Plant protection product, fungicide and insecticide for turf on golf courses, sports and athletic fields

Can help turf tolerate limited water conditions
Helps support healthy turf and a more durable playing surface

ACTIVE INGREDIENT:
Mineral Oil* ..................................................................................................................................................... 88.80%
OTHER INGREDIENTS: ........................................................................................................................................... 11.20%
TOTAL: ............................................................................................................................................................. 100.00%

*Contains petroleum distillates, CAS # 8042-47-5

Patent(s): www.suncor.com/patents

Keep from freezing
KEEP OUT OF REACH OF CHILDREN
CAUTION

See inside booklet for additional Precautionary Statements and Directions for Use
EPA REG. NO. 69526-17
EPA EST. NO. 79693-CAN-001

MADE IN CANADA
(MAY CONTAIN IMPORTED PARTS) FOR:

OMRI LISTED
For Organic Use

strength
TMTrademark of Suncor Energy Inc. Used under license.
- Plant protection product for turf
- Year-Round Applicability subject to label Use Restrictions
- For Use in Both Conventional and Organic Turfgrass Management
- Easier to prepare spray than CIVITAS™ TURF DEFENSE Ready-2-Mix
- Shake well before using

**FIRST AID**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Instructions</th>
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<tbody>
<tr>
<td>If swallowed:</td>
<td>• Immediately call a poison control center or doctor.</td>
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<td></td>
<td>• Do not induce vomiting unless told to by a poison</td>
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<td></td>
<td>control center or doctor.</td>
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<td>• Do not give any liquid to the person.</td>
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<td>• Do not give anything by mouth to an unconscious</td>
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<td></td>
<td>person.</td>
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<td>If on skin or clothing:</td>
<td>• Take off contaminated clothing.</td>
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<td>• Rinse skin immediately with plenty of water for</td>
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<td>15-20 minutes.</td>
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<td></td>
<td>• Call a poison control center or doctor for treatment</td>
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<td>advice.</td>
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</table>

**HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. To reach a U.S. POISON CONTROL CENTER, call 1-800-222-1222. You may also contact INTELLIGRO: 1-844-388-2665, or CANUTEC Canadian Transport Emergency Centre: 613-996-6666.

**NOTE TO PHYSICIAN:** Contains petroleum distillate. Do not induce vomiting since vomiting may induce aspiration pneumonia

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Avoid contact with eyes, skin, or clothing.

**Personal Protective Equipment (PPE)**

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical-resistant gloves made of Barrier Laminate, Nitrile rubber ≥14mils, Neoprene Rubber ≥ 14 mils or Viton ≥ 14 mils
- Shoes plus socks

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

Discard clothing and other absorbent materials that have been drenched or heavily damaged by this product’s concentrate. Do not reuse them.

**User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet;
- Remove clothing and/or PPE immediately if pesticide gets inside and then wash thoroughly and change into clean clothing;
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Apply this product only as specified on the label. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.
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 through any type of irrigation system. 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. Aerial application of this product is prohibited.

This product is registered only for use on turf on golf courses, sports and athletic fields. Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

Keep children and pets out of the treated area until sprays have dried.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:
Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. **Keep from freezing.**

Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Keep containers closed to prevent entry of water.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE DISPOSAL:
Dispose of wastes resulting from use of this product on site or at an approved waste disposal facility.

CONTAINER HANDLING:
Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse (or equivalent) container 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

PRODUCT INFORMATION

CIVITAS TURF DEFENSE Pre-M1xed™ should be applied to non-dormant, healthy turf, preventatively, prior to the onset of disease symptoms. CIVITAS TURF DEFENSE Pre-M1xed works to prevent diseases from taking hold in the first place, and can also provide some treatment benefits. If disease symptoms are present or disease pressure is expected to be high, CIVITAS TURF DEFENSE Pre-M1xed should be used in combination with other fungicides.

CIVITAS TURF DEFENSE Pre-M1xed may be used on cool and warm-season grasses if applied in accordance with the requirements and specifications of this label.
CIVITAS TURF DEFENSE Pre-Mixed works to smother insects and provides a barrier that helps prevent insects and pathogens from accepting or using the host plant. Apply CIVITAS TURF DEFENSE Pre-Mixed prior to insect or disease symptoms, and use it as a component of an integrated pest management (IPM) program.

**USE RESTRICTIONS**

Keep children and pets out of the treated area until sprays have dried.

CIVITAS TURF DEFENSE Pre-Mixed may only be used on turf on golf courses, sports and athletic fields to control the types of insects, and fungi identified in the Application Rate Table in this **DIRECTIONS FOR USE** section.

Do not over-spray or double-spray.

