

CAUTION

KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

ACTIVE CONSTITUENT: 250 g/L IPRODIONE

SOLVENT: 332 g/L LIQUID HYDROCARBONS









For the control of certain fungal diseases in various crops and situations as specified in the Directions for Use Table.

SAFETY DIRECTIONS

May irritate the eyes. Avoid contact with eyes and skin, and avoid inhalation of vapour. When opening the container and using Rovral[®] Liquid Fungicide wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC gloves and face shield. If Rovral[®] Liquid Fungicide on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (telephone 13 11 26). If swallowed, **DO NOT** induce vomiting. Give a glass of water.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet that can be obtained from www.fmccrop.com.au

GENERAL INSTRUCTIONS

FUNGICIDE RESISTANCE WARNING



Rovral[®] Liquid Fungicide is a member of the dicarboximide group of fungicides. For fungicide resistant management Rovral[®] Liquid Fungicide is a Group 2 fungicide. Some naturally occurring individual fungi resistant to Rovral[®] Liquid Fungicide and other Group 2 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. These resistant fungi will not be controlled by Rovral[®] Liquid Fungicide or other Group 2 fungicides, thus resulting in a reduction in efficacy and possible yield loss.

Since the occurrence of resistant fungi is difficult to detect prior to use, FMC accepts no liability for any losses that may result from the failure of Rovral[®] Liquid Fungicide to control resistant fungi.

RESISTANCE MANAGEMENT

Resistant strains of fungi can develop to Rovral[®] Liquid Fungicide and other fungicides. To reduce the possibility of this occurrence, and where alternatives are available, rotate to use products with as many different modes of action as possible. Where specific resistance management strategies are established these are detailed at the CropLife Australia website (https://www.croplife.org.au) or from your local agronomist.

MIXING

Note: Rovral[®] Liquid Fungicide may be unstable in conditions where the pH is 7 or higher. It is therefore essential to check the pH of the spray solution before adding Rovral[®] Liquid Fungicide. A suitable registered buffering agent may have to be added to bring the pH down below 7.

Shake well before use. Add half the required water volume to the spray tank or vat with the agitation mechanism operating. Add the required volume of Rovral[®] Liquid Fungicide and then add additional water to the volume required.

Good disease control requires even, thorough coverage of the target area. Application should be made using appropriate spray equipment and sufficient water to provide adequate penetration and coverage. Equipment settings and water volume may need to vary, depending on the growth stage of the crop. High pressure, prolonged and vigorous agitation particularly in conjunction with a high concentration of Rovral[®] Liquid Fungicide in the spray tank may reduce the suspension properties of Rovral[®] Liquid Fungicide, resulting in a scum forming on the surface or sediment forming on the filters. If the agitation system cannot be adjusted, or concentration reduced to overcome this problem it is recommended that Rovral[®] Aquaflo be used, where registered.

Special Instructions for Tree Crops / Vines

Dilute spraying

- Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient spray solution to cover the crop to the point of run-off. Avoid excessive run-off.
- The required spray volume to achieve point of run-off may be determined by applying different test volumes, using different settings on the spray, or from industry guidelines or from other expert advice.
- Add the amount of Rovral[®] Liquid Fungicide specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off.
- The required dilute spray volume to achieve point of run-off will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate spraying

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage through the crop canopy using your chosen spray volume.
- Determine an appropriate dilute spray volume (see <u>Dilute spraying</u> above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

EXAMPLE ONLY

- 1. Dilute spray volume as determined above: For example 1500 L/ha
- Your chosen concentrate spray volume: For example 500L/ha
- The concentration factor in this example is: 3 X (i.e. 1500 L / 500 L = 3).
- 4. If the dilute label is 10 mL/100 L, then the concentrate rate becomes 3 x 10, that is 30 mL of

product per 100 L of water for concentrate spraying.

- The chosen spray volume, amount of Rovral[®] Liquid Fungicide per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry best practices.

COMPATIBILITY

Rovral® Liquid Fungicide is compatible with the following products:

*Alliette WG (see Note below), azinphos-methyl, benomyl, Bugmaster® Flowable, chlorfenvinphos, chlorpyrifos (500 g/L EC), demeton-S-methyl, Dithane M45®, Thiodan® EC (endosulfan), fenamirol, Kelthane®, Kocide® (Warning: DO NOT mix Rovral® Liquid Fungicide with Kocide® for use on potatoes), Larvin® 375, Maldison 500, Marlin®, metataxyl, methamidophos, methyl parathion, pirimicarb, propargite, triademol).

