OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

May 14, 2025

SENT BY EMAIL

Michele Lussos
michele@ag-chem.com
SHARDA USA LLC

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - Add ABN Topper
Product Name: SMASH III
Admin Number: 83529-385
EPA Receipt Date: 04/30/2025
Action Case Number: 00654647

Dear Michele Lussos:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA 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 labeling submitted with this application has been stamped "Notification" and will be placed in our records.

The alternate brand name: Topper has been added to the registration. Our records have been updated accordingly.

Should you wish to add/retain a reference to your 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 EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Hester Dingle via email at dingle.hester@epa.gov.

Sincerely,

Heather McFarley, PM 24
FHB, RD
Office of Pesticide Programs

Topramezone	Group	27	Herbicide

SMASH III

Herbicide

[ABN: TOPPER]

For postemergence control of broadleaf and grass weeds in select turfgrass species on golf courses, sod farms, and residential turfgrass

ACTIVE INGREDIENT:	**(% by weight)**
topramezone: [3-(4,5-dihydro-isoxazolyl)-2-methyl-4-(methylsulfonyl) phenyl](5-hydroxy-1-methyl-1*H*-pyrazol-4-yl)methanone	29.7%
OTHER INGREDIENTS**	70.3%
TOTAL	100.0%

1 gallon contains 2.8 pounds of topramezone free acid

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you DO NOT understand the label, find someone to explain it to you in detail.)

[See] [inside] [label] [booklet] [for] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including] [Storage and Disposal] [instructions][.]

EPA Reg. No. 83539-
EPA Est. No.:
Net Weight:

Manufactured [for][by]
SHARDA USA LLC
P.O BOX 640
Hockessin, DE 19707

NOTIFICATION
83529-385
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:
05/14/2025

FIRST AID	
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have a 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.
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 center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information contact the	

National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8AM to 12PM PST, or at http://npic.orst.edu.

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
CAUTION/PRECAUCION

CAUTION. Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Wear protective eyewear.

Personal Protective Equipment (PPE)
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks
- Goggles, face shield, or safety glasses

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS
Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothes.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Controls Statement
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.

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 washwater or rinsate. **DO NOT** apply this product through any type of irrigation system.

This product is toxic to aquatic and terrestrial plants. Minimize exposure to nontarget plants. **DO NOT** apply when weather conditions favor drift from target areas.

Product must be used in a manner that will prevent back-siphoning in wells, spills or improper disposal of excess pesticide, spray mixture or rinsate.

NON-TARGET ORGANISM ADVISORY: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Groundwater Advisory
This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory
This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as a high potential for reaching both surface water and aquatic sediment via runoff for several months or more after application. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

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.

Observe all precautions, restrictions, and limitations in this label and the labels of products used in combination with **SMASH III herbicide**. The use of **SMASH III** not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautions, and **Conditions of Sale and Warranty** are to be followed.

MANDATORY SPRAY DRIFT MANAGEMENT

Ground Broom Application:

- User must only apply with the release height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that deliver medium or coarser droplets in accordance with the American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom
•Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
•Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
•Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT - Ground Boom
For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS
Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY
When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS
Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground sow-ce or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. A void applications during temperature inversions.

WIND
Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

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 **12 hours.**

PPE required for early entry to treated areas that is per-mitted 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, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils,

neoprene rubber ≥ 14 mils, natural rubber (includes natural rubber blends and laminates) ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
• Shoes plus socks

NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) 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 or allow people or pets to enter the treat-ed area until sprays have dried.

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.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

Pesticide Storage

Store product in original container only. Store product in a cool, dry place. **DO NOT** store this product under wet conditions. If this product has been stored where freezing temperatures have occurred, agitate or mix contents of container well before use. Avoid cross-contamination with other pesticides.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling:

Nonrefillable Plastic Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 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.

Triple rinse containers too large to shake (capacity > 5 gallons) 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.

Pressure rinse as follows: Empty the remaining con-tents into application equipment or 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 sec-onds. Drain for 10 seconds after the flow begins

to drip.