Apply in the morning, before daily high temperatures are reached, use caution when daily high temperatures are expected to be high (above 90°F for cool season grass types) for 2 or more consecutive days. Continually monitor condition of turfgrass and adjust applications based on turf vigor and weather forecasts.

Do not apply when air temperatures at time of application are expected to be near freezing (at or below 40°F). Ensure applications are made to non-dormant, healthy turfgrass. Drying times may be longer at lower temperatures.

Do not apply when rain or other unsuitable weather conditions are predicted.

**USE PRECAUTIONS**

Plants should be sprayed only when they are in vigorous condition and when their moisture condition is suitable. Adjust the use of CIVITAS TURF DEFENSE Pre-Mixed during periods of severe environmental stress: high heat and humidity (including high soil temperatures at the roots) and/or soil moisture at or below permanent wilting point.

Under such conditions, use the product with caution especially on Poa annua and Colonial Bentgrass and consider adjusting the application program by doing one or more of the following:

- Use longer specified application intervals (Refer to Application Rate Tables)
- Lower CIVITAS TURF DEFENSE Pre-Mixed application rates
- Increase total application volume
- Evaluate rates and use of other products in a tank mix, primarily chemicals that may have phytotoxic properties of their own
- Manage cultural practices to reduce stress on turfgrass and apply during cooler periods of the day (morning or evening)
- Pause applications

Once these conditions pass, and turfgrass is actively growing and under reduced environmental stress, resume the normal application program.

Under high disease pressure, use the highest rate and shortest application interval corresponding with the application schedule selected from the tables below and/or combine with another registered fungicide.

This product has not been tested on all species or varieties of turfgrass. Before treating a large area, treat a small area and observe for several days prior to making full scale applications.

Ensure CIVITAS TURF DEFENSE Pre-Mixed is applied prior to line painting on sports and athletic fields. Wait until product has thoroughly dried prior to re-entry to avoid staining.

Drying times may be longer at lower temperatures.
SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application (ground) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed
Do not apply at wind speeds greater than 15 mph at the application site.

Temperature Inversions
If applying at wind speeds less than 3 mph, the applicator must determine if (a) conditions of temperature inversion exist, or (b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Release Height
Apply using a nozzle height of no more than 4 feet above the ground.

Droplet Size
Apply as a medium or coarser spray (ASABE standard 572), and the minimum volume mean diameter (VMD) for spinning atomizer nozzles.

INTEGRATED PEST MANAGEMENT AND RESISTANCE MANAGEMENT

This product can be used in resistance management strategies or in integrated pest management (IPM) programs. CIVITAS TURF DEFENSE Pre-Mixed is effective for use in programs that attempt to minimize disease resistance as there are no known resistance issues with CIVITAS TURF DEFENSE Pre-Mixed.

Consult with your Federal, State or local Cooperative Extension Specialist for guidance on the proper use of CIVITAS TURF DEFENSE Pre-Mixed in programs for resistance management and using it in an IPM program.

MIXING DIRECTIONS

Prior to Mixing
• Use only in equipment with sufficient agitation to keep contents thoroughly mixed. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.
• Be sure tank is clean; make certain that the tank is free of sulfur residues.
• Carefully calculate the quantity of CIVITAS TURF DEFENSE Pre-Mixed needed before mixing. Refer to the Application Rate Tables for controlling specific pests.
• CIVITAS TURF DEFENSE Pre-Mixed MUST BE SHAKED WELL IMMEDIATELY BEFORE USE. Phase separation can occur during storage. Shake firmly for 30 seconds, or until the liquid has a uniform consistency and color.

Mixing Directions
• With agitator running, start filling the tank until it gets about half full. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.
• CIVITAS TURF DEFENSE Pre-Mixed is an emulsified concentrate and should be added after Wettable Soluble Powders, Wettable Powders, Water Dispersible Granulars and Liquid Flowables are added to the tank.
• Add CIVITAS TURF DEFENSE Pre-Mixed to the mixture. An initial green bloom indicates proper emulsification, and can be applied to the turf. Do not use this product if it does not emulsify.
• Add remaining emulsified concentrate and Soluble products (if applicable) and fill the tank completely with water.
• Maintain agitation during mixing and application.
• Prepare only enough spray mix for the current day’s use. Do not store spray mix.
Tank Mixes

Follow all directions, restrictions, precautions, and limitations on labeling of all products used in tank mixes. Observe the most restrictive of the labeling limitations and precautions of all products used in the mixture. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

DO NOT combine CIVITAS TURF DEFENSE Pre-Mixed in the spray tank with pesticides, surfactants, or fertilizers, unless your prior use or “jar compatibility test” has shown the combination to be physically compatible and non-injurious to turf under your conditions. USE WITH CAUTION and test on a small area prior to broad application, especially with the following combinations:

• Combinations with DMI fungicides will increase the possibility of phytotoxicity inherent with DMI chemistries, especially on Poa annua, Colonial Bentgrass and Bermuda grass, under high temperatures and humidity. Increasing total spray volume may help reduce the chance of phytotoxicity.

