

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 18, 2015

Chris Mason, Ph.D. Manager of Registration Loveland Products Inc. P.O. Box 1286 Greeley, CO 80632-1286

Subject: Notification per PRN 98-10 – Add Fungicide Resistance Group and First Aid Reference Statement to Front Panel, and Revise Container Disposal Heading Product Name: Monsoon EPA Registration Number: 34704-900 Application Date: 08/20/2015 Decision Number: 508830

Dear Mr. Mason:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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If you have any questions, you may contact Marcel Howard at (703)305-6784 or via email at howard.marcel@epa.gov.

Sincerely,

and For Marat

Hope Johnson, Product Manager 21 Fungicide Branch Registration Division (7505P) Office of Pesticide Programs



# Foliar Fungicide For control of specified diseases on various crops.

ACTIVE INGREDIENT:	
Tebuconazole, alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1 <i>H</i> -1,2,4-triazole-1-ethanol	
OTHER INGREDIENTS	
TOTA	AL 100.0%

Contains 3.6 pounds tebuconazole per gallon

## KEEP OUT OF REACH OF CHILDREN CAUTION

For Additional Precautionary Statements, Complete First Aid, Directions for Use, Storage and Disposal and Other Use Information, See Inside This Label Booklet.

	FIRST AID
If swallowed:	Call a poison control center 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 center or doctor.
	Do not give anything by mouth to an unconscious person.
lf on skin	Take off contaminated clothing.
or clothing:	Rinse skin immediately with plenty of water for 15 to 20 minutes.
-	Call a poison control center or doctor for treatment advice.
If in eyes:	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
lf inhaled:	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if
	possible.
	Call a poison control center or doctor for further treatment advice.

**SYMPTOMS OF POISONING:** The compound does not cause any definite symptoms that would be diagnostic. Contact with the eyes may cause irritation.

# NOTIFICATION

#### 34704-900

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/18/2015

EPA REG. NO. 34704-900

EPA EST. NO. 34704-MS-001

## NET CONTENTS 1 GAL. (3.78 L)

031109 V4D 08B15

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor or spray mist.

## Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Chemical-resistant gloves, such as barrier laminate, or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton,
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to mammals, fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

**Ground Water Advisory:** Tebuconazole is known to leach through soil into ground under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

**Surface Water Advisory:** This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted within 48 hours.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI is listed in the application directions for each crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls,
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton,
- · Shoes plus socks.

**Spray Volume:** MONSOON® may be applied in a minimum of 10 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary, increase the spray volume per acre for complete crop coverage.

**Chemigation:** Do not apply this product through any type of irrigation system.

**Mixing:** Add specified amount of MONSOON into the spray tank while filling with water to the desired level. Operate the agitator while mixing. If other materials are added to the spray tank, MONSOON should be thoroughly dispersed prior to the addition of other materials. Do not tank mix with products containing a prohibition against tank mixing. Follow the most restrictive labeling requirements of any tank mix product.

**Compatibility:** To determine the compatibility of MONSOON with other products, the following procedure should be followed: Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least five (5) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible. For further information contact your local Loveland Products, Inc. representative.

#### **RESISTANCE MANAGEMENT STATEMENT**

MONSOON is a Group 3 fungicide which exhibits no known cross-resistance to other fungicide groups. However, fungal pathogens are known to develop resistance to products with the same mode of action when used repeatedly. Any fungal population may contain or develop individuals that are resistant to MONSOON and other Group 3 fungicides. If Group 3 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted diseases, the resistant isolates may eventually dominate the fungal population. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies established for the crop and use area. Such strategies may include rotation and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Contact your local extension specialist, certified crop advisor, and/or manufacturer for fungicide resistance management and/or integrated disease management to ensure effective long-term control of the fungal diseases on this label.

## **APPLICATION DIRECTIONS**

ASPARAGUS	
DISEASE	RATE OF MONSOON
Rust ( <i>Puccinia</i> spp.)	4 to 6 fl. oz. per acre
Notes: Apply MONSOON as a fol	iar spray to the developing ferns after harvest of spears is completed. Apply at the earliest sign of rust

**Notes:** Apply MONSOON as a foliar spray to the developing ferns after harvest of spears is completed. Apply at the earliest sign of rust pustules or when weather conditions are conducive for rust development. Apply 4 to 6 fl oz of MONSOON per acre (0.11 lb ai – 0.17 lb ai per acre) in alternation with another effective fungicide. Under conditions of severe rust pressure, use the higher rate. Repeat applications on a 14-day interval as necessary to maintain control of rust. Do not apply to harvestable spears. Do not apply within 100 days of harvest in California and 180 days in all other states. Do not make more than three foliar applications per season (18 fl oz/acre or 0.51 lb ai/acre). General Comments: Applications may be made using ground or aerial application equipment. A 50 foot spray drift buffer zone is required for all aerial applications. For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON. MONSOON is a sterol demethylation inhibitor (DMI) fungicide (Group 3). Alternating MONSOON with other DMI fungicides may lead to resistance.

