OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
WASHINGTON, D.C. 20460

June 28, 2024

Dr. Matthew Brooks
Regulatory Consultant
Sharda USA LLC
PO Box 640
Hockessin DE 19707

Subject: Approval of Label Amendment; Only Indicated Changes Reviewed – change the product name from SMASH IMPACT and SMASH
Product Name: SMASH
EPA Registration Number: 83529-338
Application Date: 03/25/2024
Case Number: 00559705

Dear Dr. Matthew Brooks:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. However, EPA reviewed only the label changes highlighted, marked, or otherwise indicated on the submitted label. Any other changes to the previously approved label that were not clearly highlighted, marked, or otherwise indicated in your submission were not reviewed and may form the basis of regulatory and/or enforcement action if later discovered by the Agency. Further, submission of a label amendment application with unidentified changes may be considered a knowing submission of false information to the Agency. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

The label submitted with the application has been stamped “Accepted Only Indicated Revisions Reviewed” and is enclosed for your records.

This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 C.F.R. § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently

approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 C.F.R. § 152.3.

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 FIFRA and is subject to review by the Agency. If the website contains any false or misleading statement, design, or graphic, the product may be misbranded and unlawful to sell or distribute under FIFRA Sections 2(q)(1)(A) and 12(a)(1)(E). 40 C.F.R. § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on the product label, claims made as part of the product’s sale or distribution may not substantially differ from those claims approved through the registration process under FIFRA Section 12(a)(1)(B). 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 product will be referred to the EPA’s Office of Enforcement and Compliance Assurance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Francisco Llarena-Arias at 202-566-2816 or at llarena-arias.francisco@epa.gov.

Sincerely,

Francisco Llarena-Arias For
Heather McFarley,
Product Manager 24
Fungicide & Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

ACCEPTED
ONLY INDICATED
REVISIONS REVIEWED
06/28/2024

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.
83529-338
No label revisions other than those indicated were reported to the Agency.

Topramezone	Group	27	Herbicide

SMASH

For postemergence weed control in of field corn, popcorn, sweet corn, sugarcane.

Active Ingredient:
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 2.73 pounds of topramezone free acid.

EPA Reg. No. 83529-338 **EPA Est. No.**

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 details.)

See inside booklet for complete **First Aid**, **Precautionary Statements**, **Directions for Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents:

Sharda USA LLC
7217 Lancaster Pike, Suite A
Hockessin, DE 19707

FIRST AID	
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 to an unconscious person.
If on skin	• Take off contaminated 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 eyes open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after first 5 minutes; then continue rinsing. • Call a poison control center or doctor for treatment advice.
Have the product container label with you when calling a poison control center or doctor, or going for treatment. Call Poison Control at 1-800-222-1222 for emergency medical treatment information. For general information on this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.	

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handler must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils.
- Shoes plus sock

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 washable exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS
Users should: • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • 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.

Engineering Controls

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.

Product must be used in a manner which will prevent back-siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures, 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. 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 loading of topramezone and its transformation products from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This label 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 drifts. 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 regulations.

Observe all precautions and limitations in this label and the labels of products used in combination with **SMASH**. The use of **SMASH** 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.

SHARDA USA LLC does not advise or authorize the use of this product in manufacturing, processing, or preparing custom blends with other products for application in crops.

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 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 into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is:

- Coveralls, Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14mils, 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 sock

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 mic contents of container will 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 mic, 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 mic 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 flows begin 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 contents 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 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Plastic Container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Triple rinse as follows: 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% 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.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage including cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

Spills

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

CHEMTREC 1-800-424-9300

Steps to take if this material is released into the environment or spilled:

- Wear Personal Protective Equipment (PPE) and avoid exposure when managing a spill. (See Precautionary Statements section of this label for required PPE.)
- Dike and contain the spill with inter material (Sand, earth, etc.) and transfer liquid and solid siking material to separate containers for disposal.
- Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before reuse.
- Keep spill out of all sewers and open bodies of water.

Product Information

SMASH IMPACT is a suspension concentrate (SC) herbicide providing systemic postemergence control or growth suppression of emerged broadleaf and grass weeds in field corn (grown for grain, silage, or seed), popcorn (grown for ear, kernel, or seed), sweet corn (grown for ear, kernel, or seed), sugarcane. This product may be used on conventional and herbicide-resistant corn hybrids. **SHARDA USA LLC** has not tested all inbred lines for resistance to **SMASH**. Before using **SMASH**, refer to seed company instructions for use on inbred lines of field corn, popcorn, and sweet corn.