Spills

In case of large-scale spill of this product, call:

- **CHEMTREC 1-800-424-9300**

In case of medical emergency regarding this product, call:

- **Your local doctor for immediate treatment**
- **Your local poison control center (hospital)**
- **Sharda USA representive**

Steps to take if material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing, and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

Product Information

SMASH III herbicide may be applied as a postemergence broadcast or spot spray to residential and nonresidential turfgrass including:

• Airports
• Athletic fields
• Cemeteries
• Golf courses
• Grounds or lawns around residential and commercial establishments
• Houses of worship
• Military and other institutions
• Single/Multifamily dwellings
• Parks
• Picnic grounds
• Roadsides
• Schools
• Sod farms

SMASH III is a broad-spectrum systemic postemergence herbicide for control or suppression of broadleaf and grass weeds in select turfgrass species:

• Bentgrass, creeping*
• Bermudagrass**
• Bluegrass, Kentucky
• Centipedegrass
• Fescue, fine
• Fescue, tall
• † Paspalum, seashore**
• Ryegrass, perennial

* Creeping bentgrass is marginally tolerant to **SMASH III** at a rate of 0.25 fl oz/A. Test on a small area before large-scale use.

** Bermudagrass and seashore paspalum are marginally tolerant and some turf injury can be expected. See Special Weed Control section.

† Not registered for use in California

When applied as directed, **SMASH III** will control or suppress the broadleaf and grass weeds listed in **Table 2.** Applications of **SMASH III** must include spray additives for acceptable weed control. See **Spray Mix Additives** for details.

Mode of Action

SMASH III is absorbed by leaves, roots, and shoots and is translocated to the growing points of susceptible weeds. **SMASH III** controls weeds by inhibiting carotenoid biosynthesis [HPPD inhibitor (**Group 27**)]. Soon after application, treat-ed weeds turn white because of chlorophyll loss and growth stops. Affected weeds then become necrotic and are controlled.

Resistance Management

For resistance management, SMASH III is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to SMASH III and other Group 27 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of SMASH III or other Group 27 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

Use Information

Apply **SMASH III** to actively growing weeds as a post-emergence broadcast or spot spray in labeled turfgrass species at the specified rate and growth stage in **Table 1** and **Table 2. DO NOT** exceed the labeled application rate or fail to comply with use specifications in **Restrictions and Limitations.**

For best results, weeds should be actively growing and not under stress from lack of water, excessive water,

low fertility, mowing shock, excessive hot or cold temperatures, or injury from other herbicide applications.

To achieve consistent weed control, a crop oil concentrate (COC) or methylated seed oil (MSO) adjuvant is required. See **Table 1** and **Table 2** for rates.

Turfgrass Tolerance

Apply **SMASH III** during favorable growing conditions for optimum turfgrass tolerance and weed control. Turfgrass under environmental stress is more likely to show injury, such as transient bleaching, from herbicide applications. These symptoms are temporary, and turfgrass vigor is not affected.

Creeping Bentgrass. Creeping bentgrass is marginally tolerant to **SMASH III** at a rate of 0.25 fl oz/A. Test on a small area before large-scale use. Environmental and growing conditions may affect bentgrass tolerance. Weed control will be reduced as a result of a lower use rate for labeled weeds.

Spot Applications

Postemergence spot applications of **SMASH III herbicide** may be made to susceptible weeds in tolerant turfgrass species. Apply 0.023 to 0.034 fl oz (0.7 to 1.0 mL) of **SMASH III** per 1000 square feet of treated area. Spray coverage should be uniform and complete. See Table 1 for spot spray mix amounts.

Mowing Information

To maximize weed control and minimize potential turfgrass injury, **DO NOT** mow 2 days before through 2 days after applying **SMASH III**.

Irrigation and Rainfall

If soil moisture is not sufficient before **SMASH III** application, irrigation may improve weed control. For best results, **DO NOT** water or irrigate for 24 hours after application.

Extended Residual Grass Control

To extend residual control of annual grass weeds, **SMASH III** may be tank mixed with herbicides including **Pendulum® 3.3 EC herbicide (a.i. pendimethalin and EPA Reg #241-341), Pendulum® AquaCap™ herbicide (a.i. pendimethalin and EPA Reg# 241-416), or Tower® herbicide (a.i. dimethenamid-P, EPA Reg # 7969-239)**. Consult the respective tank mix labels for additional weeds controlled and follow the information in the **Mixing Order** section of this label.

Seeding/Overseeding/New Seeding/Renovation/Sodding/Sprigging

SMASH III can be used for weed control during the establishment of tolerant turfgrass species; see **Product Information** section. Creeping bentgrass may show bleaching symptoms and growth suppression with higher **SMASH III** application rates.

