



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Registration Division (7505P)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:

92115-13

Date of Issuance:

8/14/18

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

FBN 400

Name and Address of Registrant (include ZIP Code):

Jane Miller
 Agent for FBN Inputs, LLC
 c/o Biologic Regulatory Consulting, Inc.
 10529 Heritage Bay Blvd.
 Naples, FL 34120

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

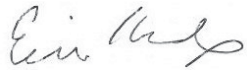
On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:


 Erik Kraft, Product Manager 24
 Fungicide & Herbicide Branch Registration Division (7505P)

Date:

8/14/18

2. You are required to comply with the data requirements described in the DCI identified below:

a. Mesotrione GDCI-122990-1474

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. Make the following label changes before you release the product for shipment:

- Revise the EPA Registration Number to read, “EPA Reg. No. 92115-13.”

4. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 05/31/2018

If you have any questions, please contact Lisa Pabel by phone at (703) 347-0459, or via email at pabel.lisa@epa.gov.

{BOOKLET FRONT PANEL LANGUAGE}

MESOTRIONE GROUP 27 HERBICIDE

FBNSM 400

(ABN: FBNSM MESOTRIONE 4SC)

For control of annual broadleaf weeds in corn (field, seed, sweet, yellow pop), asparagus, citrus fruit, pome fruit, stone fruit, tree nuts, cranberries, flax, oats, okra, pearl millet, rhubarb, sorghum (grain and sweet), soybeans, sugarcane, turfgrass

ACTIVE INGREDIENT:

Mesotrione: (CAS No. 104206-82-8).....	40.0%
OTHER INGREDIENTS:	<u>60.0%</u>
TOTAL:	100.0%

Contains 4 lbs. active ingredient mesotrione per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> 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 IN EYES:	<ul style="list-style-type: none"> 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.
IF INHALED:	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24-hour Medical Emergency Assistant (Human or Animal), call 1-800-222-1222. For Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), call ChemTrec at 1-800-424-9300.	

See inside booklet for additional Precautionary Statements and Directions for Use.

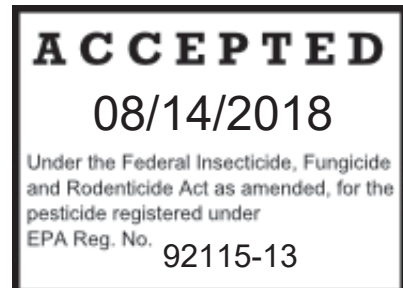
EPA Reg. No. 92115-NEW

EPA Est. No. xxxxxx-xx-xxx

Net Contents: _____

Lot No.: see container

Manufactured For:
FBN Inputs LLC
300 El Camino Road
San Carlos, CA 94070



{LANGUAGE INSIDE BOOKLET}

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

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves

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

ENGINEERING CONTROL STATEMENTS

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/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.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

SURFACE WATER ADVISORY

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

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reactions may occur.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval (REI). 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 permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves

PRODUCT INFORMATION

FBNSM 400 is a systemic pre-emergence and post-emergence herbicide for the selective contact and residual control of broadleaf weeds in field corn, seed corn, yellow popcorn, sweet corn, and other listed crops. When used pre-emergence, weeds take up the product through the soil during emergence. Dry conditions following application may reduce the pre-emergence activity of **FBNSM 400**. If an activating rain (0.25 inches) is not received within 7-10 days after a pre-emergence application, where appropriate, rotary hoeing is suggested to activate the herbicide. When used post-emergence, susceptible weeds take up the herbicide through the treated foliage and cease growth soon after application. Complete death of the weeds may take up to 2 weeks. The product is absorbed through the soil and/or by the foliage of emerged weeds.

FBNSM 400 is not effective for the control of most grass weeds. Pre-emergence grass herbicides or post-emergence grass herbicides can be tank mixed with **FBNSM 400** to provide broad spectrum weed control in corn (see appropriate section of label for this information). **FBNSM 400** can be applied post-emergence following a pre-emergence grass herbicide application. **FBNSM 400** can also be used in combination with a burndown herbicide, prior to planting, to provide added burndown and residual weed control in field corn, seed corn, yellow popcorn, and sweet corn.

RESISTANCE-MANAGEMENT

The efficacy of **FBNSM 400** is not affected by the presence of biotype weed species that are resistant to Protoporphyrinogen Oxidase (PPO), 4-Hydroxyphenylpyruvate Dioxygenase (HPPD) or Acetolactate Synthase (ALS) inhibiting herbicides or to Triazine or Glyphosate herbicides.

For resistance management, **FBNSM 400** is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to **FBNSM 400** 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 **FBNSM 400** 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 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 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.
- For further information or to report suspected resistance, contact a FBN Inputs LLC Inc. representative.

WEED MANAGEMENT PRACTICES

To minimize the occurrence of mesotrione-resistant biotypes, observe the following weed management practices:

- Scout your fields before and after herbicide application.
- Start with a clean field, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small (less than 4 inches).
- Incorporate other herbicides (e.g., a selective and/or a residual herbicide) and cultural practices (e.g., tillage or crop rotation) as part of your weed control system, where appropriate.
- Use the full specified herbicide rate and proper application timing for the hardest to control weed species present in the field. Avoid tank mixtures with other herbicides that reduce the efficacy of this product (through antagonism), or with ones that encourage application rates of this product below those specified on this label.
- Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Use new commercial seed that is as free of weed seed as possible.
- Use good agronomic principles that enhance crop development and crop competitiveness.
- Report any incidence of repeated non-performance of this product on a particular weed to your FBN Inputs LLC Inc. representative, local retailer, or county extension agent.

