MUSTGROWTM CROP BIOFUMIGANT

FUNGICIDE, NEMATICIDE PELLET

COMMERCIAL

For the suppression of populations of listed soil-borne pathogens and nematodes.

ACTIVE INGREDIENT: Oriental Mustard Seed Meal (*Brassica juncea*)100% Warning, contains the allergen mustard

REGISTRATION NUMBER: 30263 PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING KEEP OUT OF REACH OF CHILDREN

CAUTION: EYE IRRITANT POTENTIAL SKIN SENSITIZER

NET CONTENTS: 4-500 KG

MPT Mustard Products & Technologies Inc. 201-1st Avenue South; Suite 1005 Saskatoon, SK S7K 1J5 Telephone: 306-651-1986

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN.

Potential skin sensitizer. May irritate eyes. Avoid contact with eyes, skin or clothing. If contacted with eyes, wash thoroughly with plenty of running water. May cause respiratory irritation. Avoid inhaling or breathing dust. Wash hands thoroughly with soap and water after handling. Users must wear long sleeved shirt, long pants, chemical-resistant gloves, shoes and socks, and a NIOSH approved respirator with any N-95 filter or a NIOSH approved powered air-purifying respirator with an HE filter for biological products when handling and during application. In addition, wear protective eyewear (goggles or face shield) when handling and during application. If present during watering, the applicator is required to wear a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks, protective eyewear (goggles or face shield) and a full-face respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides, or a NIOSH-approved canister approved for pesticides. Unprotected persons must be kept out of the treated areas for 14 days.

FIRST AID

If swallowed, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

STORAGE

Store this product away from food or feed.

ENVIRONMENTAL PRECAUTIONS:

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

DIRECTIONS FOR USE:

As this product is not registered for the control of pests in aquatic systems DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

This product is a dry pellet applied directly to soil for the suppression of populations of soil-borne pathogens and nematodes. This product is intended for use as part of an Integrated Pest Management (IPM) program.

This product must be applied dry by using a calibrated spreader that will distribute the product evenly and uniformly. Do not mix the product with water prior to application. Immediately after application, and incorporation, watering must be followed as recommended. The product is stable when it is dry, but will activate when it is wet to provide suppression of the labeled pathogens and nematodes. The product should be applied to a dry soil surface and incorporated. The amount of water required after application is dependent on soil moisture content and soil type. If the soil surface is wet before application, then less water will be required.

Minor phytotoxicity may occur in the seedling stage on some listed crops.

Restricted-entry interval (REI): Do not enter or allow entry into treated areas for 24 hours after application of water to MustGrowTM Crop Biofumigant in the soil.

Сгор	Rate (kg product/ha)	Pest Suppressed
Cannabis and Industrial Hemp Field grown *, in Greenhouses, other enclosed growing structures or in High Tunnels**	2240	Soil-borne <i>Pythium</i> spp. Soil-borne <i>Fusarium</i> spp. Verticillium wilt (<i>Verticillium dahlia</i>)
	1121 - 2240	Root knot nematode (<i>Meloidogyne</i> spp.)
Root and Tuber Vegetables (CG 1)	1121 - 2240	Root knot nematode (<i>Meloidogyne</i> spp.) Verticillium wilt (<i>Verticillium albo-atrum, V. dahlia</i>)
	2240	Soil-borne <i>Pythium</i> spp. and <i>Fusarium</i> spp.

DO NOT APPLY BY AIR.

Bulb Vegetables (CG 3-07), Leafy Vegetables (CG 4); Cucurbit Vegetables (CG 9), Cereal Grains (CG 15), Herbs And Spices (CG 19), Oilseeds (CG 20-09) and Asparagus	2240	Soil-borne <i>Pythium</i> spp. and <i>Fusarium</i> spp.
Brassica Leafy Vegetables (CG 5)	1121 - 2240	Root knot nematode (Meloidogyne spp.)
	2240	Soil-borne <i>Pythium</i> spp. and <i>Fusarium</i> spp.
Legume Vegetables (CG 6)	1121 - 2240	Root knot nematode (Meloidogyne spp.)
	2240	Soybean cyst nematode (<i>Heterodera</i> glycines) Soil-borne Pythium spp. and Fusarium spp.
Fruiting Vegetables (CG 8-09)	1121 - 2240	Root knot nematode (<i>Meloidogyne</i> spp.) Verticillium wilt (<i>Verticillium albo-atrum, V. dahlia</i>)
	2240	Soil-borne <i>Pythium</i> spp., <i>Fusarium</i> spp. and <i>Phytophthora capsici</i>
Pome Fruit (CG 11-09) and Stone Fruit (CG 12-09)	1121 – 2240	Root Lesion Nematode (<i>Pratylenchus</i> <i>penetrans</i>) Ring Nematodes (<i>Criconemella</i> <i>xenoplax</i>)
Berry and Small Fruit (CG 13-07)	1121 - 2240	Root knot nematode (<i>Meloidogyne</i> spp.) Verticillium wilt (<i>Verticillium albo-</i> <i>atrum, V. dahlia</i>)
	2240	Soil-borne <i>Pythium</i> spp. and <i>Fusarium</i> spp.
Strawberry	1121 - 2240	Root lesion nematode (<i>Pratylenchus</i> <i>penetrans</i>) Red stele (<i>Phytophthora fragariae</i>)
Raspberries, red and black raspberry, wild raspberry, cultivars and hybrids of these	1121 - 2240	Phytophthora root rot (<i>Phytophthora rubi</i>)
Tree Nuts (CG 14-11)	1121 - 2240	Root Lesion Nematode (<i>Pratylenchus penetrans</i>)
Tobacco	1121 - 2240	Verticillium wilt (<i>Verticillium albo-atrum, V. dahlia</i>)
	2240	Soil-borne <i>Pythium</i> spp. and <i>Fusarium</i> spp.