• Combinations with high rates of certain iron-containing products may cause temporary discoloration.

• Use caution when tank-mixing with high rates of Chlorothalonil, especially under high temperature conditions.

• DO NOT combine CIVITAS TURF DEFENSE Pre-Mixed with Pentachloronitrobenzene (PCNB) as phytotoxicity may result from the combination when applied to turf.

APPLICATION PROCEDURES

• CIVITAS TURF DEFENSE Pre-Mixed may be applied using the types of spray equipment commonly employed for ground applications. Note requirements for SPRAY DRIFT MANAGEMENT.

• Apply at 1-5 gallons of total spray volume per 1000 ft².

• CIVITAS TURF DEFENSE Pre-Mixed should only be applied to non-dormant, healthy turf.

• All applications must be consistent with the requirements and specifications indicated in the DIRECTIONS FOR USE and the rest of this label.

• CIVITAS TURF DEFENSE Pre-Mixed should be applied prior to the onset of disease, turf dormancy, biotic or abiotic stressors.

• On golf course greens, it is recommended to use application rates toward the lower end of the specified range for the pest(s) to be controlled.

• Thorough coverage will provide the best results, use of flat fan or air induction nozzles are suggested.

• Protect porous surfaces and objects from overspray to avoid discoloration. Clean up any spills immediately with warm water and soap to help avoid persistent staining.

• When disease pressure is high, use application rates toward the upper end of the range specified for the pest(s) to be controlled and retreat at intervals toward the shorter end of the range specified, unless product use is not appropriate due to temperature, humidity, and/or turf health.

APPLICATION RATE TABLES

Turf Disease Control (listed in alphabetical order)