When applying **FBNSM 400** post-emergence after a mesotrione-containing pre-emergence herbicide, add atrazine as a tank mix partner. Do not apply more than 0.24 lb. of mesotrione active ingredient per acre of corn per year (equivalent to 7.7 fl. oz. per acre per year of **FBNSM 400**).

MANAGEMENT OF MESOTRIONE-RESISTANT BIOTYPES

Appropriate testing is critical in order to determine if a weed is resistant to mesotrione. Contact your FBN Inputs LLC representative to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on the Internet www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed mesotrione-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product may be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g., crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

INTEGRATED WEED PEST MANAGEMENT

Integrate **FBNSM 400** into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

USE RESTRICTIONS

- **DO NOT** apply this product through any type of irrigation system unless specified otherwise under the specific crop section on the label.
- **DO NOT** apply this product with suspension fertilizers as the carrier.
- **DO NOT** apply **FBNSM 400** post-emergence in a tank mix with emulsifiable concentrate (EC) grass herbicides, unless specifically addressed under one of the tank mix sections of this label, or injury may occur.
- **DO NOT** apply **FBNSM 400** by air unless specified otherwise under the specific crop section on the label.

USE PRECAUTIONS

When weeds are stressed and not actively growing due to environmental conditions (such as drought, heat, lack of fertility, flooding, or prolonged cool temperatures), control can be reduced or delayed. Weed escapes or regrowth may occur when application is made under prolonged stress conditions. For best weed control, **apply FBNSM 400** following label directions when weeds are actively growing.

FBNSM 400 may be applied with pyrethroid type insecticides (e.g. bifenthrin, lambda-cyhalothrin, permethrin).

SPRAY DRIFT MANAGEMENT

As with all crop protection products, it is important to avoid off-target movement onto adjacent land or crops, as even small amounts may injure sensitive plants. To reduce spray drift, the following spray drift management requirements must be followed.

SPRAY DRIFT Ground Boom Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour 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

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. 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 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. Avoid 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.

WINDBLOWN SOIL PARTICLES

This product has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying this product if prevailing local conditions may be expected to result in off-site movement.

ADDITIONAL SPRAY DRIFT DIRECTIONS FOR AERIAL APPLICATIONS

The distance of the outer-most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they must be observed.

Spray must be released at the lowest height consistent with effective weed control and flight safety.

For best results, ensure that each specific aerial application vehicle used is quantifiably pattern tested for aerial application of this product initially and every year thereafter.

RESTRICTION: For aerial application use only nozzles producing coarse-ultra coarse droplets. Do not use nozzles producing fine-medium size droplets.

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Do not make applications at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance with increasing drift potential (higher wind, smaller drops, etc.).

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Avoid application below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Ensure that every applicator is familiar with local wind patterns and how they affect drift.

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Do not apply during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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 connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPLICATION INFORMATION

PRE-EMERGENCE GROUND APPLICATION

Apply **FBNSM 400** pre-emergence with a spray volume of 10-60 gals./A using water or liquid fertilizer (excluding suspension fertilizers) as the carrier.

Spray nozzles must be uniformly spaced, the same size and type, and must provide accurate and uniform application. Use spray nozzles that provide medium to coarse droplet size to provide good coverage and avoid drift. Use a pump that can maintain a pressure of at least 35-40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures may be used with extended range or drift reduction nozzles.

Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time. If the agitation is stopped for more than 5 minutes, re-suspend the spray solution by running on full agitation prior to spraying.

POST-EMERGENCE GROUND APPLICATION

Apply in a spray volume of 10-30 gals./A using water as a carrier.

Spray nozzles must be uniformly spaced, the same size and type, and must provide accurate and uniform application. Use spray nozzles that provide medium to coarse droplet size to provide good coverage and avoid drift. Good weed coverage is essential for optimum weed control. Boom height for broadcast over-the-top applications must be based on the height of the crop, and should be within 15 inches of the crop canopy.

Use a pump that can maintain a pressure of at least 35-40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures may be used with extended range or drift reduction nozzles. When weed foliage is dense, use a minimum of 20 gals.

Use flat fan nozzles of 80° or 100° for best post-emergence coverage. Do not use floodjet nozzles or controlled droplet application equipment for post-emergence applications.

Nozzles may be angled forward 45° to enhance penetration of the crop and provide better coverage. Ensure that all in-line strainer and nozzle screens in the sprayer are 50-mesh or coarser.

Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time. If the agitation is stopped for more than 5 minutes, re-suspend the spray solution by running on full agitation prior to spraying.

AERIAL APPLICATION

RESTRICTIONS

- **FBNSM 400 may be applied by air ONLY to corn and sugarcane.**

For aerial application use only nozzles producing coarse-ultra coarse droplets. Do not use nozzles producing fine-medium size droplets.

Applications must be made in a minimum of 2 gallons of water per acre.

