant slope to adjacent waterways, or within 15 m of waterways, ponds or ditches. FORCE 3.0G Insecticide is highly toxic to aquatic invertebrates and fish. Contour ploughing should be practiced (i.e. land should be cultivated at right angles to its slope).

TOXIC to aquatic organisms.

TOXIC to birds and small wild mammals. Any spilled or exposed granules must be incorporated into the soil or otherwise cleaned-up from the soil surface.

#### Run-off

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

#### **STORAGE**

Store in a cool, dry place, away from children or animals. The product is not affected by freezing.

#### **SPILL CLEAN-UP**

Follow safety precautions as directed for handling the product. Collect spilled product with (e.g.) a broom or shovel into a tightly closable container. If on a floor or hard surface, wash with detergent and water, then rinse. If on soil, collect contaminated surface soil with the product. If the product is clean, it may be used; otherwise, follow the disposal instructions.

#### **DECONTAMINATION AND DISPOSAL**

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.

#### **DISPOSAL:**

- 1. Empty bag thoroughly into insecticide hopper box.
- 2. Make the empty bag unsuitable for further use.
- 3. Dispose of the bag in accordance with provincial requirements.

## IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

#### PRODUCT INFORMATION

FORCE 3.0G Insecticide is a synthetic pyrethroid soil insecticide applied at planting as a band or infurrow treatment for control of corn rootworm, black cutworm, wireworms, seedcorn maggot in field, sweet and seed corn.

FORCE 3.0G Insecticide applied as a band will control Northern and Western corn rootworm and black cutworm.

FORCE 3.0G Insecticide applied in-furrow will control Northern and Western corn rootworm, black cutworm, wireworms and seedcorn maggot.

FORCE 3.0G Insecticide is not systemic, and does not control insects which burrow into or feed on corn stalks, leaves, or ears.

#### **DIRECTIONS FOR USE**

**FORCE 3.0G Insecticide is to be used on field, sweet and seed corn only**. Corn forage, grain, cobs, and other plant portions may be fed to livestock.

**APPLICATION:** Apply FORCE 3.0G Insecticide through a planter mounted insecticide applicator.

DO NOT APPLY BY AIR.

Banded: For control of Northern and Western corn rootworm and black cutworm.

Apply FORCE 3.0G Insecticide in a 15-20 cm wide band centred over the seed furrow at **37.5 g product/100 m of row** through a planter mounted insecticide applicator. The band should be applied ahead of the planter's press wheels and then incorporated into the top 1-2 cm of soil by tines or by dragging a short length of chain behind the press wheels. If using a planter with the insecticide applicators behind the press wheels, ensure incorporation into the top 1-2 cm of soil. It is recommended that wind-guards be used to ensure proper placement of FORCE 3.0G Insecticide.

**NOTE:** In regions where seedcorn maggot and wireworm are common, these may be controlled by treatment of seed with a registered product. Follow product label for rates and directions for use.

**In-Furrow:** For control of Northern and Western corn rootworm, black cutworm, wireworms and seedcorn maggot.

Apply FORCE 3.0G Insecticide in the furrow with the seed 2-5 cm deep at 37.5 g product/100 m of row. FORCE 3.0G Insecticide should be applied directly behind the seed tube into the open seed furrow.

Rotional crops may be planted no sooner than 30 days after application.

Do not harvest sweet or field corn for forage until 49 days after treatmeant and for cobs or grain until 56 days after treatment.

#### **Engineering Controls and Personal Protective Equipment**

## Mixing and loading granules:

Open mixing and loading with maximum Personal Protective Equipment (PPE): Chemical resistant coveralls over a single layer (long-sleeved shirt, long pants, socks plus boots) with chemical resistant gloves, and safety goggles or face shield plus a suitable respirator.

#### **Applying granules:**

Use a closed cab with maximum Personal Protection Equipment (PPE): Chemical resistant coveralls over a single layer (long-sleeved shirt, long pants, socks plus shoes). Add chemicals resistant gloves for all tasks outside of the closed cab.

#### **Restricted-entry Intervals**

Observe a restricted-entry interval of 12 hours after application for all post application activities.

**CALIBRATION:** It is essential that the correct rate of FORCE 3.0G Insecticide be applied to obtain the best insect control. Calibration tubes and instructions are available from your supplier.

- 1. Measure a 100 m length of row.
- 2. Attach calibration tubes to each applicator outlet.
- 3. Drive planter down the 100 m of row at normal planting speed to collect insecticide in calibration tubes.

- 4. Remove tube and tap 4 times to settle granules.
- 5. If calibration tube reading is above or below 37.5 g/100 m row, adjust gauge setting accordingly and repeat steps 2, 3 and 4.
- 6. Recalibrate periodically to ensure correct rate is being applied.

#### **GAUGE SETTINGS FOR FORCE 3.0G INSECTICIDE APPLICATION**

Speed Km/h	6.5	10	13
Applicator	Application Rate: 37.5 grams per 100 m of row		
Gandy bolt-on bottom Gandy snap-on bottom Noble (round opening) Noble (rectangular opening) John Deere 1986 Maxi-Emerge II (adjustable knob-0-79) John Deere 7000 Maxi-Emerge (Even) (0-10-20-30-40) John Deere 7000 Maxi-Emerge (Odd) (5-15-25-35-45) John Deere (metal box with 3 range settings and dial) Range/Notch International Harvester (one gauge per hopper) Gate/Dial Old International Harvester (two gauge per hopper) Gate/Dial New Buffalo (10-20-30-40) Buffalo (fluted-roll feed-revolutions on hexagonal adjusting-nut) Allis Chalmers (old) Allis Chalmers (new, with Noble metering unit)	17 15 8 6 13 10 9 1/17 1/6 2/2 6 4 3/4 4 3/4 8	19 18 9 7 17 13 11 1/25 2/0 2/5 9 *	21 21 14 9 21 17 14 1/32 2/3 2/8 12 *
Kinze	6	8	10

<sup>\*</sup> Uniform Flow at all Speeds

**NOTE:** These settings should be used as starting points only. Continually check the amount of FORCE 3.0G Insecticide used against a known length of row or acreage and make further adjustments accordingly. Also, check calibration occasionally to make sure equipment wear, changing conditions, etc., have not caused a change in flow rate.

FORCE 3.0G Insecticide used at 37.5g of product per 100 metres of row converts to the following quantities per planted corn acreage.

Row Spacing	FORCE 3.0G Insecticide per ha	1 bag of FORCE 3.0G Insecticide (20kg) will treat
75 cm	5 kg	4.0 ha
80 cm	4.7 kg	4.2 ha
85 cm	4.4 kg	4.6 ha
90 cm	4.25 kg	4.8 ha
95 cm	3.95 kg	5.0 ha
100 cm	3.75 kg	5.4 ha

#### **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, please note that FORCE 3.0G Insecticide contains a Group 3 insecticide. Any insect population may contain individuals naturally resistant to FORCE 3.0G Insecticide and other Group 3 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 FORCE 3.0G Insecticide or other Group 3 insecticides with different groups that control the same pests in a field.

Use tank mixtures with insecticides from a different group when such use is permitted.

Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

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 Syngenta Canada Inc. company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <a href="https://www.syngenta.ca">www.syngenta.ca</a>.

FORCE® is a trademark of a Syngenta Group Company.