When tank mixing products the order of mixing is determined by formulation type. As a guide the following mixing sequence is recommended:

- 1. Wettable powders
- 2. Suspension concentrates
- 3. Water Dispersible Granules
- 4. Suspo-suspensions (e.g. Rovral[®] Liquid Fungicide)
- 5. Soluble powders
- 6. Solutions
- 7. Emulsifiable concentrates
- 8. Soluble concentrates
- 9. Wetting agents and oils

With any mixture, thoroughly agitate immediately before applying. It is not recommended to mix this product with more than one of the above chemicals in the tank. The use of a surfactant or spray oil is not recommended with Rovral[®] Liquid Fungicide as it may result in crop damage to sensitive plants. **DO NOT** mix with fertilisers. Mixtures with some fertilisers, e.g. urea may cause foliar damage.

Note: * Mixing Rovral[®] Liquid Fungicide with Alliette WG may result in some setting out.

As formulations of other manufacturers' products are beyond the control of FMC, all mixtures should be tested prior to mixing commercial quantities.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS AND ORGANISMS

DO NOT apply the product under weather conditions, or from spraying equipment, which could be expected to cause spray drift onto adjacent crops, croplands, pastures, livestock, natural or impounded lakes, dams or other waterways.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to aquatic organisms. **DO NOT** contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, secure well-

ventilated area. **DO NOT** store for prolonged periods in direct sunlight. Protect from frost.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, designated vegetation and tree roots. Empty containers and product should not be burnt. Do not re-use empty container for any other purpose.

DIRECTIONS FOR USE

RATE

In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the **Special Instructions for Tree Crops/Vines** section.

CRITICAL COMMENTS

For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of Rovral[®] Liquid Fungicide to the target crop when applying Rovral[®] Liquid Fungicide by dilute or concentrate spraying methods. Refer to the **Special Instructions for Tree Crops/Vines** section.

CROP	DISEASE	STATE	RATE	WHP	CRITICAL COMMENTS
Almonds	Blossom blight, brown rot (<i>Monilinia</i> spp., <i>Sclerotinia</i> spp.)	All States	100 mL / 100 L water	Nil	Apply first at full bloom and, if conditions are favourable for disease development, up to two subsequent applications can be made; at petal fall and up to four weeks after petal fall.
Boysenberries	Grey mould (<i>Botrytis cinerea</i>)		200 mL / 100 L water	1 day (H)	Spray at 10% blossom and full bloom. For fruit protection, apply at 2 to 3 weeks pre-harvest.
Grapes				7 days (H)	Good crop hygiene will add in the control of disease. This use is subject to a CropLife Australia fungicide resistance management strategy. The number of subsequent applications and the total number of applications of Group B fungicides permitted is limited. Refer to the CropLife Australia Resistance Management Guidelines. See the "General Instructions – Resistance Management" for details on where these guidelines can be obtained.
Kiwifruit	Botrytis blight (<i>Botrytis</i> spp.)	NSW, Vic, WA only			Apply the spray to vines every 10 to 14 days ensuring that all fruit is thoroughly wet. Apply 3 applications at 10 to 14 day intervals from 10% bloom to petal fall for protection of flowers and young fruit. Apply a further 2 applications of Rovral [®] Liquid Fungicide to control late season Botrytis.
Macadamias		All States	200 mL / 100 L water	Nil	Apply as a thorough cover spray to flower racemes when they open. A follow up spray may be needed one week later if wet conditions persist during flowering. Remove nuts under tree prior to spraying.
Mandarins (non- bearing)	Alternaria leaf spot (brown spot) (<i>Alternaria alternata</i>)	Qld, WA, NT only			Apply to non-bearing trees of Murcott variety monthly from first flush in spring until flushing ceases in the autumn. Reduce intervals to fortnightly during periods of wet weather.
Passionfruit	Alternaria leaf spot (brown spot) (<i>Alternaria</i> spp., <i>Alternaria</i> passiflorae)	Qld, NSW, WA, NT only		1 day (H)	 This use is subject to CropLife Australia fungicide resistance management strategy: 1. Maintain a protective cover with protectant fungicide such as mancozeb. 2. Limit the use of Rovral[®] Liquid Fungicide to strategic periods, i.e. before, during and after extended wet periods. 3. Always tank mix Rovral[®] Liquid Fungicide with a protectant such as mancozeb. 4. DO NOT apply more than four

