

**HARMFUL, ECOTOXIC**  
**KEEP OUT OF REACH OF CHILDREN**

**TOPSIN<sup>®</sup> - MFA**

**FUNGICIDE**

**Contains:** 400 g/litre thiophanate-methyl in the form of a suspension concentrate

**For disease control in fruit, vegetables,  
turf and ornamentals**

171002

**PLEASE READ THE ENTIRE LABEL BEFORE MIXING OR APPLYING. SHAKE WELL BEFORE USE.**

**HAZARD CLASSIFICATION:** 6.1D, 6.5B, 6.6B, 9.1A, 9.2B

**APPROVED HANDLER:** This product must be under the control of an approved handler during use or locked up. See SDS for details.

**RECORD KEEPING:** Records of use as described in NZS 8409 Management of Agrichemicals must be kept in certain situations. See SDS for full details

**WARNING:** May be harmful if swallowed, inhaled or absorbed through the skin. May cause skin sensitization from prolonged skin contact. Avoid skin contact. Suspected of causing genetic defects.

**FIRST AID:** If swallowed DO NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT SCRUB THE SKIN. If splashed in eyes, wash out immediately with water for at least 15 minutes. Seek medical attention.

**PERSONAL PROTECTION:** Avoid skin and eye contact and inhalation of spray mist. When mixing or applying wear waterproof gloves, eye protection, boots and overalls. DO NOT eat, drink or smoke while using. Wash splashes of concentrate from skin immediately. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

**STORAGE:** Store in original container, tightly closed and in a locked, dry, cool area away from foodstuffs. Store in accordance with NZS 8409 Management of Agrichemicals.

**DISPOSAL:** Triple rinse empty container and add rinsate to the spray tank. If recycling, discard cap and deliver clean container to an Agrecovery depot. Alternatively crush and bury in an approved landfill. Dispose of product only by using according to this label, or at an approved disposal facility.

**ECOTOXIC:** Very toxic to fish/aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container. Toxic to the soil environment.

**SAFETY DATA SHEET:** Additional information is listed in the SDS available from Lonza NZ Limited or www.lonza.co.nz

**Approved pursuant to the HSNO Act 1996,** No: HSR000486 See www.epa.govt.nz for approval conditions.

**Registered pursuant to the ACVM Act 1997,** No. P002893 See www.foodsafety.govt.nz for registration conditions.

**DIRECTIONS FOR USE**

It is an offence to use this product on animals. The rates expressed are for high volume spraying to run-off. For concentrate spraying adjust dilution rates accordingly.

CROP	DISEASE	RATE	CRITICAL COMMENTS
Stone Fruit	Brown rot	50 - 80 ml/100 litres water	<b>Blossom:</b> Apply only 2 sprays of Topsin M-4A plus an appropriate protectant fungicide between pink and petal fall. Use high rate under severe disease conditions. Do not apply less than 2 litres Topsin M-4A per hectare.
Pip Fruit	Blackspot	50 ml/100 litres water	Apply only 2 sprays of Topsin M-4A, ALWAYS WITH an appropriate protectant fungicide between second cover and harvest. Do not apply less than 2L/ha Topsin M-4A on apples or less than 3 litres/ha Topsin M-4A on pears. The inclusion of a powdery mildew fungicide is not necessary when using Topsin M-4A.
Grapes	Botrytis, Blackspot	100 ml/100 litres water	Apply 1 only spray of Topsin M-4A plus an appropriate protectant fungicide between flowering and harvest. Do not apply less than 1 litre/ha Topsin M-4A. The inclusion of a powdery mildew fungicide is not necessary when using Topsin M-4A.
Field Tomatoes	Sclerotinia	2.5 litres/ha	Apply only 2 sprays of Topsin M-4A, plus an appropriate protectant fungicide at a 14 day interval during blossom.
	Botrytis Fruit Rot	1 litre/ha in 700 – 1100 litres water	Apply 1 only spray of Topsin M-4A, plus an appropriate protectant fungicide.
Glasshouse Tomatoes	Botrytis Fruit Rot	100 ml/100 litres water	
Beans	Sclerotinia Botrytis	2.5 litres/ha in 700 - 1100 litres water	Apply only 2 sprays of Topsin M-4A, the first at early flower and again at full flower.
Onions	Botrytis	1.0 litre/ha in 400 - 700 litres water	Apply Topsin M-4A at the flag leaf stage, and 14 - 21 days later. Apply again 30 days before harvest with a further application 10-14 days later if infections persist. Use no more than 4 applications per season. Use in a program with a non Group 1 fungicide.
Citrus	Blue Mould. Fruit Dipping	100 ml/100 litres water	Dip fruit for 30 seconds in a suspension of Topsin M-4A. Keep the suspension agitated.
Cabbages	Clubroot	200 ml/100 litres water	Apply 200 mL of solution per transplant hole. Ensure roots and surrounding soil are soaked. DO NOT plant when soil is wet.
Kumera	Black Rot (Scurf)	250 ml/100 litres water	Submerge plants in the Topsin M-4A suspension for 3 minutes prior to planting out.
Turf	Brown Patch	120 ml/100 m <sup>2</sup>	Each year apply only 2 sprays of Topsin M-4A with an appropriate protectant fungicide. Apply initial treatment when fungal infection first appears and repeat 10 - 14 days later.
Ornamentals	Powdery Mildew, Botrytis, Blackspot and certain leaf spot fungi	100 ml/100 litres water	Apply only 2 sprays of Topsin M-4A with an appropriate protectant fungicide. Begin application when infection is expected and repeat 10 - 14 days later.
Cereals	Speckled Leaf Blotch ( <i>Septoria</i> )	1.0 litre/ha	Apply in 200 litres/ha water at the first sign of infection usually during late tillering about 11 - 12 weeks after sowing.