#### BARLEY DISEASE

#### **RATE OF MONSOON**

Rusts (Puccinia spp.)

4 fl. oz. per acre

Head blight (Fusarium spp.) - Suppression

APPLICATION INSTRUCTIONS: Apply MONSOON in a minimum of 10 gallons of spray solution per acre by ground or in a minimum of 5 gallons of spray solution per acre by air. A maximum of 4 fl. oz. of MONSOON may be applied per acre per crop season. Do not apply within 30 days of harvest. Straw cut after harvest may be fed or used for bedding. Grazing livestock or feeding of green forage is permitted 6 or more days after the last application of MONSOON. Barley fields should be observed closely for early disease symptoms particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.

#### APPLICATION TIMING DIRECTIONS:

**Rusts:** Apply MONSOON at the earliest sign of rust pustules on foliage.

Fusarium head blight: Optimal timing of MONSOON for Fusarium head blight suppression is when main stem heads have fully emerged (Feekes 10.5) on 50% of the plants.

General Comments: For optimum disease control, the lowest specified rate of a spray surfactant should be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

Restricted-entry interval (RÉI) = 12 hours.

#### BEANS (fresh & dry except succulent shelled) DISEASE

Rust (Uromyces appendiculatus)

**RATE OF MONSOON** 

4 to 6 fl. oz. per acre

Notes: Apply MONSOON in a protective spray schedule or when weather conditions are favorable for rust development. Repeat applications at 14-day intervals, or as necessary to maintain control.

Beans, fresh: MONSOON may be applied up to 7 days before harvest. Do not apply more than 24 fl. oz. of MONSOON per acre per crop season.

Beans, dry: MONSOON may be applied up to 14 days before harvest. Do not apply more than 12 fl. oz. of MONSOON per acre per crop season.

General Comments: For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on bean foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3)

#### Restricted-entry interval (REI) = 12 hours.

CORN (sweet corn, field corn, field corn grown fo	r seed, and popcorn)
DISEASE	RATE OF MONSOON
Rust ( <i>Puccinia</i> spp.)	4 to 6 fl. oz. per acre
Northern leaf blight ( <i>Helminthosporium turcicum</i> )	•
Couthown loof blight (Uplacinth con a vive moundie)	

Southern leaf blight (*Helminthosporium maydis*) Northern leaf spot (*Helminthosporium carbonum*) Gray leaf spot (Cercospora zeae-maydis)

Notes: Apply MONSOON in a protective spray schedule or when weather conditions are favorable for disease development. Repeat applications at 7- to 14-day intervals, or as necessary to maintain control. A maximum of 24 fl. oz. (1.5 pint) of MONSOON may be applied per acre per crop season. Sweet corn: MONSOON may be applied up to 7 days before the harvest of ears or forage, and 49 days before the harvest of fodder. Field, seed or popcorn: MONSOON may be applied up to 21 days before the harvest of forage, and 36 days before the harvest of grain or fodder.

General Comments: For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on corn foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

Restricted-entry interval (REI) for sweet corn = 19 days.

Restricted-entry interval (REI) for all corn except sweet corn = 12 hours.