<table>
<thead>
<tr>
<th>Target Disease</th>
<th>Application Interval (Days)</th>
<th>Total Application Volume with water (gal per 1,000 sq. ft.)</th>
<th>Application Rates (Fluid Ounces CIVITAS TURF DEFENSE Pre-Mixed per 1,000 sq. ft.)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose (<em>Colletotrichum cereale</em>)</td>
<td>7-14 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td></td>
</tr>
<tr>
<td>Target Disease</td>
<td>Application Interval (Days)</td>
<td>Total Application Volume with water (gal per 1,000 sq. ft.)</td>
<td>Application Rates (Fluid Ounces)</td>
<td>Comments</td>
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<tr>
<td>Brown Patch (Rhizoctonia solani)</td>
<td>14-21 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td>When disease pressure is high, CIVITAS TURF DEFENSE Pre-M1xed should be used in combination with an appropriate, registered fungicide.</td>
</tr>
<tr>
<td>Crown Rust (Puccinia coronata)</td>
<td>14-21 days</td>
<td>1-5 gal.</td>
<td>17 fl. oz.</td>
<td>When disease pressure is high, CIVITAS TURF DEFENSE Pre-M1xed should be used in combination with an appropriate, registered fungicide.</td>
</tr>
<tr>
<td>Dollar Spot (Sclerotinia homoeocarpa)</td>
<td>7-21 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td>When disease pressure is high, CIVITAS TURF DEFENSE Pre-M1xed should be used in combination with an appropriate, registered fungicide.</td>
</tr>
<tr>
<td>Fusarium Patch (Microdochium nivale)</td>
<td>7-21 days</td>
<td>1-5 gal.</td>
<td>8.5 fl. oz.</td>
<td>When disease pressure is high, CIVITAS TURF DEFENSE Pre-M1xed should be used in combination with an appropriate, registered fungicide.</td>
</tr>
<tr>
<td>Gray Leaf Spot (Pyricularia grisea)</td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td>CIVITAS TURF DEFENSE Pre-M1xed should be used in combination with an appropriate, registered fungicide.</td>
</tr>
<tr>
<td>Target Disease</td>
<td>Application Interval (Days)</td>
<td>Total Application Volume with water (gal per 1,000 sq. ft.)</td>
<td>Application Rates (Fluid Ounces CIVITAS TURF DEFENSE™ Pre-Mixed per 1,000 sq. ft.)</td>
<td>Comments</td>
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<tr>
<td>Large Patch of Zoysia (Rhizoctonia solani)</td>
<td>2 applications in the early Fall, before turf has become dormant</td>
<td>1-5 gal.</td>
<td>17 fl. oz.</td>
<td>CIVITAS TURF DEFENSE Pre-Mixed should be used in combination with an appropriate, registered fungicide. Follow-up application in early Spring may be necessary where disease pressure is high.</td>
</tr>
<tr>
<td>Leaf Spot / Melting-out (Drechslera spp. and/or Biopolaris spp)</td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
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<tr>
<td>Necrotic Ring (Leptosphaeria korrae)</td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>17 fl. oz.</td>
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<tr>
<td>Powdery Mildew (Erysiphe graminis)</td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>17 fl. oz.</td>
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<tr>
<td>Pythium Blight (Pythium aphanidermatum)</td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td><strong>CIVITAS TURF DEFENSE Pre-Mixed should be used in combination with an appropriate registered fungicide based on pyraclostrobin (FRAC code 11) and/or mefenoxam (FRAC code 4) chemistries. CIVITAS TURF DEFENSE Pre-Mixed enhances performance of tank mix partners.</strong></td>
</tr>
<tr>
<td>Red Thread (Laetisaria fuciformis)</td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>17 fl. oz.</td>
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<tr>
<td>Target Disease</td>
<td>Application Interval (Days)</td>
<td>Total Application Volume with water (gal per 1,000 sq. ft.)</td>
<td>Application Rates (Fluid Ounces CIVITAS TURF DEFENSE Pre-Mixed per 1,000 sq. ft.)</td>
<td>Comments</td>
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<tr>
<td>Rhizoctonia Leaf Spot/Mini-Ring <em>(Rhizoctonia zeae)</em></td>
<td>14-21 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td>CIVITAS TURF DEFENSE Pre-Mixed should be used in combination with an appropriate registered fungicide based on Azoxystrobin.</td>
</tr>
<tr>
<td>Snow Mold, Gray <em>(Typhula ishikariensis, Typhula incarnata)</em> Pink <em>(Microdochium nive</em>)</td>
<td>Apply clean-up spray 14-21 days before final spray, and before turf has become dormant.</td>
<td>1-5 gal.</td>
<td>17 to 34 fl. oz.</td>
<td>CIVITAS TURF DEFENSE Pre-Mixed should be used in combination with an appropriate, registered fungicide. Must apply final spray before the plant has become dormant.</td>
</tr>
<tr>
<td>Southern Blight <em>(Sclerotium rolfsii)</em></td>
<td>14 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
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<tr>
<td>Spring Dead Spot <em>(Ophiophaerella korrae)</em></td>
<td>2 applications in the early Fall before turf has become dormant.</td>
<td>1-5 gal.</td>
<td>17 fl. oz.</td>
<td>CIVITAS TURF DEFENSE Pre-Mixed should be used in combination with an appropriate, registered fungicide. When CIVITAS TURF DEFENSE Pre-Mixed is used in a tank mix with fenarimol the turfgrass should be irrigated with 0.5 inches of water following application.</td>
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<tr>
<td>Summer Patch <em>(Magnaporthe poae)</em></td>
<td>7 days</td>
<td>1-5 gal.</td>
<td>8.5 fl. oz.</td>
<td>CIVITAS TURF DEFENSE Pre-Mixed should be used in combination with an appropriate, registered fungicide.</td>
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</table>
### Turf Insect Suppression

<table>
<thead>
<tr>
<th>Target Pest</th>
<th>Application Interval (Days)</th>
<th>Total Application Volume with water (gal per 1,000 sq. ft.)</th>
<th>Application Rates (Fluid Ounces CIVITAS TURF DEFENSE Pre-Mixed per 1,000 sq. ft.)</th>
<th>Comments</th>
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<tbody>
<tr>
<td>• Annual Blue Grass Weevils</td>
<td>7-21 days</td>
<td>1-5 gal.</td>
<td>8.5 to 17 fl. oz.</td>
<td>Do not make spot applications. Treat the entire area where exposure (or infestation) occurs. Insecticidal effect of CIVITAS TURF DEFENSE Pre-Mixed can also be achieved when CIVITAS TURF DEFENSE Pre-Mixed is combined with other compatible control methods as part of an integrated pest management (IPM) program.</td>
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<td>• Banks Grass Mites</td>
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<td>• Cutworm</td>
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<tr>
<td>• Fall Armyworm</td>
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<td>• Mealybugs</td>
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<tr>
<td>• Mites</td>
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<td>• Sod Webworm</td>
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### CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Intelligro, the manufacturer or seller. To the extent consistent with applicable law neither Intelligro, the manufacturer or seller shall be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. Except as warranted by this label, Intelligro, the manufacturer or seller makes no warranties, guarantees, or representations of any kind, either express or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to, merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage. To the extent consistent with applicable law, buyer's or user's exclusive remedy, and Intelligro, the manufacturer's or seller's total liability, shall be for damages not exceeding the cost of the product.