CORN

Apply **FBNSM 400** by air for pre-emergence or post-emergence weed control only in the following states: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Nebraska, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

SUGARCANE

Apply **FBNSM 400** by air for pre-emergence or post-emergence weed control only in the following states: Florida, Louisiana and Texas.

SPRAY ADDITIVES

POST-EMERGENCE ADJUVANTS

When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Council of Producers and Distributors of Agrotechnology (CPDA) adjuvant certification program is advised.

The following adjuvants are intended primarily for **FBNSM 400** use in corn. Refer to the use directions section of each crop section for specifically advised adjuvants.

POST-EMERGENCE APPLICATIONS TO FIELD CORN AND SEED CORN

For post-emergence applications made after the crop has emerged, add crop oil concentrate (COC) to the spray solution at the rate of 1.0 gal./100 gals. of water (1.0% v/v). The use of a nonionic surfactant (NIS) at 1 qt./100 gallons of water (0.25% v/v) instead of COC is allowed, but the weed control achieved with COC is consistently better than NIS. **Severe crop injury may occur if methylated seed oil (MSO) adjuvants or MSO blend adjuvants are used with FBNSM 400 for post-emergence applications. Do not use MSO adjuvants for post-emergence use unless directed for a specific tank mix under the FBNSM 400 TANK MIXTURES FOR CORN section of this label.** In addition to COC, always add spray grade UAN (e.g., 2800-0) to the spray solution at a rate of 2.5% (v/v) or AMS at 8.5 lb./100 gals. of spray solution, except if precluded elsewhere on this label.

POST-EMERGENCE APPLICATIONS TO SWEET CORN AND YELLOW POPCORN

To avoid potentially or severe crop injury, do not add UAN or AMS when making post-emergence applications of FBNSM 400 to yellow popcorn or sweet corn.

For post-emergence applications to yellow popcorn and sweet corn, use a nonionic surfactant (NIS) instead of a crop oil concentrate (COC), to minimize the risk of crop injury. A COC may be used, and will increase the level of weed control achieved, especially under dry growing conditions, but the risk of crop injury is increased significantly under lush growing conditions. For optimum control, add atrazine wherever rotational or local atrazine restrictions allow.

PRE-EMERGENCE ADJUVANTS

For **FBNSM 400** preplant or pre-emergence applications, and where weeds are present, the use of any adjuvant for agricultural use is permitted. In these situations, MSO type adjuvants are typically better than COC type adjuvants, which are typically better than NIS type adjuvants for enhancing weed control. UAN or AMS can be added and typically provides better weed control than not adding one of these. 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.

SPRAY EQUIPMENT

CLEANING EQUIPMENT AFTER **FBNSM 400** APPLICATION

Special attention must be given to cleaning equipment before spraying a crop rather than corn. Mix only as much spray solution as needed.

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a cleaning solution of 1 gal. of household ammonia per 25 gals. of water. Many commercial spray tank cleaners may be used.
3. Use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. If a pressure washer is not available, completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
4. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
5. Dispose of rinsate from steps 1-3 in an appropriate manner.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

MIXING PROCEDURES

Refer to the **Crop Use Directions** sections of this label for tank mixes. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive direction for use and precautionary statements of each product in the tank mixture.

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here. Mix only with products which are labeled for the same crops and whose labels do not prohibit mixing with mesotrione-containing products. Always follow the most restrictive label limitations and precautions.

Do not apply more than labeled rates. Do not tank mix **FBNSM 400** with any other insecticide, fungicide, fertilizer solution, or adjuvant not specified on the label without testing compatibility, as poor mixing may result. Test the compatibility of any tank mix combination on a small scale (such as a jar test) before actual tank mixing.

Only use sprayers in good running condition with good agitation. Ensure that the sprayer has been cleaned according to instructions on the label of the product used most recently. For post-emergence applications, use only clean water for the spray solution. Ensure that all in-line strainer and nozzle screens in the sprayer are 50-mesh or coarser. Do not use screens finer than 50-mesh.

Follow the mixing instructions for adding **FBNSM 400** to the spray tank:

1. Liquid fertilizer (excluding suspension fertilizers) may be used as the carrier for pre-emergence applications.
2. Begin to fill sprayer tank or premix tank with clean water and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
3. When the sprayer or premix tank is half full of water, add AMS and agitate until completely dispersed.
4. Next add **FBNSM 400** slowly and agitate until completely dissolved. Wait at least 1 minute after the last of the **FBNSM 400** has been added to the tank to allow for complete dispersion. A longer agitation period may be required to disperse **FBNSM 400** when using old water from sources such as deep drilled wells.
5. If tank mixing, add the tank mix product next.

6. Finally, add adjuvant and UAN, if needed, and then continue to fill tank to desired level with water.

WEEDS CONTROLLED

FBNSM 400 applied as directed in this label will control or partially control the weeds listed in Tables 1 and 2.

Partial control can either mean erratic control (good to poor) or consistent control at a level below that generally considered acceptable for commercial weed control.

For best post-emergence results, apply **FBNSM 400** to actively growing weeds. Dry weather following pre-emergence application of **FBNSM 400** may reduce residual weed control effectiveness. If irrigation is available, apply ½ to 1 inch of water after pre-emergence application. If irrigation is not available, make a uniform shallow cultivation as soon as weeds emerge.

