(ProForce

Tombstone Duo

Fungicide

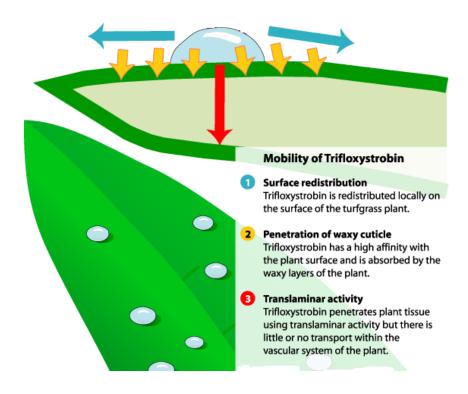




- **Tombstone Duo** is a broad spectrum fungicide containing the active ingredients Trifloxystrobin (100g/L) and Tebuconazole (200g/L).
- It is registered for the control of Anthracnose, Brown Patch, Winter Fusarium, Helminthosporium diseases (including White Helmo), Leptosphaerulina, Curvularia, Dollar Spot and ERI (Ectotrophic Root Infecting Fungi) diseases.
- Tombstone Duo is an SC formulation.
- Tombstone Duo is manufactured in Australia.







Trifloxystrobin Mode of Action





Group

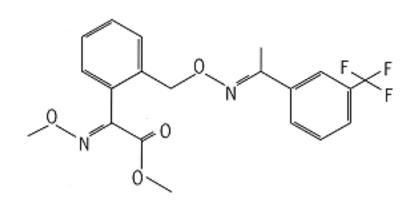
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Fungicide

Trifloxystrobin

- Strobilurin Group (Group 11)
- Represents the second generation class of Strobilurin active ingredients
- Inhibits fungal cell respiration, which prevents energy production and leads to rapid cell death
- Mesosystemic penetration and redistribution properties
- The compound shows a strong inhibitory effect on fungal spore germination and other early stages of pathogen development, giving rise to the excellent preventive activity









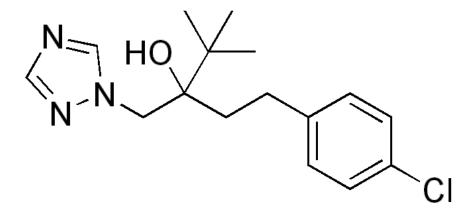


Group

11

Fungicide









Tebuconazole

- Triazole Group (Group 3)
- Transported acropetally (upwards)
- Inhibit biosynthesis of sterols, which are important structural components of fungal cell membranes.
 - SBI sterol biosynthesis inhibitor
 - DMI demethylation inhibitor
- Protective, curative, and in some cases, eradicative activity





Definition of "mesostemic"



The non-scientific definition: "Locked-on"

Trifloxystrobin is characterized by a strong bonding onto the plant surfaces through penetration of the waxy layers. This forms a secure reservoir of fungicide to provide longlasting, <u>weather-protected disease</u> control.

The scientific definition:

With a high affinity to plant surface structures
Trifloxystrobin is strongly absorbed by the waxy layers of
the plant and forms a weather-protected deposit.
Amounts sufficient for biological activity are re-distributed
from this reservoir by surface water or superficial vapor
movement and re-deposited on the nearby plant surfaces.
It penetrates plant tissues, has translaminar activity but
there is little or no transport within the vascular system of
the plant.









Maximising Performance

- Good turf disease control requires good coverage. Application should be made using sufficient water to ensure thorough coverage: 800-1,600L of water per hectare.
- For preventative control apply Tombstone Duo on a 21-28 day interval when conditions are favourable for disease development. For curative control apply Tombstone Duo on a 14-21 day interval.
- For Brown Patch and ERI disease control, apply sufficient irrigation quickly following irrigation to wash Tombstone Duo into the crown and upper root zone (3-6mm of irrigation).
- For ERI disease control, make monthly preventative applications in the three months preceding the disease season (usually early Spring).
- From a resistance management perspective, do not apply more than two consecutive sprays of Tombstone Duo unless mixed with a protectant fungicide from group 14, 28, M2, M3, M4 or M5.
- Tombstone Duo acts very rapidly and where the turf is of a low nutritional status, a slight yellowing may be seen. This will be corrected by nitrogenous fertiliser applications. Where possible, it is recommended that a fertiliser program should precede the fungicide application.

Tombstone Duo Fungicide – Use Rates & Label Recommendations

PATHOGEN	APPLICATION RATE	WATER RATE	KEY COMMENTS
Brown Patch (Rhizoctonia solani)	2L/ha (20mL/100m²)	800-1600L/ha (8-16L/100m²)	Apply sufficient irrigation quickly following irrigation to wash Tombstone Duo into the crown and upper root zone (3-6mm of irrigation).
Dollar Spot (Sclerotinia homoecarpa)	3L/ha (20mL/100m²)		For preventative control apply on a 21-28 day interval when conditions are favourable for disease development. To control existing infections apply on a 14-21 day interval.
Winter Fusarium or Fusarium Patch (<i>Microdochium nivale</i>)	2L/ha (20mL/100m²)		
Anthracnose (Colletotrichum graminicola)	2L/ha (20mL/100m²)		
Secondary Diseases Leptosphaerulina spp., Curvularia spp.	2L/ha (20mL/100m²)		
Black and White Helminthosporium (<i>Bipolaris</i> spp., <i>Drechslera</i> spp., <i>Exserohilum</i> spp.)	2L/ha (20mL/100m²) 280mL per bowling green		Make monthly preventative applications from December to March.
ERI (Ectotrophic Root Infecting Fungi)	2L/ha (20mL/100m²)		Make monthly preventative applications in the three months preceding the disease season (usually early Spring).
Spring Dead Spot	2L/ha (20mL/100m²)		Apply as a preventive application in January to March after renovation and recovery of active growth. Make a second application one month later. Apply irrigation to wash Tombstone Duo into the root zone.

Note: Tombstone Duo is also registered for a range of ornamental and landscape plant diseases such as Azalea Petal Blight, Botrytis Blight, Grey Mould, Leaf Spots, Rusts (including Myrtle Rust), Powdery Mildew and Black Spot. For additional information, see the label.