COTTON
DISEASE RATE OF MONSOON
Southwestern cotton rust ( <i>Puccinia cacabata</i> ) 6 to 8 fl. oz. per acre
Notes: Apply MONSOON in a protective spray schedule or when weather conditions are favorable for rust development. Repeat applica-
tions at 7- to 14-day intervals, or as necessary to maintain control. MONSOON may be applied up to 30 days before harvest. Do not apply
more than 24 fl. oz. of MONSOON per acre per crop season.
General Comments: For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON.
MONSOON must have two to four hours of drying time on cotton foliage for the active ingredient to move systemically into plant tissue
before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhib-
itor (DMI) fungicide (Group 3). Restricted-entry interval (REI) = 12 hours.
CUCUDDIT VECETADIES CONTR. Chavata (fruit): Chinaga waxaaurd (Chinaga progarving malan): aitran malan; ayaymbar; gharkin;
CUCURBIT VEGETABLES GROUP: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter-
melon, Chinese cucumber); muskmelon (includes cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon,
honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon); pumpkin; squash, summer
(includes crookneck squash, scallop squash, straightneck squash, vegetable marrow and zucchini); squash, winter (includes butter-
nut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon
DISEASE RATE OF MONSOON
Powdery mildew ( <i>Sphaerotheca fuliginea</i> / 6 to 8 fl. oz. per acre
Podosphaera xanthii) (Erysiphe cichoracearum)
Gummy stem blight - suppression 8 fl. oz. per acre
( <i>Didymella bryonae</i> ) (watermelon, squash,
pumpkin, and melons only)
pumpkin, and melons only) Notes: Apply the specified dosage in a protective spray schedule to foliage and fruit. Repeat applications at 10- to 14-day intervals.
pumpkin, and melons only) Notes: Apply the specified dosage in a protective spray schedule to foliage and fruit. Repeat applications at 10- to 14-day intervals. MONSOON may be applied up to 7 days before harvest. Do not apply more than 24 fl. oz. of MONSOON per acre per crop season.
pumpkin, and melons only) Notes: Apply the specified dosage in a protective spray schedule to foliage and fruit. Repeat applications at 10- to 14-day intervals.

MONSOON must have two to four hours of drying time for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

#### Restricted-entry interval (REI) = 12 hours.

DRY BULB ONION, GARLIC, GREAT-HEADED	(elephant) GARLIC, WELCH ONION, SHALLOT
DISEASE	RATE OF MONSOON
White rot (Sclerotium cepivorum)	White rot: 20.5 fl oz per acre applied in a 4 to 6 inch band over/into
	each furrow. May be applied by chemigation to control white rot.
Rust ( <i>Puccinia allii, Puccinia porri</i> )	4 to 6 fl. oz per acre

Purple blotch (Alternaria porii)

White rot: For the control of white rot, make one application in the furrow at the time of planting. The in-furrow application should be made at the rate of 20.5 fl. oz MONSOON per acre. Apply the entire per acre rate in a 4 to 6 inch band over/into each furrow. Additional control may be obtained by including two foliar applications at 4 to 6 fl oz/acre.

**Rust:** For the control of rust make foliar applications at the rate of 4 to 6 fl. oz MONSOON per acre per application. Repeat at an interval of 10 to 14 days. Apply MONSOON in a protective spray schedule or when weather conditions are favorable for rust development.

**Notes:** Do not apply more than 32.5 fl. oz. MONSOON per acre per season if an in-furrow treatment is made. If MONSOON is not applied as an in-furrow treatment then do not apply more than 12 fl oz. MONSOON per acre per season as a foliar spray.

Do not apply within 7 days of harvest (PHI = 7 days).

**General Comments:** For optimum results use as a preventative treatment. Begin applications as soon as crop and/or environmental conditions become favorable for disease development. The lowest recommended rate of a spray surfactant may be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

#### <u>GREEN ONION, LEEK, SPRING ONION, SCALLION, JAPANESE BUNCHING ONION, GREEN SHALLOTS, GREEN ESCHALOTS</u> DISEASE RATE OF MONSOON

White rot (*Sclerotium cepivorum*)

4 to 6 fl. oz per acre

suppression only

Rust (*Puccinia allii, Puccinia porri*) Purple blotch (*Alternaria porii*)

For the control of diseases make foliar applications using an interval of 10 to 14 days. Apply MONSOON in a protective spray schedule or when weather conditions are favorable for rust development.

Notes: Do not apply more than 24 fl. oz. MONSOON per acre per season.

Do not apply within 7 days of harvest (PHI = 7 days).

**General Comments:** For optimum results use as a preventative treatment. Begin applications as soon as crop and/or environmental conditions become favorable for disease development. The lowest recommended rate of a spray surfactant may be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

Restricted-entry interval (REI) = 12 hours.

#### <u>hops</u> Disease

ATE OF MONSOON 4 to 8 fl. oz. per acre

Powdery mildew (*Sphaerotheca humuli / Sphaerotheca macularis*)

**Notes:** Apply the specified dosage in a protective spray schedule to foliage. Repeat applications at 10- to 14-day intervals. MONSOON may be applied up to 14 days before harvest. Do not apply more than 32 fl. oz. of MONSOON per acre per crop season. Increase the spray volume and the application rate as vine growth increases during the season.