FBNSM 400 applied alone or in mixture with atrazine will not provide consistent or effective control of weeds identified as resistant to post-emergence HPPD inhibiting herbicides.

Refer to the crop sections on this label for specific rates and use directions.

Table 1. Weeds Controlled with Post-Emergence Applications of FBNSM 400

Weed Common Name	Weed Scientific Name	FBN SM 400 3 fl oz/A (0.094 lb ai/A) Applied Alone	FBN SM 400 2.5-3.0 fl oz/A (0.079-0.094 lb ai/A) + Atrazine ¹
		Apply to Weeds <5 Inches Tall ²	
Amaranth, palmer	<i>Amaranthus palmeri</i>	PC ³	C ³
Amaranth, powell	<i>Amaranthus powellii</i>	C	C
Amaranth, spiny	<i>Amaranthus spinosus</i>	C	C
Atriplex	<i>Chenopodium orach</i>	C	C
Broadleaf signalgrass	<i>Urochloa platyphylla</i>	C ³	C ³
Buckwheat, wild	<i>Polygonum convolvulus</i>	PC	PC
Buffalobur	<i>Solanum rostratum</i>	C	C
Burcucumber	<i>Sicyos angulatus</i>	PC	C ³
Carpetweed	<i>Mollugo verticillata</i>	C	C
Carrot, wild	<i>Daucus carota</i>	PC	C
Chickweed, common	<i>Stellaria media</i>	C	C
Cocklebur, common	<i>Xanthium strumarium</i>	C	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	C ³	C ³
Dandelion	<i>Taraxacum officinale</i>	NC	PC
Dock, curly	<i>Rumex crispus</i>	PC	PC
Galinsoga	<i>Galinsoga parviflora</i>	C	C
Hemp	<i>Cannabis sativa</i>	C	C
Horsenettle	<i>Solanum carolinense</i>	PC	C
Jimsonweed	<i>Datura stamonium</i>	C	C
Horseweed (Marestail)	<i>Conyza canadensis</i>	PC	C
Knotweed, prostrate	<i>Polygonum aviculare</i>	PC	PC
Kochia	<i>Kochia scoparia</i>	PC ³	C ³
Lambsquarters, common	<i>Chenopodium album</i>	C	C
Mallow, Venice	<i>Hibiscus trionum</i>	NC	C
Morningglory, entireleaf	<i>Ipomoea hederacea</i>	PC	C
Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>	PC	C
Morningglory, pitted	<i>Ipomoea lacunosa</i>	PC	C
Mustard, wild	<i>Brassica kaber</i>	C	C
Nightshade, black	<i>Solanum nigrum</i>	C	C
Nightshade, Eastern black	<i>Solanum ptycanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	C

Weed Common Name	Weed Scientific Name	FBN SM 400 3 fl oz/A (0.094 lb ai/A) Applied Alone	FBN SM 400 2.5-3.0 fl oz/A (0.079-0.094 lb ai/A) + Atrazine ¹
		Apply to Weeds <5 Inches Tall ²	
Nutsedge, yellow	<i>Cyperus esculentus</i>	PC	PC
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	C
Pigweed, tumble	<i>Amaranthus albus</i>	C	C
Pokeweed, common	<i>Phytolacca Americana</i>	PC	PC
Potatoes, volunteer	<i>Solanum</i> spp.	C	C
Pusley, Florida	<i>Richardia scabra</i>	C ³	C ³
Ragweed, common	<i>Ambrosia artemisiifolia</i>	PC	C
Ragweed, giant	<i>Ambrosia trifida</i>	C ³	C
Sesbania, hemp	<i>Sesbania exaltata</i>	C	C
Sida, prickly (Teaweed)	<i>Sida spinosa</i>	NC	C ³
Smartweed, Ladysthumb	<i>Polygonum persicaria</i>	C ³	C
Smartweed, pale	<i>Polygonum lapathifolium</i>	C ³	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C ³	C
Sunflower, common	<i>Helianthus annuus</i>	C	C
Thistle, Canada	<i>Cirsium arvense</i>	NC	PC
Velvetleaf	<i>Abutilon theophrasti</i>	C	C
Waterhemp, common	<i>Amaranthus rudis</i>	C ³	C
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C ³	C

¹FBNSM 400 tank mixture with atrazine is approved only for use on corn and sugarcane.

²In certain situations, weeds can be controlled at larger than listed sizes, however to protect crop yield, manage weed resistance and provide consistent control, treat weeds before they exceed 5 inches in height.

³Apply before weed exceeds 3 inches in height.

