

2015-0158
2015-02-10

(Container)

Group	2	Herbicide
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ADAMA
Florasulam NC

Suspension

**FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND PEACE RIVER
REGION OF BRITISH COLUMBIA ONLY**

AGRICULTURAL

READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

GUARANTEE: florasulam 50 g/L
Contains 1,2-benzisothiazoline-3-one at 0.039% as a preservative

REGISTRATION NO. **30857** PEST CONTROL PRODUCTS ACT

CAUTION



POISON

MAY CAUSE SLIGHT EYE IRRITATION

NET CONTENTS: 0.5-250 Litres

ADAMA Agricultural Solutions Canada Ltd.
300 – 191 Lombard Avenue
Winnipeg, Manitoba
R3B 0X1
1-855-264-6262

**For emergency medical help and health/safety inquiries call ProPharma at 1-877-250-9291
(24 hours a day)**

For spill, leak or fire call INFOTRAC at 1-800-535-5053 (24 hours a day)

PRECAUTIONS

MAY CAUSE SLIGHT EYE IRRITATION.

KEEP OUT OF REACH OF CHILDREN.

DO NOT APPLY BY AIR.

At all times: Wear clean clothing with full length sleeves and pants.

During mixing and loading, and clean-up and repair: Wear chemical-resistant gloves. Rinse gloves before removal. Use safety glasses. **At completion of spraying or end of the day:** Take a shower immediately. Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing at the end of the work session and store and wash separately from household laundry using detergents and hot water before reuse.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

FIRST AID:

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 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.

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.

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

TOXICOLOGICAL INFORMATION

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

ENVIRONMENTAL HAZARDS

Overspray or drift to sensitive habitats should be avoided. A buffer zone of 30 metres is required between the downwind edge of the boom and the closest edge of sensitive terrestrial habitats including forested areas, shelter belts, woodlots, hedgerows, and shrublands. A buffer zone of 5 metres is required between the downwind edge of the boom and the closest edge of sensitive aquatic habitats including sloughs, ponds, prairie potholes, lakes, rivers, streams, wetlands and wildlife habitats at the edge of these bodies of water. Do not contaminate these habitats when cleaning and rinsing spray equipment or containers.

Do not apply during periods of dead calm or when winds are gusty.

STORAGE

Store in original containers in a secure, dry heated storage. Florasulam NC will freeze at -10°C. If product is frozen, bring to room temperature and agitate before use. Do not allow contamination of seeds, plants, fertilizers or other pesticides. Do not contaminate food, feedstuffs or domestic water supplies. If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste.

DISPOSAL

Recyclable Containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

Returnable Containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

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.

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 any 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.

(Booklet)

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GENERAL INFORMATION

Florasulam NC is a selective postemergence herbicide for the control of hard-to-kill annual broadleaved weeds such as chickweed, wild buckwheat and cleavers in spring wheat (including durum), spring barley, and oats (tank mixes only) not underseeded with legumes. Florasulam NC is mixed with water and applied as a uniform broadcast spray. It is non-corrosive, nonflammable, and nonvolatile.

Florasulam NC must be applied early postemergence, to the main flush of actively growing broadleaved weeds. Warm, moist growing conditions promote active weed growth and enhance the activity of Florasulam NC by allowing maximum foliar uptake and contact activity. Weeds hardened off by cold weather or drought stress may not be adequately controlled or suppressed and re-growth may occur. For best results, ensure thorough spray coverage of target weeds. See “DIRECTIONS FOR USE” section of this label for complete use details.

Florasulam NC stops growth of susceptible weeds rapidly. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 2 weeks after application, depending upon growing conditions and weed susceptibility. Degree of control and duration of effect are dependent on weed sensitivity, weed size, crop competition, growing conditions at and following treatment, and spray coverage.

MODE OF ACTION

Florasulam NC inhibits the production of the ALS enzyme in plants. This enzyme is essential for the production of certain amino acids which are essential for plant growth. Florasulam NC is a Group 2 mode of action herbicide.

GENERAL USE PRECAUTIONS

Sensitive Plants

Do not apply Florasulam NC directly to, or otherwise permit it to come in direct contact with susceptible crops or desirable plants including alfalfa, edible beans, canola, flowers and ornamentals, lentils, lettuce, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tomatoes or tobacco.

Non-Target Sites

Do not apply where proximity of susceptible crops (e.g. canola and legumes) or other desirable plants is likely to result in exposure to spray or spray drift. See Environmental Hazards section of the label.

Crop Rotation

Fields previously treated with Florasulam NC can be seeded the following year to barley, canola, peas, wheat or fields can be summerfallowed.

Do not use in successive years at the same site.

This product has potential to leach. Do not apply excessive irrigation.

Tank Mixtures

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact ADAMA Agricultural Solutions Canada Ltd. at 1-855-264-6262 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by ADAMA Agricultural Solutions Canada Ltd.

Spray Equipment Precaution

Do not apply through any type of irrigation system.

DO NOT APPLY BY AIR.

To Reduce Spray Drift:

1. Use nozzles delivering higher volumes and coarser droplets.
2. Use low pressures (200 to 275 kPa).
3. Use 100 L/ha of spray solution.
4. Spray when the wind velocity is 15 km/hr or less.
5. Spot treatments should only be applied with a calibrated boom to prevent over-application.

