



DuPont™ Zorvec Enicade®

FUNGICIDE

Technical Information

Active Constituent:

100 g/L OXATHIPIPROLIN

Pack Sizes:

1 L

5 L

**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

For the control of certain fungal disease species in oilseed poppies and vegetable crops as per the Directions for Use

FIRS1 LT AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

SAFETY DIRECTIONS

May irritate the skin. Avoid contact with the skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When opening the container and preparing spray, wear chemical-resistant gloves. Wash hands after use. After each day's use wash gloves and contaminated clothing.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet available from www.cropprotection.dupont.com.au

GENERAL INSTRUCTIONS

DuPont™ Zorvec® Enicade® fungicide is recommended for control of certain foliar plant diseases, and has preventive, and locally systemic activity. Zorvec® Enicade® must be applied in a regularly scheduled protective spray program in rotation with other fungicides. See the Directions for use table for specific crop/disease recommendations.

FUNGICIDE RESISTANCE WARNING

DuPont™ Zorvec® Enicade® fungicide is a member of the oxysterol binding protein homologue inhibition (OSBPI) group of fungicides. For fungicide resistance management Zorvec® Enicade® is a Group 49 fungicide. Oxysterol binding proteins (OSBP) are implicated in the movement of lipids between membranes, among other processes. Inhibiting OSBP may disrupt other processes in the fungal cell, such as signalling, maintaining cell membranes, and the formation of more complex lipids that are essential for the cell to survive.

Some naturally occurring fungal biotypes resistant to Zorvec® Enicade® and other Group 49 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if Zorvec® Enicade® and other Group 49 fungicides are used repeatedly. These resistant fungi will not be controlled by this product or

other Group 49 fungicides, thus resulting in a reduction in efficacy and possible yield loss.

Since the occurrence of resistant individuals is difficult to detect prior to use DuPont accepts no liability for any losses that may result from the failure of Zorvec® Enicade® to control resistant fungi.

DISEASE RESISTANCE MANAGEMENT

Zorvec® Enicade® may be subject to specific resistance management strategies. To help prevent the development of resistance to Zorvec® Enicade®, use Zorvec® Enicade® fungicide in accordance with the current Fungicide Resistance Management (FRM) strategy for your region.

For the latest information refer to the CropLife Australia website

(<https://www.croplife.org.au/resources/programs/resistance-management/>).

To delay fungicide resistance;

- Exposure to Zorvec® Enicade® (or any other Group 49-containing product) should not exceed thirty-three percent (33%) of the total period of protection needed per crop.
- For crops when three (3) or more Downy mildew fungicide applications are made, use Zorvec® Enicade® (or any other Group 49-containing product) in no more than 33% of the total number of fungicide applications, with a maximum number of sprays as specified in the Critical Comments section of the Directions for Use table. Where less than three (3) Downy mildew fungicide applications are made, make no more than one (1) application of Zorvec® Enicade® (or any other Group 49-containing product).
- Zorvec® Enicade® applications are to be made preventatively and no more than two (2) times in sequence before applying a fungicide with a different mode of action.
- Where a fungicide with a different mode of action follows Zorvec® Enicade® (or any other Group 49-containing product) application, this fungicide preferably should have curative activity.
- Very few foliar fungicides have activity on soil-borne pathogens and the resistance risk associated with these diseases
- There will be no more than six (6) applications of Zorvec® Enicade® (or any other Group 49 containing product) per year on the same acreage, targeting the same pathogen.

A disease management program that includes rotation and/or tank mixing with fungicides with a different mode of action is essential to reduce the risk of fungicide resistance development. For guidance on a particular crop and disease control situation, contact your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries, or local DuPont representative.

MIXING

Fill spray tank to ¼ to ½ full of water. Measure the amount of Zorvec® Enicade® required for the area to be sprayed. Add Zorvec® Enicade® directly to the spray tank with the agitation engaged. Mix thoroughly to disperse the fungicide. Once dispersed, the material must be kept in suspension at all times by continuous agitation. Use mechanical or hydraulic means, **DO NOT** use air agitation, premix or slurry.

If spray solution is left standing, ensure thorough re-agitation of the spray mix until fully resuspended. **DO NOT** allow spray mix to sit overnight, as resuspension may be difficult.

SURFACTANT/WETTING AGENT

Use of a surfactant/wetting agent is not required.

APPLICATION

Use a sprayer fitted with high flow rate nozzles to apply the highest practical spray volume. Use sufficient water to obtain thorough coverage of plants, with a minimum 250 L/ha.