					Rovral [®] Liquid Fungicide (or other Group 2 fungicide) sprays in a season.
Raspberries	Grey mould (<i>Botrytis</i> <i>cinerea</i>)	All States			Spray at 10% blossom and full bloom. For fruit protection, apply at 2 to 3 weeks pre- harvest.
Stone Fruit: Apricots, cherries, nectarines, peaches, plums	Orchard Spraying Blossom blight (Monolinia fructiola, Monolinia laxa) Brown rot (Monolinia fructiola, Monolinia laxa)	Qld, NSW, Vic, Tas, SA, WA only	100 to 150 mL / 100 L water	Nil	Critical timings for control of blossom blight are 10% blossom, full bloom and petal/shuck fall and for control of subsequent brown rot in fruit, 3 weeks and 1 week pre-harvest. Use the higher rate under severe conditions of challenge, or for single applications of Rovral [®] Liquid Fungicide in the spray program. This use is subject to a CropLife Australia fungicide resistance management strategy. The number of consecutive applications of Group 2 fungicides permitted is limited. Refer to the CropLife Australia Resistance Management Guidelines. See the "General Instructions – Resistance Management" for details on where these guidelines can be obtained.
Youngberries	Grey mould (<i>Botrytis</i> <i>cinerea</i>)	All States	200 mL / 100 L water	1 day (H)	Spray at 10% blossom and full bloom. For full protection, apply at 2 to 3 weeks preharvest.

Berries (See Tree Crops/Vines for boysenberries, raspberries and youngberries)

CROP	DISEASE	STATE	RATE	WHP	CRITICAL COMMENTS
Strawberries	Grey mould (<i>Botrytis</i> <i>cinerea</i>)	All States	2.0 L/ha where spray volume is less than 1000 L/ha OR 200 mL / 100 L water where spray volume equals or exceeds 1000 L/ha	1 day (H)	 This use is subject to a CropLife Australia fungicide resistance management strategy: 1. Apply a program of protectant fungicides during flowering. If conditions favour disease development during this period use Rovral[®] Liquid Fungicide. 2. DO NOT apply more than two successive sprays of Rovral[®] Liquid Fungicide (or other Group 2 fungicide).

Vegetables

CROP	DISEASE	STATE	RATE	WHP	CRITICAL COMMENTS
Celery	Sclerotinia rot (pink rot) (<i>Sclerotinia</i> <i>sclerotiorum</i>)	All States	2.0 L/ha where	1 day (H)	Commence spraying 1 to 2 weeks post- transplanting and then every 2 to 3 weeks. Use only five sprays.
Lettuces	Sclerotinia rot (drop) (Sclerotinia sclerotiorum, Sclerotinia minor)	Tas, WA only	volume is less than 1000 L/ha OR 200 mL / 100 L water where	7 days (H)	Spray should be directed to the stems at ground level and to the underside of lower leaves. This use is subject to a CropLife Australia fungicide resistance management strategy: 1. Apply Rovral [®] Liquid Fungicide as a seedling drench soon after