SMASH III Use During Tolerant Turfgrass Establishment. When establishing new turfgrass from seed, **SMASH III** can be applied anytime before or after seeding with the exception of a 28-day period after seeding. **DO NOT** apply **SMASH III** for a period of 28 days after seeding tolerant turfgrass.

Spray Mix Additives

Crop oil concentrate or methylated seed oil are the preferred adjuvants for postemergence applications. See **Table 1** and **Table 2** for adjuvant rates. **SMASH III** use with nonionic surfactants (NIS) or blends is not recommended because it may not provide satisfactory weed control.

Crop oil concentrate or methylated seed oil used as an adjuvant with **SMASH III** must meet all the following criteria:

• Nonphytotoxic

• Provide good mixing quality in the jar test
• Successful in local experience

The exact composition of suitable products will vary; however, any COC or MSO used should contain emulsifiers to provide good mixing quality.

When an adjuvant (or a specific adjuvant product, such as a drift control agent) is to be used with this product, the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant is recommended. Consult your local SHARDA representative or distributor for instructions for your area.

Tank Mixing Information

Read and follow the applicable restrictions and limitations and directions for use on all products involved in tank mixing. Always follow the most restrictive label use directions.

Physical incompatibility, reduced weed control, or turfgrass injury may result from mixing **SMASH III** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Before tank mixing, a jar test is required to ensure compatibility of herbicides or other pesticides and/or additives. Refer to manufacturer's labels for specific use directions, precautions, restrictions, and limitations before tank mixing with **SMASH III**. Follow those that are most restrictive.

Compatibility Test for Mix Components

Add components in the following sequence using 2 tea-spoons for each pound or 1 teaspoon for each pint of labeled rate per acre.

1. **Water -** For 20 gallons per acre spray volume, use 3.3 cups (800 mL) of water. For other spray volumes, adjust rates accordingly. Use only water from the intend-ed source at the source temperature.
2. **Products in PVA bags -** Cut an opening in the water- soluble PVA bag just large enough to use a teaspoon for measuring purposes. Use the opened water-soluble PVA bag first when preparing spray solution. Boron-containing fertilizers may be incompatible with PVA material. Include PVA material if a boron fertilizer is intended to be used. Cap the jar and invert 10 cycles.
3. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates including SMASH III, or suspo-emulsions) - Cap the jar and invert 10 cycles.
4. **Water-soluble products** - Cap the jar and invert 10 cycles.
5. **Emulsifiable concentrates** (including COC or MSO) - Cap the jar and invert 10 cycles.
6. **Water-soluble additives** - Cap the jar and invert 10 cycles.

Let the solution stand for 15 minutes and evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface or thick (clabbered) texture. For water-dispersible granule (WG) or wettable powder (WP) products, a fine precipitate that is easily resuspended is normal; large, nondispersible particles (> 300 microns) that precipitate on standing are a sign of tank mix incompatibility. **DO NOT** use any spray solution that could clog spray nozzles.

Mixing Order

Thoroughly mix **SMASH III herbicide** before dispensing from container. For containers 5 gallons or less, shake well before use. For containers greater than 5 gallons, recirculate before use.

Maintain constant agitation throughout mixing and application.

1. **Water -** Begin by agitating a thoroughly clean sprayer tank 3/4 full of clean water.
2. **Inductor -** If an inductor is used, rinse it thoroughly after each component has been added.
3. **Products in PVA bags** - Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.

4. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates including **SMASH III**, or suspo-emulsions)
5. **Water-soluble products**
6. **Emulsifiable concentrates** (including COC or MSO)
7. **Water-soluble additives** (including chelated iron or soluble nitrogen fertilizer when applicable; not all chelated iron or sprayable nitrogen fertilizers are compatible with **SMASH III**) - Always perform a compatibility test to ensure proper mixing. See **Compatibility Test for Mix Components** section of label for directions.
8. **Remaining quantity of water**

Maintain constant agitation during application.

Cleaning Spray Equipment

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

Application Instructions

Broadcast Spray

Apply 1.0 to 1.5 fl ozs/A with properly calibrated ground equipment in sufficient water per acre to provide uniform spray distribution (at least 30 gallons of water per acre or at least 0.75 gallon per 1000 sq ft). Use low-pressure sprayers delivering between 20 and 40 PSI. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Nozzle screens must be no finer than 50 mesh (100 mesh is finer than 50 mesh).

