ROVRAL[®] FLO

SOUTH AFRICA Registration Number/Registrasie Nommer L1046, Act No. 36 of 1947/Wet 36 van 1947 MALAWI Registration Number/Registrasie Nommer MW/PCB/2019/R/0033 NAMIBIA Registration Number/Registrasie Nommer N-AR2001

READ THE LABEL BEFORE USE KEEP OUT OF REACH OF CHILDREN AND ANIMALS

			0144.145	
GROUP/GROEP	2	FUNGICIDES	SWAMD	ODERS
GROUP/GROEP2A fungicide formulated as a suspension concentrate for the control of:-Botrytis in table and wine grapes, kiwifruit, tomatoes and onions, Post-harvest decay in nectarines, plums and canning peachesLeaf spot of ginger, Purple blotch (Alternaria blotch) of onions, Early blight of tomatoes Alternaria brown spot of citrus, Dollar spot, Fusarium, Helminthosporium leaf spot and Rhizoctonia brown patch in turf.HAZARD STATEMENTS: Harmful if inhaled. Suspected of causing cancer. Very toxic to aquatic life with low PRECAUTIONARY STATEMENTS:		long lasting effects. ENTS:		
Avoid bre Avoid rele Wear prot protection Respons IF INHAL POISON Collect sp	e: ED: Remove person t CENTER/ doctor if yo illage.	nt. ive clothing/ eye prote o fresh air and keep c u feel unwell.	ec-tion/ face protection	-
Active ingredie Iprodione (dicarboximide			ewe bestanddeel dikarboksimied) – 255	g/L
Net Volume	5	L	Netto Volum	1e
REGISTRATION HOLDER/REGISTRASIEHOUER FMC Chemicals (Pty) Ltd Company Registration Number: 1988/001451/07 West End Office Park Building C, Cnr West Ave & Hall Street Centurion, 0014 Telephone number: +27 (76) 875 4432 www.ag.fmc.com/za/en				
Batch Number Date of Manufacture Expiry Date	Printed on Conta Printed on Conta 2 Years from ma	ainer D	.ot Nommer Datum van Vervaardig Vervaldatum	ging
UN Number/VN Nommer 3		3082		
For any emergency or poisoning contact: Griffon Poison Information Centre (24 hrs)+27-(0)-82-446-8946Vir enige noodgeval of vergiftiging kontak Griffon vergiftiging Inligtingsentrum (24 hr)+27-(0)-82-446-8946				

HAZARD STATEMENTS:

- Harmful if inhaled.
- Suspected of causing cancer.
- Very toxic to aquatic life with long lasting effects.

IF THE CROP TO BE TREATED IS INTENDED FOR EXPORT, CONSULT THE RELEVANT EXPORTING ORGANISATION REGARDING WITHHOLDING PERIODS. IN THE CASE OF CROPS GROWN FOR LOCAL CONSUMPTION ALLOW THE FOLLOWING WITHHOLDING PERIODS BETWEEN LAST SPRAY APPLICATION AND HARVESTING :-

GINGER: 28 DAYS WINE GRAPES: 7 DAYS TABLE GRAPES: DO NOT APPLY LATER THAN PEA SIZE STAGE (EXCEPT ON "WALTHAM CROSS" AND "SULTANA" VARIETIES WHERE APPLICATIONS SHOULD NOT BE MADE AFTER FULL BLOSSOM) **KIWIFRUIT**: 7 DAYS **NECTARINES:** 3 DAYS 3 DAYS ONIONS: PEACHES (destined for canning only): 3 DAYS PLUMS (pre-harvest application): 3 DAYS TOMATOES : 3 DAYS CITRUS : **115 DAYS**

Harmful when absorbed through skin, swallowed or inhaled.

Harmful to fish and aquatic invertebrates.

Store in a cool place, away from food and feed.

Keep out of reach of children, uninformed persons and animals.

