GROUP 2 FUNGICIDE

## ROVRAL® FLO FUNGICIDE CONTAINS IPRODIONE

**SUSPENSION** 

FOR CONTROL OF DISEASES IN CANOLA AND ALFALFA (GROWN FOR SEED)

## **AGRICULTURAL**

ACTIVE INGREDIENT: IPRODIONE......240g/L Contains 1,2-benzisothiazolin-3-one at 0.014% as a preservative

REGISTRATION NO. 29315 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN



POISON

WARNING: SKIN AND EYE IRRITANT

FMC of Canada Limited 6755 Mississauga Road, Suite 204 Mississauga, ON L5N 7Y2 1-833-362-7722

**NET CONTENTS: 1L-1050L** 

**LABEL** 

## IN CASE OF EMERGENCY, CALL 1-800-331-3148 (24 HOURS)

## **USE RESTRICTIONS:**

Do not store ROVRAL FLO Fungicide near feed or foodstuffs. Thoroughly clean application equipment after use. Do not contaminate domestic or irrigation waters. Do not allow spray drift onto oats. This product should not be applied under conditions where run-off is likely to occur. Do not apply immediately after a rainfall. If rainfall is imminent, delay spraying.

## **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin and eyes. Wear protective gloves and coveralls when handling ROVRAL FLO Fungicide. Wash hands and exposed skin thoroughly after handling the concentrate and after application. May be harmful if inhaled. Avoid working in spray mist.

**Environmental Hazards:** Do not apply directly to water. Overspray or drift to sensitive habitats should be avoided. Do not spray when wind is blowing towards terrestrial sensitive areas including forested areas, shelter belts, woodlots, hedgerows, pastures, rangelands, shrublands, and vegetated ditch banks, and the sensitive aquatic habitats including sloughs, ponds, prairie potholes, lakes, rivers, streams, reservoirs, and wetlands. Do not contaminate these sensitive areas through direct application, disposal of waste or cleaning equipment. When a tank mixture is used, consult the label of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

**For aerial applications:** Aerial drift is increased under certain meteorological conditions. Do not apply during periods of dead calm, when winds are gusty or when wind speed is greater than 16 km/hour at flying height at the site of application.

For ground boom applications: Do not apply during periods of dead calm or when winds are gusty.

## FIRST AID:

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. 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 to 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.

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

**TOXICOLOGICAL INFORMATION:** This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Treat symptomatically.

## **STORAGE CONDITIONS:**

Protect from frost.

## **DISPOSAL:** For 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.

## For refillable containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

## For returnable container:

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 a way that is inconsistent with the directions on the label.

ROVRAL® is a trademark of FMC Corporation or an affiliate.

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## **DIRECTIONS FOR USE:**

For mixing, put one half the required water volume in the tank; stir in ROVRAL FLO Fungicide and add the remainder of the water. Ensure mixing is complete. Agitate thoroughly before each application and continue to agitate during spraying. A prepared spray mixture should be used as soon as possible in the same day, especially if the water used for mixing is alkaline (greater than pH of 7). ROVRAL FLO Fungicide should not be mixed with other pesticides, adjuvants or fertilizers, except where stated.

## **CANOLA**

# CONTROL OF SCLEROTINIA STEM ROT AND SUPPRESSION OF ALTERNARIA BLACK SPOT

## **Timing:**

Apply ROVRAL<sup>®</sup> FLO Fungicide when the canola crop is in the 20 - 50% bloom stage. This will be approximately 4-8 days after the canola crop begins to flower.

Best protection will be achieved when a fungicide is applied at the 20 - 30% bloom stage. This will be prior to petals beginning to fall, and will allow for the maximum number of petals to be protected.

ROVRAL<sup>®</sup> FLO Fungicide can be applied until the 50% bloom stage. This will be when the canola crop is at its maximum yellow colour, and prior to significant petal fall.