C = Control PC = Partial Control NC = Not Controlled

Table 2. Weeds Controlled with Pre-Emergence Applications of FBNSM 400

Common Name	Scientific Name	FBN SM 400 Applied Alone	FBN SM 400 + Atrazine ¹
Amaranth, palmer	<i>Amaranthus palmeri</i>	C	C
Amaranth, powell	<i>Amaranthus powellii</i>	C	C
Amaranth, spiny	<i>Amaranthus spinosus</i>	C	C
Broadleaf signalgrass	<i>Urochloa platyphylla</i>	PC	PC
Buffalobur	<i>Solanum rostratum</i>	C	C
Burclover, California	<i>Medicago polymorpha</i>	C	-
Carpetweed	<i>Mollugo verticillata</i>	C	C
Carrot, wild	<i>Daucus carota</i>	C	-
Chickweed, common	<i>Stellaria media</i>	C	C
Chickweed, mouse-ear	<i>Cerastium vulgatum</i>	C	-
Cocklebur, common	<i>Xanthium strumarium</i>	PC	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	PC	PC
Dandelion (common (seedling))	<i>Taraxacum officinale</i>	C	-
Deadnettle, purple	<i>Lamium purpureum</i>	C	-
Dock, curly	<i>Rumex crispus</i>	C	-
Eveningprimrose, cutleaf	<i>Oenothera laciniata</i>	C	-
Fiddleneck, coast	<i>Amsinckia intermedia</i>	C	-
Filaree, redstem	<i>Erodium cicutarium</i>	C	-
Filaree, whitestem	<i>Erodium moschatum</i>	C	-
Fleabane, hairy	<i>Conyza bonariensis</i>	C	-
Galinsoga	<i>Galinsoga parviflora</i>	C	C

Common Name	Scientific Name	FBN SM 400 Applied Alone	FBN SM 400 + Atrazine ¹
Geranium, Carolina	<i>Geranium carolinianum</i>	C	-
Groundcherry, smooth	<i>Physalis subglabrata</i>	C	-
Groundsel, common	<i>Senecio vulgaris</i>	C	-
Henbit	<i>Lamium amplexicaule</i>	C	-
Horsenettle	<i>Solanum carolinense</i>	P	-
Horseweed (Marestail)	<i>Conyza canadensis</i>	C	-
Jimsonweed	<i>Datura stamonium</i>	C	C
Kochia	<i>Kochia scoparia</i>	P	C
Lambsquarters, common	<i>Chenopodium album</i>	C	C
Lettuce, prickly	<i>Lactuca serriola</i>	C	-
Mallow, common	<i>Malva neglecta</i>	C	-
Mayweed, chamomile	<i>Anthemis cotula</i>	C	-
Morningglory, entireleaf	<i>Ipomoea hederacea</i>	P	C
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	P	C
Morningglory, pitted	<i>Ipomoea lacunosa</i>	P	C
Mustard, wild	<i>Brassica kaber</i>	C	C
Nettle, burning	<i>Urtica urens</i>	C	-
Nightshade, eastern black	<i>Solanum ptycanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	C
Pansy	<i>Viola tricolor</i>	C	-
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	C
Pigweed, tumble	<i>Amaranthus albus</i>	C	C
Pineappleweed	<i>Matricaria matricarioides</i>	C	-
Puncturevine, common	<i>Tribulus terrestris</i>	C	-
Purslane, common	<i>Portulaca oleracea</i>	C	-
Pusley, common	<i>Richardia scabra</i>	P	-
Ragweed, common	<i>Ambrosia artemisiifolia</i>	C	C
Ragweed, giant	<i>Ambrosia trifida</i>	P	C
Redmaids	<i>Calandria caulescens</i>	C	-
Rocket, London	<i>Sisymbrium irio</i>	C	-
Shepherdspurse	<i>Capsella bursa-pastoris</i>	C	-
Smartweed, ladysthumb	<i>Polygonum persicaria</i>	C	C
Smartweed, pale	<i>Polygonum lapathifolium</i>	C	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C	C
Sowthistle, annual	<i>Sonchus oleraceus</i>	C	-
Spanishneedles	<i>Bidens bipinnata</i>	C	-
Sunflower, common	<i>Helianthus annuus</i>	P	C
Swinecress	<i>Coronopus didymus</i>	C	-
Tasselflower, red	<i>Emilia sonchifolia</i>	C	-
Velvetleaf	<i>Abutilon theophrasti</i>	C	C
Waterhemp, common	<i>Amaranthus rudis</i>	C	C
Vetch, common	<i>Vicia sativa</i>	C	-
Vetch, purple	<i>Vicia benghalensis</i>	P	-
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C	C
Willowherb, panicle	<i>Epilobium brachycarpum</i>	C	-

¹FBNSM 400 tank mixture with atrazine is approved only for use on corn, grain sorghum and sugarcane. Refer to the crop sections on this label for specific use directions.

C = Control P = Partial Control

ROTATIONAL CROPS

When **FBNSM 400** is applied as directed on this label, follow the crop rotation intervals in Table 3. If **FBNSM 400** is tank mixed with other products, the most restrictive product's crop rotation intervals must be followed.

Table 3. Time Interval Between FBNSM 400 Application and Replanting or Planting of Rotational Crop

Crop	Replant/Rotational Interval
Asparagus Corn (all types) Cranberry Flax Kentucky bluegrass grown for seed Millet, pearl Oats Rhubarb Ryegrass (perennial and annual) grown for seed Sorghum (grain and sweet) Sugarcane Tall fescue grown for seed	No restriction
Small grain cereals including wheat, barley and rye	4 months
Alfalfa Blueberry Canola Cotton Currant Lingonberry Okra Peanuts Peas* Potato Rice Snap beans* Soybeans Sunflowers Tobacco	10 months
Cucurbits Dry beans Red clover Sugar beets All other rotational crops not listed in this table	18 months

*Plant Peas and Snap Beans only if the criteria below have been met. If all criteria are not met, a minimum 18 month interval must be observed following **FBNSM 400** application.