<u>Re-entry</u> – Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Although **Rovral® Flo** is regarded as crop-safe on most important cultivars, this does not mean that a more sensitive cultivar might not be commercialized in the future. Where a new cultivar is encountered, large areas should not be sprayed without prior testing of **Rovral® Flo** on that cultivar.

ALTHOUGH THIS REMEDY HAS BEEN EXTENSIVELY TESTED UNDER A LARGE VARIETY OF CONDITIONS THE REGISTRATION HOLDER DOES NOT WARRANT THAT IT WILL BE EFFICACIOUS UNDER ALL CONDITIONS BECAUSE THE ACTION AND EFFECT THEREOF MAY BE AFFECTED BY FACTORS SUCH AS ABNORMAL CLIMATIC AND STORAGE CONDITIONS, QUALITY OF DILUTION WATER, COMPATIBILITY WITH OTHER SUBSTANCES NOT INDICATED ON THE LABEL AND THE OCCURRENCE OF RESISTANCE OF THE DISEASES TO THE REMEDY CONCERNED AS WELL AS BY THE METHOD, TIME AND ACCURACY OF APPLICATION. THE REGISTRATION HOLDER FURTHERMORE DOES NOT ACCEPT RESPONSIBILITY FOR DAMAGE TO CROPS, VEGETATION, THE ENVIRONMENT OR HARM TO MAN OR ANIMAL OR FOR LACK OF PERFORMANCE OF THE REMEDY CONCERNED DUE TO FAILURE OF THE USER TO FOLLOW THE LABEL INSTRUCTIONS OR TO THE OCCURRENCE OF CONDITIONS WHICH COULD NOT HAVE BEEN FORESEEN IN TERMS OF THE REGISTRATION. CONSULT THE SUPPLIER IN THE EVENT OF ANY UNCERTAINTY.

PRECAUTIONS:

PRECAUTIONARY STATEMENTS:

Prevention:

- Obtain special instructions before use.
- Avoid breathing mist or vapors.
- Avoid release to the environment.
- Wear protective gloves/ protective clothing/ eye protec-tion/ face protection/ hearing protection.

Response:

- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
- Collect spillage.

HAZARDOUS INGREDIENTS:

Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction

- Do not inhale spray mist.
- Wash with soap and water after skin contact.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face.
- Prevent spray drift onto other crops, grazing, rivers and dams.
- Prevent contamination of food, eating utensils, feed and drinking water.
- Clean all equipment thoroughly after use and do not pollute the environment with wash water.
- When empty, invert the container over the spray tank or mixing tank and allow it to drain for at least 30 seconds after the flow has slowed down to a drip.
- **TRIPLE RINSE** the empty container as follows: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

RESISTANCE WARNING :

For resistance management, **Rovral**® **Flo** is a Group Code 2 (dicarboximide) fungicide. Any fungus population may contain individuals naturally resistant to **Rovral**® **Flo** and other Group Code 2 (dicarboximide) fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **Rovral**® **Flo** or any other Group Code 2 (dicarboximide) fungicides.

Since the presence of resistant fungi is difficult to detect prior to fungicide application, it is of the utmost importance that treated crops be inspected at regular intervals to identify the occurrence of fungicide-resistant fungi timeously. FMC Chemicals (Pty) Ltd will not accept liability for performance failures in the event of a build-up of resistant fungi resulting from inadequate resistance management practices as indicated on the label.

To delay fungicide resistance:

- Avoid exclusive, repeated use of fungicides from the same fungicide Group Code. Alternate or tank mix with
 products from different fungicide Group Codes.
- Integrate other control methods [chemical, cultural, biological] into disease control programmes.

For specific information on resistance management contact your local distributor representative.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

COMPATIBILITY:

Rovral® Flo is compatible with fungicides and insecticides normally used on the crops mentioned above. However, it is recommended that **Rovral® Flo** not be used in tank mixes in cases where thorough agitation of the mixture cannot be maintained.