Check sprayer routinely to determine proper calibration. Flat fan, flood, or cone nozzles may be used. Arrange nozzles for uniform coverage of turfgrass and weeds. Adjust boom height, nozzle selection, and pressure to pro-vide uniform coverage and minimize spray drift. Prevent overlaps that will increase rates above those labeled for use. Avoid application when winds may cause drift.

Spot Spray

Apply 0.023 to 0.034 fl oz (0.7 to 1.0 mL) **SMASH III**/1000 sq ft of treated area as follows in **Table 1** for spot spray mixture amounts.

Table 1. Spot Spraying with SMASH III at 1 gallon/1000 sq ft Spray Volume

Spray Mix Volume	SMASH III in Mix				COC or MSO in Mix	Area Covered
	0.023 fl oz per 1000 sq ft[1]	0.030 fl oz per 1000 sq ft[2]	0.034 fl oz per 1000 sq ft[3]	0.046 fl oz per 1000 sq ft[4]		
(gallons)	(mL)	(mL)	(mL)	(mL)	(mL)	(sq ft)
1	0.7	0.9	1.0	1.4	30 (2 Tbls*)	1000
2	1.4	1.8	2.0	2.8	60 (4 Tbls*)	2000
3	2.1	2.7	3.0	4.2	90 (6 Tbls*)	3000
4	2.8	3.6	4.0	5.6	120 (8 Tbls*)	4000

[1] Equivalent to 1.0 fl oz of product per acre
[2] Equivalent to 1.33 fl ozs of product per acre
[3] Equivalent to 1.5 fl ozs of product per acre
[4] Equivalent to 2.0 fl ozs of product per acre; for use in Kentucky bluegrass only * Tbls = Tablespoons

Mixing Instructions for Backpack and Pump-up Type Sprayers. Begin with a clean spray tank. Fill the spray tank 1/2 full with clean water. Add the required amount of **SMASH III herbicide**. Because a small amount of **SMASH III** is required for spot applications, use the following directions to ensure proper mixing.

Measure **SMASH III** required for specific spray volume according to **Table 1. DO NOT** add directly to the spray tank. Pre-mix in a small, sealable container (e.g. 8 to 16 fl ozs) filled 1/2 to 3/4 with water. Add contents to the spray tank. Cap sprayer and agitate to ensure mixing. Uncap sprayer and add appropriate amount of COC or MSO. Cap sprayer and agitate again. Uncap sprayer and finish filling tank to desired level. During application, periodically agitate the mixture to ensure mixing. If the mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed.

Apply spray mixture directly on sporadically occurring susceptible turfgrass weeds (see **Table 2**). For best results, apply on a spray-to-wet basis. Follow-up applications may be made if necessary (see **Table 2**). Use a spray colorant or indicator in the spray tank for more efficient spot applications.

Spray Drift Management

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

Use only medium or coarser spray nozzles according to ASAE (S572) definition of standard nozzles.

For ground-boom applications, **DO NOT** apply with a nozzle height greater than 2 feet above the target site.

DO NOT apply at wind speeds greater than 15 mph.

When applying at wind speeds less than 3 mph, the applicator must determine if conditions of temperature inversion exist or stable atmospheric conditions exist at or below nozzle height. **DO NOT** make applications into areas of temperature inversion or stable atmospheric conditions.

Turfgrass Tank Mixes

Read and follow the applicable restrictions and limitations and directions for use on all products involved in tank mixing. Always follow the most restrictive label use directions. To control additional broadleaf weed species, a tank mix with 2,4-D; triclopyr; or other broadleaf herbicide may be used. To increase control of grass weeds, a tank mix with **Drive® XLR8 herbicide (a.i. quinclorac and EPA reg # 7969-272)** may be used. For extended residual control, apply **SMASH III** with **Pendulum® 3.3 EC herbicide (a.i. pendimethalin and EPA Reg #241-341),, Pendulum® AquaCap™ herbicide(a.i. pendimethalin and EPA Reg# 241-416), or Tower® herbicide (a.i. dimethenamid-P, EPA Reg # 7969-239)**.

The transitory whitening (bleaching) intensity of susceptible weed species from **SMASH III** can be reduced with tank mix mixtures of **Drive XLR8** or triclopyr. Consult labels for turf-grass tolerance when tank mixing.

Physical incompatibility, reduced weed control, or turfgrass injury may result from mixing **SMASH III** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Before tank mixing, a jar test is required to ensure compatibility of herbicides or other pesticides and/or additives. Refer to manufacturer's labels for specific use directions, precautions, restrictions, and limitations before tank mixing with **SMASH III**. Follow those that are most restrictive.