**General Comments:** For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

Restricted-entry interval (REI) = 12 hours.

# LEAFY BRASSICA GREENS Broccoli raab; cabbage, Chinese (bok choy); collards; kale; mizuna; mustard greens; mustard spinach; rape greens; turnip greens

DISEASE

RATE OF MONSOON

Cercospora leaf spot (*Cercospora brassicicola*) Powdery mildew (*Erysiphe cruciferarum*) Alternaria leaf spot (*Alternaria brassicicola*) 3 to 4 fl. oz per acre

Notes: Do not apply more than 16 fl. oz. MONSOON per acre per season. Do not apply within 7 days of harvest (PHI = 7 days). General Comments: For optimum results use as a preventative treatment. Begin applications as soon as crop and/or environmental conditions become favorable for disease development. The lowest recommended rate of a spray surfactant may be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

**Restriction:** Application to turnip greens is limited to East of the Rockies. **Restricted-entry interval (REI) = 12 hours.** 

GARDEN BEET ROOTS AND TOPS (leaves)	
DISEASE	RATE OF MONSOON
Cercospora leaf spot ( <i>Cercospora beticola</i> )	3 to 7.2 fl. oz per acre
Notes: Make applications on a 14 day intervals. Do	not apply more than 28.8 fl. oz. MONSOON per acre per season.
Do not apply within 7 days of harvest (PHI = 7 da	ys).
General Comments: For optimum results use as	a preventative treatment. Begin applications as soon as crop and/or environmental
conditions become favorable for disease develop	nent. The lowest labeled rate of a spray surfactant may be tank-mixed with MONSOON.

conditions become favorable for disease development. The lowest labeled rate of a spray surfactant may be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3).

LYCHEE
DISEASE RATE OF MONSOON
Anthracnose ( <i>Colletotrichum gloeosporioides</i> ) 4 to 6 fl. oz. per acre
Notes: Begin first application of MONSOON as panicle emerges. Spray up to 6 fl. oz. per acre every 10 days thereafter for a total of 8
sprays. Apply specified dosage in a minimum of 50 gallons of spray solution per acre by ground only. Do not apply more than 48 fl. oz.
of MONSOON per acre per season. MONSOON can be applied up to and including the day of harvest (PHI = 0 days).
General Comments: For optimum disease control, the lowest labeled rate of a non-ionic spray surfactant should be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into
plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demeth-
ylation inhibitor (DMI) fungicide (Group 3).
Restricted-entry interval (REI) = 2 days.
OKRA
DISEASE RATE OF MONSOON
Cercospora leaf spot ( <i>Cercospor</i> a spp.) 4 to 6 fl. oz. per acre
Notes: Apply specific dosage of MONSOON in a preventative spray program. Use the highest rate when disease conditions are favorable
and in areas where high disease pressure is expected. Applications may be repeated at 14-day intervals in order to maintain control of
the disease. Apply specified dosage as a foliar spray in a minimum of 20 gallons of spray solution per acre by ground or a minimum of
5 gallons of spray solution by air. Applications may be made no closer than 3 days before harvest. Do not apply more than 24 fl. oz. of
MONSOON per acre per season.
General Comments: For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON.
MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into plant tissue
before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhib-
itor (DMI) fungicide (Group 3).
Restricted-entry interval (REI) = 12 hours.
PEANUT
DISEASE RATE OF MONSOON
SOILBORNE: 7.2 fl oz per acre
Sclerotium stem and pod rot (white mold,
southern blight, southern stem rot)
Rhizoctonia limb rot
Rhizoctonia pod rot (Virginia and North Carolina only)
FOLIAR:
Early leaf spot
Late leaf spot
Leaf rust

Leaf rust Web blotch (*Phoma*)

Pepper spot (Leptosphaerulina)

**FOUR-APPLICATION SPRAY PROGRAM:** Apply the specified rate in a preventive spray schedule. See table below for proper timing of applications. Applications of chlorothalonil should be made prior to and following applications of MONSOON to discourage development of resistant strains of fungi. For optimum control of foliar diseases such as leaf rust, web blotch, and pepper spot, the lowest label recommended rate of a spray surfactant should be tank-mixed with MONSOON.

**LEAF SPOT ADVISORY SCHEDULE:** For control of soilborne diseases in an advisory schedule, apply MONSOON in the first advisory spray in July and continue MONSOON applications at 14-day intervals. Applications after August 15 should be tank mixed with chlorothalonil for resistance management purposes.