MIXING INSTRUCTIONS:

Ensure that clean water is used at all times. Half fill the spray tank with water, stir in the required quantity of **Rovral® Flo** and top up with water. Ensure mixing is complete and agitate before and throughout each application.

APPLICATION TABLE:

CROP AND DISEASES	DOSAGE	REMARKS
CITRUS (Mandarin types, including Minneolas and similar hybrids) Alternaria brown spot Alternaria alternata (= Alternaria citri)	200 m { Rovral® Flo + 200 g mancozeb WP or WG / 100 { water	Apply as a full cover spray ensuring that the spray mixture also penetrates into the inner structure of the tree. Thorough wetting of fruit and newly developed flush is essential. Two applications will normally be required. Apply the first spray 4 weeks after 100 % petal drop (Oct/Nov) and follow up with the second spray 4 to 6 weeks later (Dec). Follow the shorter interval during very wet seasons. Do not apply more than twice per season. Application of the Rovral® Flo / mancozeb mixture forms part of a season-long control programme as recommended by Citrus Research International. Apply also the required additional protectant fungicide sprays (copper hydroxide or mancozeb) during the periods August to October and January to March.
GINGER : Leaf spot (<i>Nigrospora</i> sp.)	200 mł /100 ł water	Apply every 21 days, from 8 weeks after planting until 4 weeks before harvest.
KIWIFRUIT Botrytis	200 mł /100 ł water	Apply as a full cover spray, ensuring that the fruit are thoroughly wetted. Apply as a single application 7 to 10 days before harvest. Do not apply more than 1 500 ℓ spray mixture / ha.
NECTARINES Post-harvest decay (<i>Botrytis, Monilinia</i> and <i>Rhizopus</i> spp.)	200 mℓ / 100 ℓ water	Apply as a full cover spray, ensuring that the fruit are thoroughly wetted. Apply twice, i.e. at 10 and 3 days prior to harvest. This may be followed by a post-harvest application of Rovral® Aquaflo (Reg. No. L5140) according to its label instructions.

ONIONS: Purple blotch (<i>Alternaria</i> blotch) and <i>Botrytis</i> neck rot	2	Begin application when plants are in the 3-5 leaf stage (about 10 – 15 days after transplant) and repeat at 14-21 day intervals. Use the shorter spray interval under high disease pressure. IMPORTANT : This is a preventive treatment and should not be postponed until the disease symptoms appear. Do not use a wetter. Do not apply to wet plants.
PEACHES (Destined for canning) Post-harvest decay (<i>Monilinia</i> and <i>Rhizopus</i> spp.)	200 mℓ / 100 ℓ water	Apply as a full cover spray, ensuring that the fruit are thoroughly wetted. Apply twice, i.e. at 10 and 3 days prior to harvest.
PLUMS Post-harvest decay (<i>Botrytis, Monilinia</i> and <i>Rhizopus</i> spp.)	200 mł /100 ł water	Apply as a full cover spray, ensuring that the fruit are thoroughly wetted. Apply twice, i.e. at 10 and 3 days prior to harvest. OR After harvest dip fruit in suspension for one minute, remove and allow to dry off. Do not exceed indicated dip concentration. NOTE : DO NOT APPLY BOTH TREATMENTS, VIZ, PRE- AND POST-HARVEST AS THIS COULD RESULT IN RESIDUES EXCEEDING ACCEPTABLE LEVELS.
TABLE GRAPES: Botrytis rot (Botrytis cinerea)	200 mł /100 ł water	Apply 500 to 1 000 <i>l</i> of spray mixture / ha, depending on the growth of the vines. Ensure thorough wetting of the inflorescences or bunches. Apply the first spray at the full-blossom stage. Follow this with an application at the pea-size stage, using either Rovral® Flo , or a suitable alternative Botrytis remedy such as Scala (Reg. No. L4972) or Teldor 500 SC (Reg. No. L6250). DO NOT apply Rovral® Flo to Waltham Cross and Sultana grapes later than full blossom. Following the pea-size stage apply other Botrytis remedies [Scala , Teldor 500 SC or Rovral® Aquaflo (Reg. No. L5140)] according to their label instructions. Do not apply more than a total of three iprodione (Rovral® Flo , Rovral® Aquaflo) sprays per season. NB : Applications should be made as soon as possible after mealybug sprays or repeated if a mealybug spray is made within 14 days after a Rovral® Flo application.