When applied postemergence as directed, **SMASH** will control or suppress the broadleaf weeds listed in **Table 1** and the grass weeds listed in **Table 2.**

To increase weed control spectrum for use in corn, tank mix **SMASH** with herbicides with the active ingredient of atrazine.

SMASH IMPACT applications must include spray additives. See **Additives** and **Mixing Order** for details.

Table 1. Broadleaf Weed Controlled Postemergence Broadcast
(including ALS-resistant[1], glyphosate-resistant, and triazine-resistant biotypes)

Common Name	Scientific Name	SMASH 0.5fl oz/A (0.011 lb Ai/A)	APPLICATION RATE 0.75 to 1.0 fl oz/A (0.016 to 0.022 lb Ai/A)
		Maximum Weed Size[2] (inches)	
Amaranth, Palmer	*Amaranthus palmeri*	4	6
Amaranth, Powell	*Amaranthus powellii*	4	6
Burcucumber	*Sicyos angulatus*	4	6
Canola, volunteer	*Brassica* spp.	4	6
Carpetweed	*Mollugo verticillata*	4	6
Chickweed, common	*Stellaria media*	2	4
Cocklebur, common	*Xanthium strumarium*	5	8
Dandelion	*Taraxacum officinale*	–	6*
Galinsoga, hairy	*Galinsoga ciliata*	4	6
Henbit	*Lamium amplexicaule*	3	4
Horseweed (Marestail)	*Conyza canadensis*	4	6
Jimsonweed	*Datura stramonium*	4	6
Kochia	*Kochia scoparia*	4	6
Lambsquarters, common	*Chenopodium album*	4	6
Lettuce, prickly	*Latuca serriola*	2	4
Mallow, common	*Malva neglecta*	2	3
Mallow, Venice	*Hibiscus trionum*	2*	3*
Morningglory	*Ipomoea* spp.	4*	6*
Mustard	*Brassica* spp.	4	6
Nightshade, black	*Solanum nigrum*	4	6
Nightshade, Eastern black	*Solanum ptycanthum*	4	6
Nightshade, hairy	*Solanum sarrachoides*	4	6
Pigweed, prostrate	*Amaranthus blitoides*	4	6
Pigweed, redroot	*Amaranthus retroflexus*	4	6
Pigweed, smooth	*Amaranthus hybridus*	4	6
Pigweed, tumble	*Amaranthus album*	2	4
Pusley, Florida	*Richardia scabra*	2	3
Ragweed, common	*Ambrosia artemisiifolia*	4	6
Ragweed, giant	*Ambrosia trifida*	5	8
Shepherd's-purse	*Capsella bursa-pastoris*	2	4
Sida, prickly	*Sida spinosa*	2	3
Smartweed, ladysthumb	*Polygonum persicaria*	2	3
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	2	3
Sunflower, volunteer	*Helianthus* spp.	5	8
Sunflower, wild (common)	*Helianthus annuus*	5	8
Thistle, Canada	*Cirsium arvense*	4*	6*
Thistle, Russian	*Salsola iberica*	2	4
Velvetleaf	*Abutilon theophrasti*	4	8

Waterhemp, common	*Amaranthus rudis*	4	6
Waterhemp, tall	*Amaranthus tuberculatus*	4	6

[1] ALS (acetolactate synthase)-resistant weeds include those weeds resistant to imidazolinone, sulfonamide, and/or sulfonylurea herbicides.
[2] For best performance, spray before weeds exceed the maximum stem height or vine length listed in this table.
* Partial control or suppression

Table 2. Grass Weeds Controlled or Suppressed[2] Postemergence Broadcast
(including ALS-resistant[1], glyphosate-resistant, and triazine-resistant biotypes)