**GENERAL DIRECTIONS:** For optimum control of the specified soilborne diseases, four consecutive applications of MONSOON must be made at 14-day intervals. A maximum 28.8 fluid ounces of MONSOON may be applied per crop season. MONSOON may be applied up to 14 days before harvest. Do not feed hay or threshings or allow livestock to graze in treated areas.

MONSOON is a sterol demethylation inhibitor (DMI) fungicide. Chlorothalonil may be tank mixed at the rate of 12 ounces of active ingredient with MONSOON as a leaf spot resistance management strategy. A spray surfactant is not necessary when MONSOON is tank mixed with chlorothalonil. Mixing or alternating MONSOON with other DMI fungicides may lead to resistance.

MONSOON must be carried by rainfall or irrigation into the root and pod zone for control of root and pod rots caused by *Sclerotium rolfsii* and *Rhizoctonia solani*. Drought conditions will decrease the effectiveness of MONSOON against the root and pod rots.

Use MONSOON in conjunction with cultural practices that are known to reduce the severity of soilborne diseases, such as proper crop rotation practices.

Timing of MONSOON Application fo	r Optimum Control of White Mold and	Rhizoctonia Limb and Pod Rot	
Spray Program	MONSOON Application No.	Chlorothalonil Application No.	
7 applications	3, 4, 5 and 6	1, 2 and 7	

#### PECAN DISEASE

#### RATE OF MONSOON

4 to 8 fl. oz. per acre

Brown leaf spot (*Sirosporium diffusium*) Downy spot (*Mycosphaerella caryigena*) Liver spot (*Gnomonia caryae*) Scab (*Cladosporium caryigenum*) Vein spot (*Gnomonia nerviseda*) Zonate leaf spot (*Grovesinia pyramidalis*)

**Notes:** Apply MONSOON in a preventive spray schedule beginning at early bud break (young leaves unfolding), and continue applications at 10- to 14-day intervals through the pollination period. MONSOON should be applied at 4 fl. oz. per acre in a tank-mix with the recommended rate of Super Tin® in cover sprays. Follow label directions for the use of Super Tin. Do not add a surfactant to the spray solution when tank-mixing MONSOON with Super Tin. Apply MONSOON in a spray volume of 15 or more gallons per acre by air or 50 or more gallons per acre by ground. Apply 7 to 8 fl. oz. per acre of MONSOON to full-size mature trees, and 4 to 6 fl. oz. per acre of MONSOON to smaller trees. Apply the high rate to varieties that are highly susceptible to the indicated diseases, or when severe disease conditions exist. The lowest labeled rate of a surfactant may be added to the spray solution for optimum control of the indicated diseases. Do not apply after shucks begin to split. A maximum of 32 fl. oz. of MONSOON may be applied per acre per crop season. Do not cut cover crops in treated areas for feed or allow livestock to graze treated areas.

**General Comments:** For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON. MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3). It may be applied in a tank-mix or alternated (every other spray application) with a non-DMI fungicide as a resistance management strategy.

Restricted-entry interval (REI) = 12 hours.

## **SOYBEAN**

#### **DISEASE**

**RATE OF MONSOON** 3 to 4 fl oz per acre

Soybean Rust (*Phakopsora pachyrhizi*) Powdery mildew (*Microsphaera diffusa*)

**Use Directions:** Apply MONSOON as a broadcast foliar spray as a preventative spray or at first visible symptoms of disease. Repeat applications on a 10- to 14-day spray interval if environmental conditions are favorable for continued disease development. Use of the higher rates and shorter spray intervals are recommended when disease pressure is severe. The lowest label recommended rate of a spray surfactant must be tank-mixed with MONSOON. MONSOON should be applied in a minimum of 10 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons per acre by aircraft spray equipment.

**Restrictions:** Applications may not be made within 21 days of harvest. Do not apply more than 3 applications per season. Do not apply more than 12 fl. oz/a per use season.

#### <u>Restricted-entry interval (REI) = 12 hours.</u>

#### SUNFLOWER DISEASE

Rust (Puccinia helianthi)

A to 6 fl. oz. per acre

**Notes:** Apply specific dosage of MONSOON at the earliest sign of infection (rust pustules developing) or when weather conditions are favorable for rust development. Apply higher rate to highly susceptible varieties and/or under severe disease conditions. Application may be repeated at 14 days if necessary to maintain control of the disease. Apply specified dosage in a minimum of 20 gallons of spray solution per acre by ground or a minimum of 5 gallons of spray solution by air. Do not apply more than 16 fl. oz. of MONSOON per acre per season or within 50 days of harvest.