			spray volume equals or exceeds 1000 L/ha		 emergence. 2. Apply protectant fungicide as a high volume foliar spray before planting out, then Rovral[®] Liquid Fungicide immediately after planting. 3. Maintain cover with protectant fungicide at 7-10 day intervals. 4. If weather conditions favour Botrytis infection, tank mix the protectant with Rovral[®] Liquid Fungicide. 5. Do not apply Rovral[®] Liquid Fungicide (or other Group 2 fungicides) more than four times per season, irrespective of the target disease.
Potatoes	Sclerotinia rot (Sclerotinia sclerotiorum)	All States	1.0 to 2.0 L/ha where spray volume is less than	Nil	Apply 2 sprays, once immediately before and once immediately after hilling-up. For most effective treatment, concentrate the spray at the base of the stems and surrounding soil surface, where the fungus is active. Use the higher rate where disease is severe.
	Harget spot (early blight) <i>(Alternaria</i> <i>solani)</i> Hypocotyl rot (black scurf) <i>(Rhizoctonia solani)</i>		1000 L/ha OR 100 to 200 mL / 100 L water where spray volume equals or exceeds 1000 L/ha 800 mL / tonne seed material		Ensure coverage to the whole plant. Treatment is not generally required after flowering. Use the higher rate where disease is severe. Limit the use of Rovral [®] Liquid Fungicide to periods where conditions favour disease development. This use is subject to a CropLife Australia fungicide resistance management strategy. The number of consecutive applications of Group 2 fungicides permitted is limited. Refer to the CropLife Australian Resistance Management Guidelines. See the "General Instructions – Resistance Management" for details on where these guidelines can be obtained. Rovral [®] Liquid Fungicide will protect emerging shoots from hypocotyl rot, improving overall germination. Rovral [®] Liquid Fungicide may also reduce occurrence of black scurf on the harvested
					potatoes. Ensure good coverage of seed material and planting furrow. This can be achieved by applying Rovral [®] Liquid Fungicide as a fine spray to the seed at the time of planting using spray equipment mounted on the planter, and nozzles located at three points on each planter row to ensure uniform coating of the seed. DO NOT plant into waterlogged soil. A minimum water volume of 80 mL/ tonne seed should be used.
Tomatoes	Sclerotinia rot (Sclerotinia sclerotiorum)	Qld, NSW, Tas, SA, WA only	2.0 L/ha where spray	7 days (H)	Spray at 14-day intervals from transplanting and throughout the period of disease pressure.
	Grey mould (<i>Botrytis cinerea</i>)	All States	volume is less than 1000 L/ha OR 200 mL / 100 L water where spray volume equals or exceeds		Commence spraying 3 to 4 weeks after transplanting or at the onset of disease. Repeat treatment at 14-day intervals or when conditions favour spread of the disease, i.e at trimming or deleafing. This use is subject to a CropLife Australia fungicide resistance management strategy: 1. Alternate or mix Rovral [®] Liquid Fungicide with a protectant such as chlorothalonil. Avoid applying two Rovral [®] Liquid Fungicide (or other

		1000 L/ha	 Group 2 fungicide) sprays in succession, unless tank mixed with a protectant. DO NOT apply more than four Rovral[®] Liquid Fungicide (or other Group 2 fungicide) sprays in one season.
Target spot (early blight) <i>(Alternaria solani)</i>	Qld, Tas, WA, NT only		 Commence spraying 1 week post-transplanting. Use adequate water to give thorough coverage of the plants. Use high volume spray equipment. This use is subject to a CropLife Australia fungicide resistance management strategy: 1. Limit the use of Rovral[®] Liquid Fungicide to periods where conditions favour disease development. 2. DO NOT apply more than four Rovral[®] Liquid Fungicide (or other Group 2 fungicide) sprays in one season. Apply no more than consecutive sprays of a Group 2 fungicide.

Field Crops

CROP	DISEASE	STATE	RATE	WHP	CRITICAL COMMENTS
Canola	Sclerotinia (Sclerotinia sclerotiorum)	All States	2.0 L/ha	6 weeks (H, G)	Apply at 20 to 50% flowering. Apply as a preventative spray before disease infection is anticipated. Good coverage is essential. <u>Aerial application</u> : Apply using a minimum water volume of 45L/ha. <u>Ground application</u> : Apply using a minimum water volume of 100L/ha.
Lucerne	Lucerne leaf spot (Stemphylium botryosum)	Qld, WA only	500 mL to 1.0 L/ha where	7 days (G)	Spray every 10 to 14 days when cool, damp weather favours the disease. Use the higher rate under conditions of high disease pressure.
	Leptosphaerulina leaf spot (<i>Leptosphaerulina trifoli</i>)		volume is less than 1000 L/ha OR 50 to 100 mL / 100 L water where spray volume equals or exceeds 1000 L/ha		Apply in at least 300 L water/ha every 10 to 14 days when cool, damp weather favours the disease. Use the higher rate under conditions of high disease pressure.
Peanuts	Sclerotinia rot (Sclerotinia sclerotiorum, Sclerotinia minor)		2.0 L/ha OR 400 mL/100 L water (spot application)	12 days (H)	Apply when disease first appears. Repeat if necessary. Use a high water volume to ensure good coverage of foliage and stem at ground level. Do not mix Rovral [®] Liquid Fungicide with a foliar fungicide due to the different target positions on the plant.
Soybeans	Black leaf blight (<i>Arkoola nigra</i>)	NSW, WA only	2.0 L/200 to 400 L water/ha	7 weeks (H)	If disease is present on leaves apply a foliar spray at early pod set (pods approximately 5 mm long). An additional spray 14 days later may be required if wet seasonal conditions prevail.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIODS (H = HARVEST, G = GRAZING)