Restrictions and Limitations

- **Spot treatment:**
  - **DO NOT** apply more than 0.046 fl oz per 1,000 sq ft (0.001lb ai) per application
  - **DO NOT** apply more than 0.092 fl oz per 1000 sq ft (0.002 lb ai) per year.
- **DO NOT** apply more than 2.0 fl ozs of SMASH III (0.0438 lb ai) per application.
- **DO NOT** apply more than 4.0 fl ozs SMASH III (0.0875 lb ai) per acre per year.
- **DO NOT** apply more than three times per year.

- **DO NOT** apply to golf course collars or greens.
- Minimum retreatment interval is 30 days.
- Maintain a 5-ft buffer between treated areas and bent-grass greens.
- **DO NOT** make applications of **SMASH III** to drought-stressed turfgrass and/or drought-stressed weeds.
- Except for control or suppression of the following, **DO NOT** apply to Bahiagrass, buffalograss, carpetgrass, St. Augustinegrass, zoysiagrass, dichondra, or desirable clover.
- **DO NOT** apply more than 0.25 fl oz/A per application to creeping bentgrass. Sequential applications may be required to achieve desired level of weed control.
- Direct spray, drift, or runoff will injure nontolerant turfgrass and ornamentals.
- **DO NOT** apply during conditions favoring drift from the target area.
- **DO NOT** apply within ornamental beds or to areas where runoff into those areas is likely to occur.
- **DO NOT** apply to exposed feeder roots of trees or ornamentals or within the dripline of trees and other ornamental species.
- **DO NOT** use clippings as mulch around flowers, ornamentals, trees, or in vegetable gardens.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** use to formulate or reformulate any other pesticide product that is not registered by EPA.
- **DO NOT** apply **SMASH III** by air.
- **DO NOT** apply an organophosphate or carbamate insecticide within 7 days of applying **SMASH III** or turfgrass injury may result.
- To reduce movement into sensitive species such as bentgrass, avoid foot and vehicle traffic until spray has dried.

Table 2. Postemergence Weed Control* in Turfgrass

Weed Species	Application Rate	Additive Rate
Annual Grass Weeds Controlled[1]		
Barnyardgrass Crabgrass, large[4] Crabgrass, smooth[4] Crabgrass, southern***,[4] Cupgrass, woolly*** Foxtail, giant Foxtail, green Foxtail, yellow*** Goosegrass Johnsongrass, seedling*** Millet, wild proso*** Panicum, fall*** Paspalum, slender*** Shattercane*** Signalgrass, broadleaf*** Stiltgrass, Japanese*** Velvetgrass, common*** Windmillgrass***	1.0 to 1.5** fl ozs/A (0.02225 to 0.03338 lbs A.I.) or 0.023 to 0.034 fl oz/1000 sq ft (0.7 to 1.0 mL)	COC or MSO 0.5 to 1% volume/volume (v/v) (2 to 4 qts/100 gallons of spray)
Perennial Grass Weeds Controlled/Suppressed		

Bermudagrass, common[2,4] Dallisgrass***[,4] Nimblewill*** Zoysiagrass***[,4]	3 applications at 1.0 to 1.33 fl ozs/A (0.02225 to 0.02967 lbs A.I.) or 0.023 to 0.030 fl oz/1000 sq ft (0.7 to 0.9 mL) applied on a 3 to 4 week spray interval Initiate first application mid-to-late summer or approximately 9 weeks to 12 weeks before fall reseeding period for cool-season grasses. Reseeding will aid in the percent conversion of ground cover back to the desired cool-season grass species.	COC or MSO 0.5 to 1% v/v (2 to 4 qts/100 gallons of spray)

Table 2. Postemergence Weed Control* in Turfgrass (continued)

Weed Species	Application Rate	Additive Rate
Broadleaf Weeds Controlled[3]		
Amaranth, Palmer*** Amaranth, Powell*** Burcucumber*** Carpetweed*** Chickweed, common*** Clover, large hop*** Clover, white Cocklebur, common*** Dandelion, common*** Galinsoga, hairy*** Ground ivy*** Horseweed (Marestail)*** Jimsonweed*** Kochia*** Lambsquarters, common Mallow, common*** Mallow, Venice*** Morningglory spp.*** Mustard spp.*** Nightshade, black*** Nightshade, Eastern black*** Nightshade, hairy*** Oxalis (Yellow wood sorrel)*** Pigweed, prostrate*** Pigweed, redroot Pigweed, smooth***	1.0 to 1.5** fl ozs/A (0.02225 to 0.03338 lbs A.I.) or 0.023 to 0.034 fl oz/1000 sq ft (0.7 to 1.0 mL)	COC or MSO 0.5 to 1% v/v (2 to 4 qts/100 gallons of spray)