Common Name	Scientific Name	Maximum Weed Leaf Stage[3]	Maximum Weed Size[3] (inches)
Barnyardgrass	*Echinochloa crus-galli*	4	4
Crabgrass, large	*Digitaria sanguinalis*	4	3
Crabgrass, smooth	*Digitaria ischaemum*	4	3
Cupgrass, woolly	*Eriochloa villosa*	3*	3*
Foxtail, giant	*Setaria faberi*	4	4
Foxtail, green	*Setaria viridis*	3*	3*
Foxtail, yellow	*Setaria lutescens*	3*	3*
Goosegrass	*Eleusine indica*	4	3
Johnsongrass, seedling	*Sorghum halepense*	3*	4*
Millet, wild proso	*Panicum miliaceum*	3	3
Panicum, fall	*Panicum dichotomiflorum*	3*	3*
Shattercane	*Sorghum bicolor*	3*	4*
Signalgrass, broadleaf	*Brachiaria platyphylla*	3*	3*

[1] ALS-resistant weeds include those weeds resistant to imidazolinone and/or sulfonylurea herbicides.
[2] Growth suppression at 0.5 fl oz/A
[3] For best performance, spray before grass exceeds the maximum leaf stage and/or height listed in this table.
* Growth suppression at 0.75 fl oz/A; control at 1.0 fl oz/A

Mode of Action

SMASH is absorbed by leaves, roots, and shoots and translocated to the growing points of sensitive weeds to control emerged weeds. **SMASH** controls weeds by inhibiting carotenoid biosynthesis (HPPD-inhibitor Group 27). Temperatures and moisture conditions for active plant growth are important for optimum **SMASH** activity. **SMASH** supplication to weeds during periods of stress conditions, including cold temperatures and/or drought, may result in reduced performance.

Herbicide Resistance Management

For resistance management, **SMASH** is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to **SMASH** 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** 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 weed), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and 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 plant 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.

Crop Resistance

Apply **SMASH** during favorable growing conditions for optimum crop resistant and weed control. Crops under environmental stress are more likely to show injury from any herbicide application. Rarely, plants under these conditions treated with **SMASH** may show transient bleaching of the portion of the leaves intercepting the spray application. These symptoms are temporary and occur infrequently; crop growth is not affected.

Cultivation

Avoid disturbing (e.g. cultivation) treated areas for at least 7 days following an application of **SMASH** to allow best herbicide uptake, translocation, and weed control.

Insecticide Information

SMASH may be used sequentially or in combination with soil or foliar applied insecticides registered for use in corn.

Application Instructions

SMASH is effective for postemergence control of annual weeds in conservation or conventional tillage production system.

RESTRICTION
DO NOT apply **SMASH** within 30 feet of the downwind edge of native plant communities.

To the extent consistent with applicable law, the applicator is responsible for any loss or damage that results from spraying **SMASH** in a manner other than directed in this label. In addition, applicator must follow all applicable state and local regulations and ordinances for spraying.

Application Timing

- Apply **SMASH** as a postemergence treatment when weeds are actively growing.

- For optimal weed control, apply **SMASH** before weeds exceed labeled height.
- Appy **SMASH** a minimum of one hour before rainfall or overhead irrigation.

Ground Application Methods and Equipment

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water peer acre. Use higher water volumes treating larger weeds and/or high-density weed infestation. Weeds must be thoroughly covered with spray. Dense leaf canopies shelter small weeds and can prevent adequate spray coverage. **SMASH** applications must be made with drop nozzle if the crop canopy prevents adequate weed coverage.

Mandatory Spray Drift Mitigation

When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

- When applying to crops via aerial application equipment, applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- For aerial applications, **DO NOT** release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is required for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

Advisory Spray Drift Language

- **Pollinator Advisory:** This product contains an herbicide. Follow all label directions and precautions to minimize potential off-target exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators.
- **Spray Drift Management:** The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.
- **Importance of Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL

CONDITIONS! See **Wind, Temperature and Humidity,** and **Temperature Inversions** sections of this label.

Techniques for Controlling Droplet Size:

- **Volume -** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure -** Use the lower spray pressures advised for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- **Nozzle Type -** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

Controlling Droplet Size – Aircraft:

- **Number of Nozzles -** Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation -** Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- **Nozzle Type -** Solid stream nozzles (including disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length -** Longer booms increase drift potential. Therefore, a shorter boom length is advised.
- **Application Height -** Application more than 10 ft above the canopy increases the potential for spray drift.

Boom Height. Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom must remain level with the crop and have minimal bounce.