- At least 20" of rainfall plus irrigation has been received between application and planting of the rotational crop.
- Soil pH is 6.0 or greater.
- Application of **FBNSM 400** at 3 fl oz/A (0.094 lb ai/A) or less was applied no later than June 30th the year preceding rotational crop planting.
- No other HPPD herbicides (including, but not limited to, product containing isoxaflutole, mesotrione, tembotrione, or topramezone) were applied the year prior to planting peas and snap beans.

RESTRICTION

- Do not plant peas or snap beans on sand, sandy loam or loamy sand soils in Minnesota or Wisconsin.

CROP USE DIRECTIONS

CORN (FIELD, SEED, SWEET, AND YELLOW POP)

Apply **FBNSM 400** by ground for pre-emergence or post-emergence weed control.

Aerial application for pre-emergence or post-emergence weed control is permitted only in the following states: **Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming.**

Refer to seed company information for use on field corn inbred lines. Special adjuvant restrictions must be followed for post-emergence applications **FBNSM 400** in yellow popcorn or sweet corn (see the **SPRAY ADDITIVES** section of this label).

Post-emergence applications (after crop emergence) of **FBNSM 400** may cause crop bleaching in some yellow popcorn and sweet corn designated as Clearfield®, LibertyLink® and Roundup Ready. Crop bleaching is typically transitory and has no effect on final yield or quality. However, herbicide sensitivity in yellow popcorn and sweet corn varies widely, and all yellow popcorn and sweet corn designated as Clearfield®, LibertyLink® and Roundup Ready have not been tested. Contact your popcorn or sweet corn company, Fieldman, or University Specialist about Clearfield®, LibertyLink® and Roundup Ready hybrids before making a post-emergence application of **FBNSM 400** to yellow popcorn or sweet corn. Do not include nitrogen based adjuvants (UAN or AMS) when making post-emergence applications of **FBNSM 400** to yellow popcorn or sweet corn.

Temporary crop response (transient bleaching) from post-emergence applications to field corn may occur under extreme weather conditions or when the crop is suffering from stress. Field corn outgrows these effects and develops normally.

PRECAUTIONS

- Severe corn injury resulting in yield loss may occur if **FBNSM 400** is applied post-emergence to corn that was treated with terbufos or chlorpyrifos.
- Severe corn injury resulting in yield loss may occur if **FBNSM 400** is applied foliar post-emergence to corn in a tank mix with any organophosphate or carbamate insecticide.
- Severe corn injury resulting in yield loss may occur if any organophosphate or carbamate insecticide is applied foliar post-emergence within 7 days before or 7 days after **FBNSM 400** application.

RESTRICTIONS

- **Do not** apply **FBNSM 400** to white popcorn or ornamental (Indian) corn.
- **Do not** cultivate corn within 7 days before or after a **FBNSM 400** application as weed control from the **FBNSM 400** application may be reduced.
- **Do not** apply more than a total of 7.7 fl oz/A (0.24 lb ai/A) of **FBNSM 400** per year.
- **Do not** make more than 2 applications of **FBNSM 400** per year.
- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) in a single application.
- Minimum retreatment interval is 14 days.
- **Do not** feed or harvest forage, grain, or stover within 45 days after application.

Apply **FBNSM 400** for the control of broadleaf and grass weeds listed in Tables 1 and 2. Corn may be treated up to 30 inches tall or up to the 8-leaf stage of corn growth.

FBNSM 400 USED ALONE - POST-EMERGENCE

Apply **FBNSM 400** at 3.0 fl oz/A (0.094 lb ai/A) per application. Always add an appropriate adjuvant to the spray tank (see the **SPRAY ADDITIVES** section of this label).

For best results, apply **FBNSM 400** to actively growing weeds. For a list of weeds controlled see Table 1. Susceptible weeds which emerge soon after application of **FBNSM 400** may be controlled after they absorb the herbicide from the soil. **FBNSM 400** will not control most grass weeds.

Two post-emergence applications of **FBNSM 400** may be made with the following restrictions.

- Only one post-emergence application may be made if **FBNSM 400** has been applied pre-emergence. Do not make more than two applications per year. Do not apply more than a total of 7.7 fl oz/A (0.24 lb ai/A) of **FBNSM 400** per year.
- Minimum retreatment interval is 14 days.
- For best weed and residual control, do not apply **FBNSM 400** at rates less than 3.0 fl oz/A (0.094 lb ai/A) post-emergence.
- Do not apply more than a total of 6.0 fl oz/A (0.188 lb ai./A) for the two post-emergence applications.
- If **FBNSM 400** is applied post-emergence to ground that received a pre-emergence application of a mesotrione-containing herbicide, atrazine must be tank mixed with **FBNSM 400**.
- If atrazine is mixed with **FBNSM 400**, do not apply to corn that is more than 12 inches high.
- Corn may be treated up to 30 inches tall or up to the 8-leaf stage of corn growth. Do not harvest forage, grain, or stover within 45 days after application.

