

# MSM Turf

**ACTIVE INGREDIENT:**

Metsulfuron Methyl  
Methyl 2-[[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)-amino]carbonyl]amino]sulfonyl]benzoate . . . 60.0%

**INERT INGREDIENTS:** . . . . . 40.0%

**TOTAL:** . . . . . 100.0%

EPA Reg. No. 66222-146-73220

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See inside booklet for complete First Aid, Precautionary Statements, Directions for Use, and Conditions of Sale and Warranty.

**Manufactured for FarmSaver.com, LLC • 4515 Falls of Neuse Road, Suite 300 • Raleigh, NC 27609**

**FIRST AID**

<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact ProSAR at 1-800-308-5391 for emergency medical treatment information.

13391

EPA 012606/Notif 040309/Rev A

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

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

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves category A such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber

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

**ENGINEERING CONTROL 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.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

**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**

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 apply where runoff water may flow during periods of intense rainfall or to water-saturated soils, as off-target movement and injury may occur. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply this product through any type of irrigation system.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.**

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) of 4 hours.

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, shoes, socks and chemical-resistant gloves category A such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber.

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter treated areas without protective clothing until sprays have dried.

Quali-Pro MSM Turf Herbicide is for use on Ornamental Turf, such as Lawns, Parks, Cemeteries, and Golf Courses (Fairways, Aprons, Tees and Roughs). This product may also be used on Sod Farms.

**State Specific Restrictions:**

- The state of Arizona has not approved this product for use on agricultural sites. Do not use this product on uses considered by the Arizona statutes to be agricultural uses.

**Controls the following perennial and annual weedy grasses:**

- |            |          |
|------------|----------|
| Bahiagrass | Ryegrass |
| Foxtail    |          |

**Controls the following broadleaf (dicot) weeds:**

- |                    |                        |
|--------------------|------------------------|
| Annual sowthistle  | Henbit                 |
| Aster              | Hoary cross (whitetop) |
| Bittercress        | Kochia                 |
| Blue mustard       | Lambsquarters          |
| Buckhorn           | Miners lettuce         |
| Bur buttercup      | Pennsylvania smartweed |
| Canada thistle     | Plantain               |
| Chicory            | Prickly lettuce        |
| Clover (white)     | Prostrate knotweed     |
| Common chickweed   | Redroot pigweed        |
| Common groundsel   | Redstem filaree        |
| Common mullein     | Shepherdspurse         |
| Common purslane    | Smallseed flaxweed     |
| Common sunflower   | Smooth pigweed         |
| Common yarrow      | Spurge (prostrate)     |
| Conical catchfly   | Sweet clover           |
| Cow cockle         | Tansy mustard          |
| Crown vetch        | Treacle mustard        |
| Curly dock         | Tumble mustard         |
| Dandelion          | Virginia buttonweed    |
| Dogfennel          | Wild carrot            |
| Fiddle chamomile   | Wild celery            |
| Fiddleneck tarweed | Wild lettuce           |
| Field pennycress   | Wild mustard           |
| Flixweed           | Wild onion             |
| Goldenrod          | Woodsorrel (oxalis)    |

For use only on Kentucky Bluegrass, Fine Fescue, Bermudagrass and St. Augustine-grass turf areas.

**USE PRECAUTIONS**

Use lowest rates for minimum chlorosis of the turf.

Do not apply Quali-Pro MSM Turf Herbicide to turf under stress from drought, insects, disease, cold temperatures, high temperatures of above 85°F on cool season grasses, or poor fertility as injury may result.

Do not apply to turf less than 1 year old.

Do not use on Bahiagrass where it is the desired turf, as severe injury may result.

Do not plant ornamentals such as shrubs and trees in treated areas for at least 1 year after the last application, or bedding plants for at least 2 years.

**The state of Arizona has not approved this product for use on sod farms (an agricultural use). This product may not be used in Arizona for any other uses considered by the Arizona statutes to be agricultural uses.**

**IMPORTANT**

Addition of a nonionic surfactant of at least 80% active ingredient at 0.25 percent by volume (1 qt./100 gal.) provides maximum performance, but may temporarily increase chlorosis of the turf.

Allow one week between the application of Quali-Pro MSM Turf Herbicide and other pesticide products. (This guideline can be relaxed where severe insect or disease attack requires immediate treatment).

**DO NOT USE ON FOOD OR FEED CROPS.** Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply Quali-Pro MSM Turf Herbicide (except as recommended) or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

When overseeding, wait 2 months (8 weeks) after application. Do not apply to any body of water, including streams, irrigation water or wells. Do not apply where runoff water may flow onto agricultural land, as injury to crops may result.

Do not allow spray drift onto adjacent crops or other desirable plants or trees as injury may occur.

Follow these practices to minimize drift:

- Stop spraying if wind speed becomes excessive. Spray drift can occur at wind speeds less than 10 MPH. If sensitive plants are downwind, extreme caution must be used. Do not spray if winds are gusty.
- High temperatures, drought and low relative humidity increase the possibility of harmful spray drift. Caution must be used when these conditions are present and sensitive plants are nearby.
- Use large droplet size sprays to minimize drift.
- Use spray pressures of 35 psi or less when applying this product.