**General Comments:** For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON. Contact your state Extension Service or Loveland Products representative for a list of approved surfactants. MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhibitor (DMI) fungicide (Group 3). **Restricted-entry interval (REI) = 12 hours.** 

TURNIP (Application is limited to East of the Rockies)
DISEASE RATE OF MONSOON
Cercospora leaf spot ( <i>Cercospora brassicicola</i> ) 4 to 7.2 fl. oz. per acre
Notes: Apply the specified dosage in a protective spray schedule to foliage. Repeat applications at 12- to 14-day intervals. MONSOON may
be applied up to 7 days before harvest. Do not apply more than 28.8 fl. oz. of MONSOON per acre per crop season.
General Comments: For optimum disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with MONSOON.
MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically into plant tissue
before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a demethylation inhib-
itor (DMI) fungicide (Group 3).
Restricted-entry interval (REI) = 12 hours.
WHEAT
DISEASE RATE OF MONSOON
Rusts leaf, stem, and stripe ( <i>Puccinia</i> spp.) 4 fl. oz. per acre
Head blight or scab (Fusarium spp.) - Suppression
APPLICATION INSTRUCTIONS: Wheat fields should be observed closely for early disease symptoms, particularly when susceptible vari-
eties are planted and/or under prolonged conditions favorable for disease development. A maximum of 4 fl. oz. of MONSOON may be
applied per acre per crop season. Do not apply within 30 days of harvest. Straw may be fed or used for bedding. Do not allow livestock
to graze or feed green forage to livestock prior to 6 days after treatment with MONSOON. Apply MONSOON in a minimum of 10 gallons
of spray solution per acre by ground, or in a minimum of 5 gallons of spray solution per acre by air.
APPLICATION TIMING DIRECTIONS:
Rusts: Apply MONSOON at the earliest sign of rust pustules on foliage.
Fusarium head blight: Optimal timing of MONSOON for Fusarium head blight suppression is the beginning of flowering on main stem
heads (Feekes 10.51).
General Comments: For optimum disease control, the lowest specified rate of a spray surfactant should be tank-mixed with
MONSOON. MONSOON must have two to four hours of drying time on plant foliage for the active ingredient to move systemically
into plant tissue before rain or irrigation occurs. After this period of time, MONSOON will be resistant to weathering. MONSOON is a
demethylation inhibitor (DMI) fungicide (Group 3).
Restricted-entry interval (REI) = 12 hours.
GRASSES GROWN FOR SEED
DISEASE RATE OF MONSOON
Rusts (Puccinia spp.)     4 to 8 fl oz per acre
Apply the specified rate of MONSOON as soon as weather conditions are favorable for rust development or when first rust pustules are
present. Repeat applications at 14 to 16 day intervals. Under heavy disease pressure use 6 to 8 fl oz/A and shorter spray intervals.
Powdery mildew 4 to 8 fl oz per acre
Apply specified rate of MONSOON when powdery mildew first appears on the leaves. Repeat applications at 14 to 16 day intervals. Under
heavy disease pressure use 6 to 8 fl oz/A and shorter spray intervals.
General Comments: Apply the specified rate in a minimum of 20 gallons of water per acre with ground sprayers or in a minimum of 10
gallons of water per acre with aircraft. Thorough coverage is important for optimum disease control.

For optimum benefit, the lowest recommended rate of a spray surfactant should be tank mixed with MONSOON.

A maximum of 16 fluid ounces (1 pint) may be applied per acre per crop season. MONSOON may be applied up to 4 days before harvest. Chaff, screenings and straw from treated areas may be used for feed purposes; however, do not forage, cut green crop, or use seed for feed purposes. Regrowth may be grazed starting 17 days after last application.

Restricted-entry interval (REI) = 12 hours.

# OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, AND ESTUARIES.

Apply only during alternate years in fields adjacent to aquatic areas listed above.

Do not apply by ground or air within 100 feet of aquatic areas listed above.

Do not cultivate within 10 feet of an aquatic area to allow growth of a vegetative filter strip.

**Spray Drift Management:** For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter. Use the largest droplet size consistent with pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. Apply in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Make aerial and ground applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

#### **ROTATIONAL CROPS**

Treated areas may be replanted with any crop specified on this label as soon as practical after last application. Any crop not specified on this label may be planted into treated areas 120 days after last application.

## **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of the children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking invert to prevent leakage. If the container is leaking or material is spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING: Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

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