Equipment Clean-Up

Equipment used to apply Florasulam NC should not be used to apply other pesticides to sensitive crops without thorough cleaning. To avoid subsequent injury to crops other than cereals, all spraying equipment must be thoroughly cleaned both inside and out, as follows:

1. Immediately after spraying, drain. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. Rinse inside of tank with clean water and flush through booms and hoses using at least one tenth of the spray tank volume. Drain tank completely.
3. Add 1 L of household ammonia (containing a minimum of 3 % ammonia) per 100 L of water while filling the tank with clean water. Agitate and then briefly flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full and allow to stand for 15 minutes with agitation. Flush the boom and hoses and drain tank completely.
4. Remove nozzles and screens and clean separately with an ammonia solution (100 mL in 10 L water).
5. Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume. Drain tank completely.

Note: If it is not possible to drain the tank completely, step 3 must be repeated before going onto step 4. **Caution:** Do not use ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty chlorine odour which may cause eye, nose, throat, and lung irritation. Do not clean equipment in an enclosed area.

DIRECTIONS FOR USE

READ THE ENTIRE LABEL BEFORE USE. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. DO NOT APPLY TO CROPS UNDERSEEDED WITH LEGUMES.

Weeds Controlled or Suppressed by Florasulam NC Alone at 100 mL/ha

Weeds Controlled:

buckwheat, wild canola,	shepherd's-purse
volunteer♦	smartweed
chickweed, common	stinkweed
cleavers	mustard, wild

♦ Including herbicide-tolerant canola varieties except Clearfield canola.

Weeds Suppressed:

hempnettle	sowthistle, annual
pigweed, redroot	sowthistle, perennial*

* Applications made at advanced leaf stages will reduce product effectiveness.

TANK MIX COMBINATION - FLORASULAM NC + GLYPHOSATE PRESENT AS ISOPROPYLAMINE SALT OR DIMETHYLAMINE SALT (E.G., VANTAGE TM PLUS HERBICIDE OR VANTAGE PLUS MAX II HERBICIDE SOLUTION)

Crops Registered: Spring Barley, Oats, Spring Wheat (including durum)

Application Directions

Florasulam NC may be tank mixed with glyphosate present as isopropylamine salt (e.g., Vantage Plus Herbicide) or dimethylamine salt (Vantage Plus MAX II Herbicide Solution) to control volunteer glyphosate-tolerant canola, wild buckwheat (up to 5 leaf) and top growth control of dandelion (up to 6 leaf stage), in addition to the labelled weeds controlled by Florasulam NC or glyphosate.

Apply Florasulam NC at 100 mL/ha with glyphosate (present as isopropylamine salt or dimethylamine salt) at 450 g a.e./ha in 100 L water per hectare.

Application Timing and Cropping

Apply to actively growing weeds in the 2-4 leaf stage, except where noted above. Extreme growing conditions such as drought or near freezing temperature prior to, at or following time of application may reduce weed control. Only weeds which are emerged at the time of application will be affected. If foliage is wet at the time of application, control may be decreased. Under conditions of high weed density, control, may be reduced.

Spring

Florasulam NC + glyphosate may be applied in the spring prior to seeding and no longer than 48 hours after seeding prior to any crop emergence. Fields treated with Florasulam NC in the spring may be planted to barley, oats, wheat, durum or summer fallowed.

Summer

Prior to August 1st: Florasulam NC + glyphosate may be applied to summer fallow fields and seeded in the following spring to barley, canola, oats, peas or wheat (including durum) or summer fallowed.

After August 1st, Florasulam + glyphosate may be applied to summer fallow fields and seeded in the following spring to barley, oats or wheat (including durum) or summer fallowed.

Fall

Florasulam + glyphosate may be applied to stubble or summer fallow fields after August 1st and prior to freeze-up and may be seeded to barley, oats or wheat (including durum) or summer fallowed.

Do not use in successive years at the same site.

Apply only one of the following treatments to the same site in the same year: a tank-mix of Florasulam NC and Glyphosate Herbicide (Vantage Plus Herbicide or Vantage Plus MAX II Herbicide Solution) (prior to planting or as the initial treatment in summerfallow), Frontline* Herbicide Tank-Mix (postemergence), or Spectrum* Herbicide Tank-Mix (postemergence).

Mixing Instructions

1. Fill sprayer tank 1/2 full of water.
2. Start sprayer tank agitation.
3. Add the required amount of Florasulam NC.
4. Add tank mix partner and continue to agitate.
5. Fill the sprayer tank with sufficient water to spray 100 L of spray mixture per hectare.
6. Follow sprayer directions and precautions as outlined above, especially when applying next to sensitive crops (e.g. canola and legumes).
7. Follow sprayer clean-up directions.

Preharvest/Grazing Intervals

Livestock may be grazed on treated crops 7 days following application. Do not harvest the treated crop within 60 days after application.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Florasulam NC is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to Florasulam NC and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used

repeatedly in the same field. 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 herbicide resistance:

- Where possible, rotate the use of Florasulam NC or other Group 2 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. • Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or integrated weed management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact ADAMA Agricultural Solutions Canada Ltd. at 1-855-264-6262.

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