FBNSM 400 USED ALONE - PRE-EMERGENCE

For broadleaf weed control, apply **FBNSM 400** alone at 6.0-7.7 fl oz/A (0.188 – 0.24 lb ai/A) by ground sprayers in a spray volume of 10-30 gals. of water (up to 80 gals. if applied with liquid fertilizers) per acre. See Table 2 for weeds controlled. **FBNSM 400** may be tank mixed with pre-emergence grass herbicides for grass control. Refer to the tank mix section for a list of partners. 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.

FBNSM 400 APPLIED IN TANK MIXTURES FOR CORN

FBNSM 400 may be tank mixed with other registered herbicides for improved spectrum of weed control in burndown, pre-emergence or post-emergence applications. These tank mixtures can also serve as a method to include a different mode of action herbicide to help control or manage the development of resistant weed biotypes.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and direction 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.

BURNDOWN TANK MIXTURES IN CORN

Apply **FBNSM 400** in a tank mixture with other registered herbicides for burndown plus residual weed control.

For improved broadleaf weed control with limited residual control prior to planting corn and before corn emergence, apply **FBNSM 400** at 3.0 fl oz/A (0.094 lb ai/A) in tank mixes with paraquat, glyphosate, dicamba brands and/or 2,4-D. For greater residual control, use 6.0-7.7 fl oz/A (0.188 – 0.24 lb ai/A) of **FBNSM 400** (see Table 2) with the above products. Use the adjuvant system specified by the burndown herbicide. 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.

PRE-EMERGENCE TANK MIXTURES IN CORN

Apply **FBNSM 400** at a rate of 5.3-7.7 fl oz/A (0.167 – 0.24 lb ai/A) in tank mixture with other registered herbicides (Table 4) for pre-emergence residual weed control. Refer to Table 2 for a list of weeds controlled by **FBNSM 400** and **FBNSM 400** plus atrazine applied pre-emergence.

Table 4. FBNSM 400 Tank Mixtures for Pre-Emergence Application in Corn

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds controlled. 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.

ACTIVE INGREDIENT
Atrazine
Acetochlor
Dimethenamid
Pendimethalin
s-metolachlor
Acetochlor + atrazine
Atrazine + s-metolachlor
Atrazine + glyphosate + metolachlor
Dimethenamid + atrazine

POST-EMERGENCE TANK MIXTURES IN CORN

The tank mixtures with **FBNSM 400** identified in Table 5 may be applied post-emergence to corn. Unless specified otherwise on this label or a supplemental label, do not apply **FBNSM 400** at less than 3.0 fl oz/A. (0.094 lb ai/A) Application of **FBNSM 400** at rates less than 3.0 fl oz (0.094 lb ai/A) post-emergence may result in a loss of residual control.

Always add an appropriate adjuvant to the spray tank (see the **SPRAY ADDITIVES** section of this label). 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.

Table 5. FBNSM 400 Tank Mixtures for Post-Emergence Application in Corn

Active Ingredient(s)	Directions
Atrazine	<ul style="list-style-type: none"> Refer to Table 1 on this label for application rates and weeds controlled.
Nicosulfuron	<ul style="list-style-type: none"> Use this mixture for additional grass control. Refer to product label for list of weeds controlled.
Bentazon	<ul style="list-style-type: none"> Use this mixture for additional broadleaf weed control. Refer to product label for list of weeds controlled.
Rimsulfuron + thifensulfuron methyl	<ul style="list-style-type: none"> Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Atrazine + s-metolachlor	<ul style="list-style-type: none"> When using these tank mixtures, omit the nitrogen based adjuvant (UAN or AMS) from the mixture or apply as a post-directed spray to minimize contact with crop foliage. To further reduce the risk of crop injury, the user may also leave out the crop oil concentrate (COC), or replace it with a nonionic surfactant (NIS). In all cases, the control of emerged weeds may be reduced somewhat due to less than optimum adjuvant effect or weed coverage.
Atrazine, glyphosate, metolachlor	<ul style="list-style-type: none"> For use only in corn containing the Roundup Ready trait. Application of this mixture to corn not containing the Roundup Ready trait will result in crop death Do not add urea ammonium nitrate (UAN) or methylated seed oil (MSO) type adjuvants to this tank mixture or crop injury may occur.
Bromoxynil + atrazine	<ul style="list-style-type: none"> Use this mixture for additional broadleaf weed control. Refer to label for use rates
Glufosinate	<ul style="list-style-type: none"> Use this tank mixture only on corn designated as LibertyLink[®]. Application of this mixture to a corn hybrid that is not designated as LibertyLink[®] will result in severe crop injury or death. Do not use crop oil concentrate (COC) as an adjuvant for this mixture or severe crop injury may occur.
Glyphosate	<ul style="list-style-type: none"> For use only in corn containing the Roundup Ready trait. Application of this mixture to a corn hybrid that does not contain the Roundup Ready trait will result in crop death. Add spray-grade ammonium sulfate (AMS) at a rate that delivers 8.5-17.0 lbs. of AMS/100 gallons of water.