Pigweed, tumble*** Prickly lettuce*** Ragweed, common*** Ragweed, giant*** Shepherd's-purse*** Sida, prickly*** Smartweed, ladysthumb*** Smartweed, Pennsylvania*** Speedwell *(Veronica* spp.*)**** Sunflower, wild (common)*** Thistle, Canada*** Thistle, Russian*** Velvetleaf Waterhemp***		

* Under certain conditions, a single application of **SMASH III herbicide** may not provide complete control. A sequential application of an additional 1.0 to 1.5 fl ozs/A of **SMASH III** 2 to 3 weeks after initial treatment may be necessary.

** Use rate may be increased up to 2.0 fl ozs/A (0.046 fl oz/1000 sq ft) in Kentucky bluegrass only.

*** Not registered for use in California

[1] To improve control of annual grass weeds, make applications before the fourth tiller growth stage. Use the 1.0 fl oz/A rate for annual grass weeds up to the second tiller growth stage. For annual grass weeds in the 2 to 4 tiller stage, apply 1.5 fl ozs/A.

[2] Control of these species requires a tank mix with triclopyr ester at label appreciate rate.

[3] To improve control of broadleaf weeds, make applications at early growth stages. To increase broadleaf weed species control spectrum, a tank mix with 2,4-D; triclopyr; or other broadleaf herbicide may be used.

[4] See **Special Weed Control** section

Special Weed Control

Control of goosegrass in Bermudagrass and seashore paspalum (Not for use on seashore paspalum in California): Apply a single application of **SMASH III herbicide** at 0.5 fl oz/A to 0.75 fl oz/A with MSO to actively growing goosegrass. Bleaching/discoloration can be expected to the desired turfgrass for 2 to 4 weeks. Apply as a spot spray or area spray to goosegrass infested areas at any growth stage. Large broadcast sprays may be objectionable due to significant bleaching for a prolonged period of time. A sequential application in Bermudagrass and seashore paspalum may result in significant turfgrass damage.

Selective control of Bermudagrass in cool season turfgrass: SMASH III can be used in combination with triclopyr ester (active label described rate) to improve Bermudagrass control over **SMASH III** applied alone. Make three applications of **SMASH III** at 1.3 fl ozs/A with MSO and triclopyr at three-week intervals or make two applications of **SMASH III** at 1.5 fl ozs/A with MSO and triclopyr followed three weeks later by **SMASH III** at 1 fl oz/A with MSO and triclopyr. Begin applications in late summer when Bermudagrass is approximately 9 to 12 weeks from first killing frost. Delay seeding of desirable turfgrass species for 3 weeks after last application. The combination outlined above may require multiple years of applications to completely control Bermudagrass in cool-season turfgrass.

Non-selective control of Bermudagrass: SMASH III can be used in combination with glyphosate to improve Bermudagrass control over glyphosate applied alone. Apply **SMASH III** at 2 fl ozs/A with MSO in a tank mix with glyphosate (use labeled rate for Bermudagrass) to control Bermudagrass. If necessary, a second application may be made to control remaining Bermudagrass. **DO NOT** apply more than 4 fl ozs **SMASH III** per acre per year. Seeding of cool- season species (fescues, ryegrass, Kentucky blue-grass) can be performed immediately after application. Delay seeding bentgrass for 2 weeks. Warm season species (Bermudagrass and seashore paspalum) can be seeded, sprigged or sodded two weeks after application.

Control of zoysiagrass: Make three applications of **SMASH III** in late summer on a three-week interval,

prior to the onset of zoysiagrass dormancy.

Improved and more consistent control of crabgrass: Apply **SMASH III** at 0.75 fl oz/A tank mixed with **Drive® XLR8 (a.i. quinclorac and EPA reg # 7969-272)** label specified rates. A sequential application may be required.

Improved dallisgrass control: Add triclopyr ester at their label specified rates and make two applications three weeks apart.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of Sharda USA LLC ("SHARDA") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

SHARDA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SHARDA AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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