



# Solitaire 240ME

Fungicide



## Targeted Pythium control

### Product Overview

Solitaire 240ME Fungicide is a targeted Pythium fungicide containing 240g/L of the active ingredient Metalaxyl-M. Metalaxyl-M is also known as Mefanoxam in some countries.

Solitaire 240ME Fungicide is specifically registered for the control of Pythium Leaf Blight, Pythium Root Rot and Damping Off in all turf management situations.

Solitaire 240ME Fungicide is a micro-emulsion (ME) formulation. It has minimal odour because the product does not contain petroleum solvents. As a result, Solitaire Fungicide mixes completely with water and may be tank mixed with many commonly used fungicides and liquid fertilisers.

Solitaire 240ME Fungicide is manufactured in Australia.

### Key Features

- > Micro-Emulsion – turf specific formulation. Minimal odour, mixes completely with water and possesses excellent tank mix flexibility, improved ease of handling and enhanced shelf life.
- > Registered to control all forms of Pythium diseases that occur in Australia. Controls Pythium Leaf Blight, Pythium Root Rot and Seedling Damping Off.
- > Rapid movement into the plant. Can be taken up and be within the plant in as quickly as 30 minutes.
- > Readily taken up by all green plant parts as well as roots. Can be taken into the plant even if the plant's root system is damaged due to Pythium attack.
- > Safe for use on young seedlings, particularly for control of seedling damping off situations.
- > Excellent turf safety. Solitaire 240ME Fungicide can be used on all major turf species.
- > Good residual activity. Can provide preventative control for up to 21 days.



## Solitaire 240ME Fungicide – Use Rates

PATHOGEN	APPLICATION RATE	WATER RATE
Pythium Leaf Blight	1.7-3.5L/ha (17-35mL/100m <sup>2</sup> )	350 – 500L/ha
Pythium Root Rot	1.7-3.5L/ha (17-35mL/100m <sup>2</sup> )	>1,000L/ha. Irrigate with 6 to 10mm quickly after application.
Seedling Damping Off ( <i>Pythium</i> spp.)	1.7-3.5L/ha (17-35mL/100m <sup>2</sup> )	>1,000L/ha. Irrigate with 6 to 10mm quickly after application only if required.



## Mode of Action

### GROUP 4 FUNGICIDE

Metalaxyl-M, the active ingredient in Solitaire Fungicide, is an acylalanine fungicide, possessing systemic activity. Metalaxyl M is rapidly taken up by the green plant parts, and is transported upwards (acropetally) in the cell and is distributed in the leaves. It provides control of fungi from within the plant, inhibiting fungal growth and reproduction, and protects new growth produced after application. When applied as a soil application, some active ingredient remains on the surface of the soil and is absorbed onto soil particles and organic matter, where it can also control pathogens on contact. Metalaxyl-M impacts strongly on RNA production in fungi cells. RNA is important to cells because it relays information encoded in DNA to tiny organs within the cell, called ribosomes, which produce protein according to the RNA's instructions. RNA is thus vital to the basic functioning of the fungi cell.

## Metalaxyl M: Strength on Pythium – US Research & Fungicide Ratings on Pythium Blight

FUNGICIDE	FRAC Group	Efficacy Rating*	Interval Days
Metalaxyl-M (Mefanoxam)	4	3.0	7-21 days
Propamocarb	28	3.0	7-21 days
Cyazofomid	21	3.5	14-21 days
Fosetyl-al	33	3.0	14-21 days

Source: University of Kentucky – Chemical Control of Turfgrass Diseases, 2017.

\* Rating system for fungicide efficacy:

4 = consistently good to excellent control in published experiments;

3 = good to excellent control in most experiments;

2 = fair to good control in most experiments;

1 = control is inconsistent between experiments but performs well in some instances.



## Maximising performance

- > When tank mixing other products with Solitaire 240ME, follow the proper sequence of adding products to the spray tank. Wettable powders or water dispersible granules should be added to the water in the tank first, followed by liquid flowable products such as Solitaire 240ME, with emulsifiable concentrates added last. Provide continuous agitation during mixing and application.
- > Within the rate range given for turf, use the lower rate for the shortest interval listed (14 days) and the higher rate for the longest interval (21 days). Under severe disease conditions, use the highest rate (3.5L/ha) and shortest interval (14 days).
- > Begin applications before symptoms occur when conditions first favour disease and continue applications while conditions remain favourable for disease development using registered Pythium fungicides.
- > Ensure good even application in order to achieve good disease control. Use Solitaire 240ME in a preventative fungicide program containing fungicides from different chemical groups.
- > Apply no more than 2 consecutive Solitaire 240ME applications at 14 to 21 day intervals for Pythium. It is recommended that Solitaire 240ME Fungicide should not be used more than 4 times per season.