Almonds, macadamias, mandarins, potatoes and stone fruit: NOT REQUIRED WHEN USED AS DIRECTED.

Boysenberries, celery, passionfruit, raspberries, strawberries and youngberries: **DO NOT** HARVEST FOR 1 DAY AFTER APPLICATION.

Grapes, kiwifruit, lettuce and tomatoes: **DO NOT** HARVEST FOR 7 DAYS AFTER APPLICATION.

Peanuts: DO NOT HARVEST FOR 12 DAYS AFTER APPLICATION.

Canola: **DO NOT** HARVEST FOR 6 WEEKS AFTER APPLICATION. **DO NOT** GRAZE OR CUT FOR STOCK FOOD FOR 6 WEEKS AFTER APPLICATION.

Soybeans: DO NOT HARVEST FOR 7 WEEKS AFTER APPLICATION.

Lucerne: **DO NOT** GRAZE OR CUT STOCK FOOD WITHIN 7 DAYS OF TREATMENT.

EXPORT OF TREATED PRODUCE

Growers should note that MRLs or import tolerances may not exist in markets for produce treated with Rovral[®] Liquid Fungicide. If you are growing produce for export, please check with FMC for the latest information on MRLs and import tolerances BEFORE using Rovral[®] Liquid Fungicide.

NOTICE TO BUYER

To the extent permitted by the Competition and Consumer Act (2010) or any relevant legislation of any State or Territory (the "Legislation") all conditions and warranties and statutory or other rights of action, whether arising in contract or tort or whether due to the negligence of FMC or Seller, which buyer or any other user may have against FMC or Seller are hereby excluded provided however that any rights of the buyer pursuant to non-excludable conditions or warranties of the Legislation are expressly preserved. FMC hereby gives notice to buyer and other users that to the extent permitted by the Legislation it will not accept responsibility for any indirect or consequential loss of whatsoever nature arising from the storage, handling or use of this product. Where permitted by the Legislation FMC's liability shall in all circumstances be limited to the replacement of the product, or a refund of the purchase price paid therefor.

The product must be used and applied strictly in accordance with the label instructions and other directions for use. It is impossible to eliminate all risks associated with the use of this product. Such risks may arise from factors such as weather conditions, soil factors, off target movement, unconventional technique, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of FMC or the Seller. Buyer accepts these risks.

IN A MEDICAL EMERGENCY CALL 1800 033 111 ALL HOURS

The information set forth herein is furnished free of charge and is based on technical data that FMC believes to be reliable. It is intended for use by persons having technical skill at their own discretion and risk. FMC makes no warranties, expressed or implied, and assumes no liability in connection with any of this information. Nothing herein is to be taken as license to operate under or a recommendation to infringe on any patents.

FMC and Rovral[®] are trademarks of FMC Corporation or an affiliate. © 2022 FMC Corporation. All rights reserved.

*Not an FMC trademark.

APVMA Approval No.:30462/58583

FMC Australasia Pty Ltd. A.B.N. 45 095 326 891 Level 2, Building B 12 Julius Ave North Ryde NSW 2113 Phone: 1800 066 355 www.fmccrop.com.au

SPECIALIST ADVICE IN EMERGENCY ONLY 1800 033 111 ALL HOURS – AUSTRALIA WIDE

Additional statements required by Globally Harmonised Systems for classification and labelling of chemicals (GHS) and Safe Work Australia:

Combustible liquid. Suspected of causing cancer.

Do not get in eyes, on skin, or on clothing. Avoid release to the environment. IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF exposed or concerned: Get medical advice/attention. In case of fire, use carbon dioxide, dry chemical, foam. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.