**It is an offence for users of this product to cause residues exceeding the relevant MRL in Food Notice: Maximum Residue Levels for Agricultural Compounds.**

**WITHOLDING PERIODS:**

Stone Fruit	Do not apply after blossom.	Beans	Do not harvest within 14 days of application.
Pip Fruit	Do not harvest within 7 days of application.	Onions	Do not harvest within 14 days of application.
Grapes	Do not harvest within 7 days of application.	Cereals	Do not harvest or graze treated crop within 60 days of application.
Tomatoes	Do not harvest within 3 days of application.		

**APPLICATION:**

**EQUIPMENT:** Topsin M-4A can be applied with conventional ground or aerial spraying equipment. Screens and nozzle strainers finer than 300 microns should not be used. Flush equipment with clean water after use.

**MIXING:** Pour the correct amount of Topsin M-4A into the partly filled spray tank and while agitating add the remainder of the water.

**COMPATIBILITY:** Topsin M-4A is compatible with most other commonly used pesticides. Do not mix with highly alkaline materials such as Bordeaux mixture or lime sulphur.

**ADDITIVES:** Do not add surfactants when Topsin M-4A is combined with other pesticides as a tank mix. The addition of a non-ionic surfactant is recommended only when Topsin M-4A is used alone on hard to wet surfaces or under dry dusty conditions.

**Cleaning Spray Equipment After Using Topsin M-4A:**

**Rinsing:** After using Topsin M-4A:

- Empty the spray tank completely and drain the whole system. Thoroughly wash inside the unit using a pressure hose. Drain spray unit and clean any filters in the tank, pump, lines, hoses and nozzles.
- After cleaning the spray unit as above, quarter fill with clean water and circulate the water through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.
- Discard rinse water on land already sprayed or on wasteland away from food and feed plants and water sources.

**RESISTANCE MANAGEMENT:** **GROUP 1 FUNGICIDE**

Topsin M-4A is a thiophanate fungicide (Group 1). Some naturally occurring individual fungi may become resistant when excessive use of the same fungicide occurs. To maximize the effectiveness of fungicides, products containing alternate modes of action should be used in the spray program. For further information see: www.resistance.nzpps.org for alternate modes of action and the details of resistance management strategies (if any) for the crops listed on the label.

Resistance to this fungicide and related benzimidazole (MBC) fungicides has developed from repeated use in some disease situations. In order to help prevent further development or build-up of resistant strains, use strictly in accordance with label instructions.

For this reason the seller cannot accept responsibility that Topsin M-4A will control the diseases listed on this label under all circumstances. If the efficacy of Topsin M-4A appears to be falling off, immediately contact your distributor so that consideration can be given to the prompt use of other alternative fungicides.

**NOTICE TO BUYER:** The manufacturer and vendors of Topsin M-4A warrant the formulation to contain the specified active ingredient within accepted tolerance but make no warranty of any kind on the uses of material and accept no responsibility, whether the material is used in accordance with the label directions or not.

**REGISTERED TO:** Mitsui & Co. (NZ) Ltd., 48 Shortland Street, Auckland. Tel: 09 914 3663 Fax: 09 379-0741

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**EMERGENCY PHONE:** 0800 CHEMCALL 0800 243 6225