## Rates:

<u>Single Applications</u>: Apply 2.1-3.1 L/ha ROVRAL<sup>®</sup> FLO Fungicide as a ground application in 100 litres of water per hectare, or as an aerial application in at least 45 litres of water per hectare. The 2.1L/ha is the recommended rate for most canola crops, however the higher rate is recommended for fields with a history of severe disease pressure and dense crop stands. Good coverage of the plants is essential.

Split Applications: Apply ROVRAL<sup>®</sup> FLO Fungicide at a rate of 1.05-1.56 L/ha followed by 1.05 L/ha as a ground application in 100 litres of water per hectare, or as an aerial application in at least 45 litres of water per hectare. The first application should be made at the 20% bloom stage of canola. The second application should be made at the 50% bloom stage of canola. The use of the higher rate on the first application is recommended for fields with a history of severe disease pressure and dense crop stands. Good coverage of the plants is essential.

## CONTROL OF SCLEROTINIA STEM ROT FOR LOW DISEASE PRESSURE

<u>Single Application Reduced Rate</u>: ROVRAL<sup>®</sup> FLO Fungicide may be applied at a reduced rate of 1.56 L/ha for lower disease pressure and light crop stands. This rate should also be applied as a ground application in 100 litres of water per hectare, or as an aerial application in at least 45 litres of water per hectare. Good coverage of the plants is essential.

## CONTROL OF ALTERNARIA BLACK SPOT

Control of alternaria black spot requires an application of ROVRAL<sup>®</sup> FLO Fungicide at **early green pod stage**. ROVRAL<sup>®</sup> FLO Fungicide may be applied as a single spray of 2.1 L/ha at early green pod stage, or as split applications of 1.05 L/ha at 20 - 50% bloom followed by 1.05 L/ha at early green pod stage. If a spray of 2.1 - 3.1 L/ha has been applied at 20 - 50% bloom, this will also control sclerotinia stem rot.

Do not make more than 2 applications per season.

Observe a pre-harvest interval of 38 days.

**Early Green Pod Stage**: Almost all canola pods are fully formed and still green with only a few flowers or undeveloped pods remaining at the top of the plant.

NOTE TO BUYER/USER: The DIRECTIONS FOR USE for this product for the use described below were developed by persons other than FMC of Canada Limitedand accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. FMC of Canada Limiteditself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold FMC of Canada Limitedharmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

ALFALFA GROWN FOR SEED (for use in Saskatchewan, Alberta, Manitoba and the Peace River Region of British Columbia):

## CONTROL OF SCLEROTINIA

**Timing:** Apply ROVRAL<sup>®</sup> FLO Fungicide when the crop is in the 20 - 50% bloom stage.

**Rate:** Apply ROVRAL<sup>®</sup> FLO Fungicide as a single application at a rate of 2.1-3.1 L/ha. Apply as a ground application in 100 litres of water per hectare. The 2.1 L/ha is the recommended rate for most alfalfa grown for seed crops, however, the high rate is recommended for fields with a history of severe disease pressure and dense crops stands. Good coverage of the plants is essential.

The pre-harvest interval is 38 days.

**Use limitation:** Treated alfalfa vegetation is not to be used for animal feed.

## RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that ROVRAL® FLO Fungicide contains a Group 2 fungicide. Any fungal population may contain individuals naturally resistant to ROVRAL FLO Fungicide and other Group 2 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are 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 resistancemanagement strategies should be followed. To delay fungicide/bactericide resistance: Where possible, rotate the use of ROVRAL® FLO fungicide or other Group 2 fungicides with different groups that control the same pathogens. Use tank mixtures with fungicide from a different group when such use is permitted. Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers cultural, biological and other chemical control practices. Monitor treated fungal populations for resistance development. If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available. Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens. For further information and to report suspected resistance, contact FMC of Canada Limited representatives at 1-833-362-7722.

## **Aerial Applications:**

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rate and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no

rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

#### **Use Precautions:**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal, Provincial, Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

## **Operator Precautions:**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

## **Product Specific Precautions:**

Read and understand the entire label before opening this product. If you have questions, call FMC Corporation at 1-888-59-FMC-AG (1-888-593-6224) or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 45 litres per hectare.

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