Nozzles with higher rated flows produce larger droplets. Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size, DOES NOT improve canopy penetration and may increase drift potential. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

Compatibility

Zorvec® Enicade® is an oil based formulation. Avoid applying Zorvec® Enicade® in tank mixture with other agricultural products that have a history of causing crop injury when applied with oils unless specifically recommended by DuPont.

Zorvec® Enicade® is compatible with many commonly used fungicides, liquid fertilisers, herbicides, insecticides, plant growth regulators, and biological control products. However, since the formulations of products are always changing, it is advisable to test the physical compatibility of desired tank mixes and check for adverse effects like settling out or flocculation. To determine the physical compatibility, add the recommended proportions of the tank mix products to water, mix thoroughly and allow to stand for 20 minutes. If the combination remains mixed, or can be re-mixed readily, it is considered physically compatible. Zorvec® Enicade® is compatible with *Antracol**, *Avatar**, *Benevia**, *Coragen**, Fontelis®, imidacloprid, mancozeb, *Movento**, *Octave**, Phosphorous acid, *Polyram**, *Roval**, *Success* Neo*, *Sumagic**, and *Ultimate**.

The crop safety of all potential tank-mixes, including additives and other pesticides, on all crops has not been tested. Before applying any tank-mix not specifically recommended on this label or other DuPont supplemental labelling, the safety to the target crop must be confirmed. To test for crop safety, apply the combination to a small area of the target crop in accordance with the label instructions to ensure that a phytotoxic response will not occur.

The mixing sequence recommended is: water soluble bags, dry flowable or water dispersible granules, wettable powders, water based suspension concentrates, water soluble concentrates, oil based suspension concentrates, emulsifiable concentrates, adjuvants and surfactants, soluble fertilisers.

Spray Equipment cleanout

Prior to application, start with clean, well-maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove. Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom, and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. **DO NOT** clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life with long lasting effect. **DO NOT** contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

KEEP OUT OF THE REACH OF CHILDREN.

Store in the closed, original container in a cool, well-ventilated area. **DO NOT** store for prolonged periods in direct sunlight.

Triple 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 deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. **DO NOT** burn empty containers or product.

RE-ENTRY

No re-entry restriction applies to this product.

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 DuPont or Seller, which buyer or any other user may have against DuPont 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. DuPont 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 DuPont'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 DuPont or the Seller. Buyer accepts these risks.

Avoid breathing mist or vapours. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

APVMA Approval: 68375/116068

DIRECTIONS FOR USE

RESTRAINTS:

DO NOT apply if rainfall is expected within 20 minutes of spray residues drying.

DO NOT use on hydroponic crops.

DO NOT apply in nursery production of transplanted crops.

DO NOT apply by air.

SPRAY DRIFT RESTRAINTS

DO NOT apply with spray droplets smaller than a MEDIUM spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline.

DO NOT apply during surface temperature inversion conditions at the application site.

DO NOT apply when wind speed is less than 3 or more than 20 km per hour are measured at the application site.

Users of this product **MUST** make an accurate written record of the details of each spray application within 24 hours following application and **KEEP** this record for a minimum of 2 years.

The spray application details that must be recorded are:

1. date with start and finish times of application;
2. location address and paddock/s sprayed;
3. full name of this product;
4. amount of product used per hectare and number of hectares applied to;
5. crop/situation and weed/pest;
6. wind speed and direction during application;
7. air temperature and relative humidity during application;
8. nozzle brand, type, spray angle, nozzle capacity and spray system pressure measured during application;
9. name and address of person applying this product.

(Additional record details may be required by the state or territory where this product is used.)

For use in all States where appropriate for the crop and/or disease.

CROP	DISEASE	RATE	WHP	CRITICAL COMMENTS	
Bulb vegetables (excluding Onions) including: Chives, Fennel bulb, Florence fennel, Garlic, Leeks, Shallots, Spring onions	Downy mildew (<i>Peronospora destructor</i>)	350 mL/ha Plus a registered Downy mildew protectant fungicide at registered rates	10 days	Apply up to two consecutive sprays of Zorvec® Enicade®, 10 days apart and then change to a fungicide from another chemical group. DO NOT apply more than 3 sprays of Zorvec® Enicade® to each crop as a precaution against development of disease resistance.	Maintain a regular protectant spray programme. Apply when conditions favour disease development but before the disease is evident. Apply in 250 to 500 L of water per hectare.
Onions				Apply up to two consecutive sprays of Zorvec® Enicade®, 10 to 14 days apart. DO NOT apply more than 2 sprays of Zorvec® Enicade® to each crop as a precaution against development of disease resistance.	