Drift Reduction Technology (DRT). The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs must result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: https://www.epa.gov/reducing-pesticide-drift/epa-verifiedand-rated-drift-reduction-technologies.

Wind. Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity. When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

Temperature Inversions. Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source 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.

Shielded Sprayers. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

Agriculturally approved drift-reducing additives may also be used in accordance with product labels.

Aerial Application Methods and Equipment

Uniformly apply with properly calibrated aerial equipment in 2 or more gallons of water per acre. Adequate spray volume must be used to provide accurate and uniform distribution of spray particles over the treated area and to avoid drift of spray particles to nontarget areas.

To avoid injury to sensitive crops form drift, aerial applicators must adhere to the following special aerial use directions and precautions:

- Nozzle height above ground mist be a maximum of 10 feet.
- Nozzles must be pointed toward the rear of the aircraft. The downward angle of the nozzle must not be greater than 20 degrees.
- To minimize wing-tip vortex roll, nozzles or spray boom must not be located any closer to end of wing or rotor 3.4 the distance from the center of the aircraft.
- Use a maximum spray pressure of 40 psi.
- **DO NOT** spray when wind velocity is greater than 5 mph. Coarse sprays (larger droplets0 are less likely to drift.

Additives

Postemergence applications of **SMASH** requires the addition of an adjuvant and nitrogen fertilizer for optimum weed control.

Agriculturally approved drift-reducing additives may be used in applications with **SMASH**.

When an adjuvant is to be used with this product, SHARDA USA advises the use of Chemical Producers and Distributor Association certified adjuvant.

Adjuvants

Unless Specific tank mix directions are given in a **Crop-specific Use Directions**, always use a methylated seed oil (MSO) or petroleum-based or vegetable seed-based oil concentrate (COC) with **SMASH**. For best performance across a wider range of environmental conditions, including when weeds are under moisture and/or temperature stress, use an MSO adjuvant. Apply these oil-based adjuvant concentrates at 1.0 to 1.5 gallons per 100 gallons of water (1.0% to 1.5% volume/volume [v/v]). Use the higher rate when applying during periods of hot, dry weather.

AND

Nitrogen Fertilizer

Recommended nitrogen-based fertilizers include urea ammonium nitrate (UAN; 28% to 34%) or ammonium phosphate (10-34-0) at 1.25 to 2.5 gallons per 100 gallons of water (1.25% to 2.5% v/v). Instead of a liquid fertilizer spray grade ammonium sulfate (AMS) at a minimum rate of 8.5 to 17 pounds per 100 gallons of water may be used. Use the higher rate when applying during periods of hot dry weather.

Mixing Instructions

For product container 5 gallons or less shake will before use. For product containers more than 5 gallons, recirculate before use.

DO NOT use liquid fertilizer as carrier for postemergence applications. Use only water as a carrier.

1. **Water-**Fill the spray tank ½ to ¾ full with clean water and start agitation.

2. **SMASH**-add required amount to spray tank while agitating.
3. After the **SMASH** has visible dispersed. Add spray additives and fill the remainder of the tank with water.

Maintain agitation throughout mixing and application until spraying is completed. Limit the amount of spray mixture prepared to that needed for immediate use.

Tank Mixing Order

When tank mixing **SMASH** with recommended herbicides, add the other herbicides and other components in the following order. Maintain agitation throughout mixing and application until spraying is completed. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.

1. **Water**-Fill tank ½ to ¾ full with clean water and start agitation
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-soluble additives (including dry and liquid fertilizers including as AMS or UAN)
5. **Water-dispersible products** (including dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
6. **Water-soluble products**
7. **Emulsifiable concentrates** (including MSO adjuvants)
8. **Remaining quantity of water**

Tank Mixing Information

SMASH herbicide may be applied sequentially or tank mixed with other herbicides as part of a complete weed control program. Tank mix recommendations are for use only in states where the sequential or tank mix product and application site are registered. Refer to **Crop-specific Information** for more details and for specific tank mix restrictions. Read and follow the applicable restrictions and precautions and **Direction For Use** on all products included in any tank mix. **The most restrictive labeling applies to tank mixes.**

Rotational Crop Restrictions

The following rotational crops may be planted after applying **SMASH** at the specified rate. Planting earlier than the specified interval may result in crop injury. Avoid overapplication by minimizing overlap of spray swaths and by switching off spray boom when turning (end rows).