## HOW TO USE

Use spray volumes of 20 to 80 gal./acre and pressures of 25 to 35 psi at the following rates of Quali-Pro MSM Turf Herbicide from the weeds listed below:

### 0.125 TO 0.25 OZ. PRODUCT/ACRE

Ryegrass (greens)

### 0.25 TO 0.33 OZ. PRODUCT/ACRE

Bittercress	Field pennycress
Blue mustard	Ground ivy (Fall)
Bur buttercup	Parsley-piert
Chickweed	Prostrate spurge
Chicory	Redstem filaree
Clover (white)	Spurweed
Creeping beggarweed	Wild carrot
Dandelion	

### 0.33 TO 0.5 OZ. PRODUCT/ACRE

Annual sowthistle	Ryegrass (fairways)
Aster	Seedling dogfennel
Carolina geranium	Shepherdspurse
Common yarrow	Smooth pigweed
Crown vetch	Smallseed falseflax
Florida betony	Sweet clover
Ground ivy (Spring*)	Tansy mustard
Henbit	Treacle mustard
Lambsquarters	Tumble mustard
Lespedeza	Wild celery
Miners lettuce	Wild garlic
Plantain	Wild lettuce
Prickly lettuce	Wild onion
Ragweed	Woodsorrel (oxalis)
Redroot pigweed	

### 0.25 TO 0.75 OZ. PRODUCT/ACRE

Bahiagrass\*

### 0.5 TO 1 OZ. PRODUCT/ACRE

Brazil pusley	Florida pusley
Buckhorn plantain	Foxtail
Canada thistle**	Hoary cress (whitetop)
Curly dock	Kochia
Common groundsel	Pennsylvania smartweed
Common purslane	Plantain
Common sunflower	Prostrate knotweed
Crabgrass	Sida (southern)
Dogfennel	Virginia buttonweed***
Dollarweed*	Wild mustard

\* A repeat application may be required in 4 to 6 weeks.

\*\* Suppression only involving a visual reduction in competition compared to an untreated area.

\*\*\* Controls seedling Virginia buttonweed. Suppression only of more mature plants. Repeat application may be required in 4 to 6 weeks.

The required amount of Quali-Pro MSM Turf Herbicide should be added when the spray tank is half full of water and, with agitator running, add the proper amount of product. Finish adding the required amount of water. Continuous agitation is required to keep the product in suspension.

Spray preparations of this product may degrade in acid solutions if not used in 24 hours; it is stable in alkaline solutions. Thoroughly re-agitate before using.

Tank mixes with other registered herbicides should be tested for compatibility before full scale mixing. Use mechanical or bypass agitation to thoroughly mix the spray suspension. It is not necessary to premix this product with water in a separate container prior to adding it to the spray tank. This product should always be added to the tank first, before any other herbicides or adjuvants.

**Kentucky Bluegrass and Fine Fescue:** Apply 0.25 to 0.5 oz. of Quali-Pro MSM Turf Herbicide per acre for control of the listed weeds. Do not exceed a total of 0.5 oz. per acre within a 9-month period.

**St. Augustinegrass, Bermudagrass and Zoysiagrass (Meyers and Emerald):** Apply 0.25 to 1.0 oz. of Quali-Pro MSM Turf Herbicide per acre for weed control. Some chlorosis or stunting of the turfgrass may occur following application.

**Bahiagrass Control:** For the selective control of Bahiagrass in Bermudagrass turf, use 0.25 to 0.75 oz. of Quali-Pro MSM Turf Herbicide per acre. Use the higher rates of the range on Argentine, Common and Paraguayan Bahiagrass. Apply a repeat treatment in 4 to 6 weeks if necessary. Some chlorosis or stunting of the Bermudagrass may occur following the application.

**Centipedegrass:** Apply 0.25 to 0.5 oz. of this product per acre for weed control. Some chlorosis or stunting of the turfgrass may occur following the application.

**IMPORTANT:** Addition of a nonionic surfactant of at least 80% active ingredient at 0.25 percent by volume (1 qt./100 gal.) provides maximum performance, but may temporarily increase chlorosis of the turf.

Allow one week between the application of Quali-Pro MSM Turf Herbicide and other pesticide products. (This guideline can be relaxed where a severe insect or disease attack requires immediate treatment.)

#### RECOMMENDED SPRAYER CLEANUP

Immediately after spraying, thoroughly remove all traces of Quali-Pro MSM Turf Herbicide from mixing and spray equipment as follows:

- 1) Drain tank, rinse interior surface of tank, then flush tank, boom and hoses with clean water for a minimum of 5 minutes.
- 2) Fill the tank with clean water, then add an ammonia cleaning solution. Use one gallon ammonia (containing 3% active) per 100 gallons of water. Turn on sprayer long enough to flush through boom, hoses and nozzles. Stop spraying, but keep agitator working in the tank for 15 minutes, then drain.
- 3) Repeat Step 2.
- 4) Repeat Step 1.
- 5) Nozzles and screens should then be removed and cleaned separately. To remove traces of cleaning solution, rinse the tank thoroughly with clean water and flush through hoses and boom.
- 6) Flush boom and hoses with clean water for 5 minutes just prior to using the sprayer for the first time after the Quali-Pro MSM Turf Herbicide application.

#### STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Always use original container to store pesticides in a secured warehouse or storage building. Do not store near open containers of fertilizers, seeds, or other pesticides. Do not contaminate water, food or feed by storage or disposal.

**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 (flexible-bag-all weights):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available or reconditioning; or puncture and dispose of in a sanitary landfill, by incineration, or by burning, if allowed by State and local authorities. If burned, stay out of smoke.

**Nonrefillable Container (rigid-fifty lbs. or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or by burning, if allowed by State and local authorities. If burned, stay out of smoke.

**Nonrefillable Container (rigid-greater than fifty lbs.):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or by burning, if allowed by State and local authorities. If burned, stay out of smoke.

**Refillable Container:** Refillable container. Refill this container with metsulfuron-methyl only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks 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 FarmSaver.com, LLC. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, FarmSaver.com, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of FarmSaver.com, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, FarmSaver.com, LLC disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at FarmSaver.com, LLC's election, the replacement of product.

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