WINE GRAPES Botrytis rot (<i>Botrytis cinerea</i>)	200 ml /100 l water	Apply 500 to 1 000 <i>l</i> spray mixture/ha depending on the growth of the vines. Ensure thorough wetting of the inflorescences or bunches. The number of Botrytis sprays applied per season should be determined by the history of disease in the vineyard and the expected severity of the disease. A minimum of 2 applications is recommended under conditions of low to moderate disease pressure, with up to 4 treatments when severe disease incidence is expected. <u>Treatment 1</u> : Apply Rovral® Flo at the full-blossom stage. <u>Treatment 2</u> : If moderate to severe disease incidence is expected, apply either Rovral® Flo, or a suitable alternative Botrytis remedy, such as Scala (Reg. No. 4972) or Teldor 500 SC (Reg. No. L6250) according to its label instructions, at the pea-size stage, before closure of the bunches. <u>Treatment 3</u> : If severe disease incidence is expected, apply Rovral® Flo or Rovral® Talc (Reg. No. L1216), or Scala or Teldor 500 SC in the period between bunch closure and the beginning of ripening, according to its label instructions. <u>Treatment 4</u> : Three weeks prior to harvest, apply Rovral® Flo, or a suitable alternative Botrytis remedy (Rovral® Talc, Scala or Teldor 500 SC) according to its label instructions. <u>Treatment 4</u> : Please note that Treatments 1 and 4 are critical and that they MUST be applied whether Treatments 2 and 3 are used or not. NB : Applications should be made as soon as possible after mealybug sprays, or repeated if a mealybug spray is made within 14 days after a Rovral® Flo application. Do not apply more than a total of 3 iprodione (Rovral® Flo, Rovral® Talc) applications per season.
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TOMATOES Grey rot (<i>Botrytis cinerea</i>)	200 mł /100 ł water	Apply as a full cover spray ensuring thorough coverage of the fruit. Begin spraying when conditions favour disease development and repeat at 14-day intervals. Do not exceed 3 applications of Rovral® Flo per season.
TOMATOES Early blight (<i>Alternaria solani</i>) and Grey rot (<i>Botrytis cinerea</i>)	200 mł Rovral® Flo + 200 g mancozeb WP or WG /100 ł water	Apply as a full cover spray ensuring thorough wetting. Begin spraying when conditions favour disease development and repeat at 7-day intervals. The application of this tank mixture will also provide preventive control of late blight (<i>Phytophthora infestans</i>). Do not exceed 3 applications of Rovral® Flo , alone or in tank-mixture, per season.
TURF: Dollar spot, <i>Fusarium,</i> <i>Helminthosporium</i> leaf spot & <i>Rhizoctonia</i> brown patch	75 mł /100 m²	Dilute the required quantity of Rovral® Flo in sufficient clean water to allow for good coverage of the turf surface at the indicated rate. <u>Preventive treatment</u> : Commence application from the beginning of the season with repeat treatments when conditions are favourable for the development of the disease. <u>Corrective treatment</u> : Commence application when first disease symptoms appear and repeat every 14-21 days. This treatment will prevent the disease from spreading beyond the infected areas, and suppress it on the already infected parts. <u>NOTE</u> : If grass is being mown, Rovral® Flo should be applied AFTER cutting and further mowing should not take place until AT LEAST 24 hours after treatment.

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