For rotational crops following the use of sequential applications of **SMASH**, the rotational interval begins after the last **SMASH** application.

Rotational Crop	Rotational Interval (months, based on maximum annual application rate)		
	SMASH Application Rate (fl oz/A)		
	0.5 (0.011 lb Ai/A)	0.75 (0.016 lb Ai/A)	1.0 to 2.0 (0.022 to 0.044 lb Ai/A)
Corn (all)	0	0	0
Sugarcane	0	0	0
Cereal grains	3	3	3
Grass grown for seed	3	3	3
Rice	3	3	3
Alfalfa	9	9	9
Cotton	9	9	9
Grain sorghum	9	9	9
Peanut	9	9	9
Potato	9	9	9
Soybean	9	9	9
Sunflower	9	9	9
Canola	9	9	18
Lima bean, succulent	9	9	18
Dry beans[1]	9	9*	18**
Pea	9	9	18**
Snap/Garden bean	9	9*, †	18
Sugar beet	9*	9*	18**
All Other Crops	18	18	18

[1] For cranberry beans in Idaho, Utah, and the area east of the Cascade Mountains in Oregon and Washington, follow the guidelines for snap/garden bean.

* 18 months for the following states: Colorado, Michigan, Minnesota, Montana, Nebraska (west of Highway 83), North Dakota, South Dakota, Wisconsin, and Wyoming

** 9 months for Idaho, Oregon, and Washington

† 18 months for Idaho, Utah, and the area east of the Cascade Mountains in Oregon and Washington.

Crop-specific Use Directions

Corn: (field corn, popcorn, seed corn, sweet corn)

Apply SMASH postemergence on all corn types including conventional, (Imazamox) **Clearfield®** EPA Reg. # 241-441, (glyphosate) **Roundup Ready®** EPA Reg # 71995-21, and (glufosinate-ammonium) **LibertyLink®** hybrids EPA Reg. # 254-660. In addition, SMASH may be applied on inbred lines used in field corn, popcorn and sweet corn seed production. Refer to seed company instructions before use on inbred lines.

SMASH may be used in tank mixes or sequential applications with other herbicides registered for use in corn. If SMASH is tank mixed with other herbicides, follow label restrictions for the most restrictive tank mix products. It is the pesticide user's responsibility to ensure that all products are registered for

the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Corn Restrictions

- **DO NOT** apply more than 1.0 fl oz/A **SMASH** (0.022 lb topramezone per acre) per year in corn.
- In the event of a crop loss because of weather, any corn type can be replanted following an application of **SMASH**. If **SMASH** was tank mixed with other herbicides, the label restrictions for these herbicides must also be followed.
- Up to 1 fl oz/A (0.022 lb Ai/A) can be made in a single application.
- **DO NOT** apply or retreat with **SMASH** within 45 days of corn harvest or after the V8 stage of corn growth, whichever comes first.
- **DO NOT** graze or feed treated corn forage, silage, fodder, or grain for at least 45 days after an application of **SMASH**.

Tank Mixes

SMASH may be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- atrazine + dimethenamide-P **(e.g. G-Max Lite™ herbicide EPA Reg # 7969-200)**
- atrazine + dimethenamide-P **(e.g. Guardsman Max® herbicide EPA Reg # 7969-192)**
- dimethenamide-P **(e.g. Outlook® herbicide EPA Reg # 7969-156)**
- pendimethalin **(e.g. Prowl® H2O herbicide EPA Reg # 70506-230)**
- Diflufenzopyr-sodium + Dicamba, sodium salt **(e.g. Status® herbicide EPA Reg. 7969-242)**
- atrazine
- glyphosate (e.g. **Roundup® herbicide EOA**)

SMASH tank mixes or sequential applications with products containing mesotrione are not advised.

Sequential Herbicide Combinations and Uses

In addition to control of many emerged broadleaf weeds, **SMASH** controls or suppresses growth of several emerged grass weed species. To target a broader spectrum of grasses, use **SMASH** as a sequential postemergence treatment following a preemergence grass herbicide including **Guardsman Max (**atrazine + dimethenamide-P **EPA Reg # 7969-192)**, **Outlook (**dimethenamide-P **EPA Reg # 7969-156)**, or **Prowl H2O (**pendimethalin **EPA Reg # 70506-230). SMASH** may also be used in sequential programs with registered burndown herbicides.