Pre-plant application: Apply 11.2 - 22.4 kg product per 100 m^2 of area to be treated (1121-2240 kg/ha) using a calibrated spreader directly to soil surface 14 days prior to seeding or transplanting. Do not transplant or seed immediately after treatment to allow product time to activate and work. Ensure product uniform coverage. The product must be incorporated into the upper soil layer to a depth of $10 \text{ cm} (11.2 \text{ to } 16.1 \text{ kg}/100 \text{ m}^2)$ or $15 \text{ cm} (16.1 \text{ to } 22.4 \text{ kg}/100 \text{ m}^2)$ using a disc, rotary hoe or other cultivation equipment. Immediately after the application, apply water uniformly to the treated area until a soil depth of 10 -15 cm is well moistened.

The best time to apply the product is in early spring or fall when the soil temperature is still low (end of April to early June, depending on the geographical location). Do not apply if soil temperature is below 10° C.

*Field Grown Cannabis and Industrial Hemp:

For suppression of soil-borne *Pythium* spp., soil-borne *Fusarium* spp. and verticillium wilt (*Verticillium dahlia*): apply 2240 kg product/ha (or equivalent rate relative to field/bed, planting area or spot treatment) using a calibrated spreader that will distribute the product evenly and uniformly, directly to dry soil surface 14 days prior to seeding or transplanting. Incorporate into planting beds to a depth of 15 cm by raking or tilling.

For suppression of root knot nematode (*Meloidogyne* spp.): apply 1121-2240 kg product/ha (or equivalent rate relative to field/bed, planting area or spot treatment) using a calibrated spreader that will distribute the product evenly and uniformly, directly to dry soil surface 14 days prior to seeding or transplanting. Incorporate into planting beds to a depth of 10 cm by raking or tilling. Immediately after the application, apply water uniformly to the treated area so that the soil is well moistened to a depth of 10-15 cm.

**Cannabis and Industrial Hemp Grown in Greenhouses, other enclosed growing structures or high tunnels:

For suppression of soil-borne *Pythium* spp., soil-borne *Fusarium* spp. and verticillium wilt (*Verticillium dahlia*): In an isolated outdoor area, 14 days prior to planting activities: mix dry granular product with loose planting mix or soil at a rate of 4.42 kg per cubic metre of loose planting mix or soil. Thoroughly incorporate MustGrow[™] Crop Biofumigant during mix preparation. Activate the pesticide by thoroughly watering the treated soil, until well moistened and restrict access for 14 days before the soil is moved into greenhouses, other enclosed growing structures or in high tunnels, and prepared for the planting of seeds or transplants.

For suppression of root knot nematode (*Meloidogyne* **spp.**): In an isolated outdoor area, 14 days prior to planting activities: mix dry granular product with loose planting mix or soil at a rate of 2.21-4.42 kg per cubic metre of loose planting mix or soil. Thoroughly incorporate MustGrow[™] Crop Biofumigant during mix preparation. Activate the pesticide by thoroughly watering the treated soil, until well moistened and restrict access for 14 days before the soil is moved into greenhouses, other enclosed growing structures or in high tunnels, and prepared for the planting of seeds or transplants.

Notification For Soil Being Prepared for Greenhouses, other enclosed growing structures or in high tunnels:

The applicator must verbally warn workers of the application. Biofumigant Application signs must be posted around the perimeter of the application block. Biofumigant Application signs must conform to the following requirements:

- Signs must be visible, legible and indelible, and posted around the perimeter of the application block.
- Signs must be posted prior to the start of the application and remain posted for the entire 14 days.

The signs must contain the following information:

- "Soil under biofumigation, DO NOT ENTER"
- "Mustgrow™ Crop Biofumigant in USE"
- The date and time of biofumigation
- The date and time the Treatment Period is over.
- The name of the product and registration number
- Name, address, and telephone number of the applicator

NOTE TO USER:

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (LISTED BELOW):

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than MPT Mustard Products & Technologies Inc. (MPT) under the User Requested Minor Use Label Expansion program. For these uses, MPT Mustard Products & Technologies Inc. (MPT) has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

Сгор	Pest	Application Rate	Remarks
Outdoor	Root lesion nematode	1121 -2240 kg/ha	For areas to be
ornamentals	(Pratylenchus penetrans),	(broadcast rate). If	planted into a
	root knot nematode	applied in bands centered	nursery crop the
	(Meloidogyne spp.)	122 cm (48") apart: for	following spring,
		45 cm (18") wide band	apply MustGrow TM
		use 1.67-3.34 kg per 30	Crop Biofumigant
		m of row; for 61 cm	in September or
		(24") wide band use	October after the
		3.34-6.68 kg per 30 m of	green manure crop
		row. The maximum	has been worked

	application rate per hectare must not exceed 2240 kg/ha.	in. Apply at label rates using a well- calibrated spreader that gives uniform dispersal.
		Incorporate MustGrow TM Crop Biofumigant to a depth of 10-15 cm with a rototiller or similar device. Irrigate the area well, then pack or roll or cover with tarp

DISPOSAL

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Ensure that rinsing is performed in a well-ventilated area.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product contact the manufacturer or provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offense under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.