CROP	DISEASE	RATE	WHP	CRITICAL COMMENTS
Brassica vegetables including: Broccoli, Brussels sprout, Cabbage, Cauliflower	Downy mildew (<i>Hyaloperonospora parasitica</i>)	350 mL/ha Plus a registered Downy mildew protectant fungicide at registered rates	-	Maintain a regular protectant spray programme. Apply when conditions favour disease development but before the disease is evident. Apply up to two consecutive sprays of Zorvec® Enicade®, 7 to 10 days apart and then change to a fungicide from another chemical group. Use the shorter interval when conditions favouring infection are creating a high risk. Apply in 250 to 500 L of water per hectare. DO NOT apply more than 3 sprays of Zorvec® Enicade® to each crop as a precaution against development of disease resistance.
Cucurbit vegetables including (field and protected crops): Bitter melon, Chokos, Cucumber, Gherkin, Marrow, Melons, Pumpkin, Rockmelon, Squash, Zucchini	Downy mildew (<i>Pseudoperonospora cubensis</i>)	350 mL/ha Plus a registered Downy mildew protectant fungicide at registered rates	1 day	Maintain a regular protectant spray programme. Apply when conditions favour disease development but before the disease is evident. Apply up to two consecutive sprays of Zorvec® Enicade® 7 to 10 days apart and then change to a fungicide from another chemical group. Use the shorter interval when conditions favouring infection are creating a high risk. Apply in 250 to 500 L of water per hectare. DO NOT apply more than 3 sprays of Zorvec® Enicade® to each crop as a precaution against development of disease resistance.

CROP	DISEASE	RATE	WHP	CRITICAL COMMENTS
Leafy vegetables and Brassica leafy vegetables including: Amaranth, leafy Arugula, Buk choy, Cardoon, Chard, Celtuce, Chervil, Chinese broccoli (Gai lum/Gai lan/Kai lan), Chinese cabbage (Pet sai/Wombok/Haksukai), Choy sum (Gai choy/Am soy), Corn salad, Cress, Dandelion leaves, Dock, Endive, Kai choy, Kale, Leafy mustard including Indian mustard and Mustard spinach (Komatsuma), Lettuce (Head and Leafy), Mibuna, New Zealand spinach, Orach, Pak choy, Purslane (Garden and Winter), Radicchio, Rocket, Spinach, Swiss chard, Tat soy	Downy mildew (<i>Bremia lactucae</i> , <i>Peronospora farinosa</i>)	350 mL/ha Plus a registered Downy mildew protectant fungicide at registered rates	3 days	Maintain a regular protectant spray programme. Apply when conditions favour disease development but before the disease is evident. Apply up to two consecutive sprays of Zorvec® Enicade®, 7 to 10 days apart and then change to a fungicide from another chemical group. Use the shorter interval when conditions favouring infection are creating a high risk. Apply in 250 to 500 L of water per hectare. DO NOT apply more than 3 sprays of Zorvec® Enicade® to each crop as a precaution against development of disease resistance.
Poppies	Downy mildew (<i>Peronospora cristata</i>)	350 mL/ha Plus a registered Downy mildew protectant fungicide at registered rates	6 weeks	Commence spraying early (i.e. before the main disease infection period) with registered non Group U15 fungicides. Apply Zorvec® Enicade® when conditions favour disease development during the late run-up to hook stage. Apply in 250 to 500 L water per hectare. DO NOT apply later than hook stage. DO NOT apply more than 1 application of Zorvec® Enicade® to each crop, as a precaution against development of disease resistance.

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

WITHHOLDING PERIODS

HARVEST

BRASSICAS: NOT REQUIRED WHEN USED AS DIRECTED

BRASSICA LEAFY VEGETABLES, LEAFY VEGETABLES: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.

CUCURBIT VEGETABLES: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

CHIVES, FENNEL BULB, GARLIC, LEEKS, ONIONS, SHALLOTS, SPRING ONIONS: DO NOT HARVEST FOR 10 DAYS AFTER APPLICATION.

POPPIES: DO NOT HARVEST FOR 6 WEEKS AFTER APPLICATION.

GRAZING

DO NOT GRAZE OR CUT FOR STOCK FOOD.

EXPORT STATEMENT: Growers should note that suitable Maximum Residue Levels (MRLs) or import tolerances may not be established in all markets for produce treated with Zorvec® Enicade®. If you are growing produce for export, please check with DuPont for the latest information on MRLs and export tolerances before using this product.

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