SMASH may be applied in sequence with products containing isoxaflutole (e.g. **Balance® Flexx herbicide**).

Between Crops Application (Fallow)

SMASH may be used as a foliar application to control emerged broadleaf and grass weeds at any time of the year during the fallow period after field corn, popcorn, sweet corn, sugarcane. **DO NOT** exceed the maximum yearly application rate of 2 fl oz (0.044 lb Ai/A). For rotational crops following the use of a between crop application of **SMASH**, the rotational interval begins after the last **SMASH** application; see **Rotational Crop Restrictions** section for intervals.

Application Rate and Timing

Apply **SMASH** as a broadcast spray at 0.5 fl oz/A to 2.0 fl ozs/A (0.011 to 0.044 lb Ai/a). Best product performance is obtained when weeds are small and actively growing. Thorough coverage of existing weeds is essential, and higher spray volume may be needed for best performance.

Restriction

- Minimum of 14 days between applications.
- **DO NOT** apply more than 2.0 fl ozs/A of **SMASH** (0.044 lb topramezone/A) per application.
- **DO NOT** apply more than the maximum cumulative amount of 2.0 fl ozs/A (0.044 Ai/A) of **SMASH** per year.

Sugarcane

SMASH can be applied to plant cane or sugarcane grown from stubble (ratoon). **SMASH** may be used in tank mixes or sequential applications with other herbicides registered for use in sugarcane including atrazine, metribuzin, or **Prowl H2O (**pendimethalin **EPA Reg # 70506-230)**. If **SMASH** is tank mixed with other herbicides, follow label restrictions for the most restrictive tank mix product. Application of **SMASH** may cause transient discoloration, chlorosis, or yellowing of sugarcane.

SMASH may be applied between growing seasons as either an early preplant in plant cane or post harvest in ratoon cane prior to cane initiating regrowth. Apply 0.5 to 2.0 fl ozs/A (0.011 to 0.044 lb Ai/A) of **SMASH**.

Sugarcane Restrictions

- **DO NOT** apply more than 2.0 fl ozs/A of **SMASH** (0.044 lb topramezone/A) per application in sugarcane.
- **Do not make more than 2 applications per year.**
- Minimum of 14 days is required between sequential applications.
- **DO NOT** apply more than 4.0 fl ozs/A of **SMASH** (0.088 lb topramezone/A) per year in sugarcane.
- **DO NOT** exceed 2.0 fl ozs/A of **SMASH** during the final year of sugarcane production, prior to rotation to another crop.
- **DO NOT** apply **SMASH** within 100 days of sugarcane harvest.
- **DO NOT** graze or feed treated sugarcane for at least 100 days following an application of **SMASH**.

Special Weeds Controlled/Suppressed

In addition to the weeds controlled early postemergence as described in **Table 1** and **Table 2**, **SMASH** controls or suppresses the following weeds.

- **Common Bermudagrass** *(Cynodon dactylon)* - Apply early in the season at onset of Bermudagrass greenup or emergence of new leaves. Apply 1.0 to 2.0 fl ozs/A (0.021 to 0.044 lb Ai/A) of **SMASH** per application. Up to four sequential applications at reduced application rates at 2 to 3 week intervals may be necessary for best control. **DO NOT** apply more than 4.0 fl ozs/A of **SMASH** (0.0875 lb topramezone per acre) per year. Apply using MSO or COC spray adjuvant plus nitrogen fertilizer including AMS or UAN. See **Adjuvants** and **Nitrogen Fertilizer** sections for details.
- **Fall panicum** *(Panicum dichotomiflorum)* - For rescue suppression of large fall panicum more than 12-inches tall or other annual grasses listed in **Table 1** and **Table 2**, apply 2.0 fl ozs/A (0.044 Ai/A) **SMASH** and use a minimum of 20 gallons per acre spray volume for proper spray coverage. Apply using MSO or COC spray adjuvant plus nitrogen fertilizer including AMS or UAN. See **Adjuvants** and **Nitrogen Fertilizer** sections for details.

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 or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

SHARDA USA LLC, 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.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SHARDA USA LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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