Active Ingredient(s)	Directions
	<ul style="list-style-type: none"> • If the glyphosate product label calls for an adjuvant in addition to AMS, add a non-ionic surfactant (NIS) at 0.25-0.5% v/v (1-2 quart/100 gallons). • Do not add urea ammonium nitrate (UAN), crop oil concentrate (COC), or methylated seed oil (MSO) type adjuvants to this tank mixture or crop injury may occur.
Imazethapyr + imazapyr	<ul style="list-style-type: none"> • For use only on corn designated as Clearfield[®] corn. • Application of this mixture to corn that is not Clearfield[®] corn will result in severe crop injury or death. • Do not use a Methylated Seed Oil (MSO), or an MSO blend with this mixture or severe crop injury may result
Prosulfuron	<ul style="list-style-type: none"> • Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Primisulfuron methyl + prosulfuron	<ul style="list-style-type: none"> • Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Nicosulfuron + rimsulfuron	<ul style="list-style-type: none"> • Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Nicosulfuron + thifensulfuron methyl	<ul style="list-style-type: none"> • Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Primisulfuron methyl + sodium salt of dicamba	<ul style="list-style-type: none"> • Use this mixture for additional weed control. Refer to product label for list of weeds controlled.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds controlled.

ASPARAGUS

Apply **FBNSM 400** broadcast or banded at a rate of 3.0-7.7 fl oz/A (0.094 – 0.24 lb ai/A) to asparagus as a spring application prior to spear emergence, as a post-harvest application (after final harvest), or both.

Use the 3.0 fl oz/A (0.094 lb ai/A) rate for post-emergence control or partial control of the emerged weeds listed in Table 1. Use the 6.0-7.7 fl oz/A (0.188 – 0.24 lb ai/A) rate for pre-emergence control or partial control of the weeds listed in Table 2. For banded applications, the application must be made to account for band width, i.e., to deliver 3.0-7.7 fl oz/A (0.094 – 0.24 ai/A). For the best pre-emergence weed control with spring applications, **FBNSM 400** must be applied after fern mowing, disking or other tillage operation but prior to asparagus spear emergence.

Post-harvest applications must be made in a way that minimizes contact with any standing asparagus spears or ferns and maximizes contact with the weeds and/or soil, e.g., by using a directed or semi-directed type application, or crop injury may occur. With post-harvest applications, the use of an adjuvant will increase the risk of crop injury.

If weeds are emerged at the time of the **FBNSM 400** application, the addition of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v **or** a nonionic surfactant (NIS) at the rate of 0.25% v/v is advised. In addition to COC or NIS, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% v/v **or** ammonium sulfate (AMS) at the rate of 8.5 lb./100 gallons of spray solution may be added for improved burndown of emerged weeds. If weeds have not yet emerged, no adjuvant is advised.

RESTRICTIONS

- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBNSM 400** per year through any combination of applications.
- **Do not** apply more than 3.0 fl oz/A (0.094 lb ai/A) of **FBNSM 400** per application post-emergence.
- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBNSM 400** per application pre-emergence.
- **Do not** make more than two applications of **FBNSM 400** per year when using reduced application rates.
- Minimum retreatment interval is 14 days.

BLUEGRASS, RYEGRASS (ANNUAL AND PERENNIAL) AND TALL FESCUE GROWN FOR SEED

Apply **FBNSM 400** as a pre-emergence application to bare soil (new seeding) or as a post-emergence application to an emerged grass crop.

PRE-EMERGENCE APPLICATION

Apply **FBNSM 400** to a newly seeded crop as a broadcast, surface spray at a rate of 6.0 fl oz/A (0.188 lb ai/A), prior to crop and weed emergence. Rainfall or irrigation as the newly seeded grass crop emerges from the soil may increase the risk of injury from **FBNSM 400**. Grass crop injury symptoms include temporary bleaching of newly emerged leaves, or in extreme conditions, stunting. For a list of pre-emergence weeds controlled or partially controlled see Table 2. In addition to the weeds listed in Table 2, **FBNSM 400** applied pre-emergence will control mannagrass.

POST-EMERGENCE APPLICATION

Apply **FBNSM 400** as a broadcast post-emergence spray to emerged bluegrass, perennial ryegrass or tall fescue grown for seed at a rate of 3.0 – 6.0 fl oz/A (0.094-0.188 lb ai/A). Use the 3.0 fl oz/A (0.094 lb ai/A) rate for post-emergence control or partial control of the weeds listed in Table 1. In addition to the weeds listed in Table 2, **FBNSM 400** applied post-emergence will control mannagrass (up to 3 tillers).

Use the 6.0 fl oz/A (0.188 lb ai/A) rate for post-emergence weed control plus extended residual weed control (see Table 2). The addition of a crop oil concentrate type adjuvant at 1% v/v **or** a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is advised. Post-emergence applications of **FBNSM 400** may result in temporary bleaching of the grass crop.

In addition to COC or NIS, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% v/v **or** ammonium sulfate (AMS) at the rate of 8.5 lb./100 gallons of spray solution may also be added for improved control of emerged weeds. The addition of UAN or AMS will improve consistency of post-emergence weed control but will also increase the risk of grass crop injury, especially at **FBNSM 400** rates greater than 3.0 fl oz/A (0.094 lb ai/A). If grass crop injury is a concern, do not add UAN or AMS to the spray solution.

Tank mixing other pesticides with **FBNSM 400** post-emergence may increase the risk of crop injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to **FBNSM 400** for applications made post-emergence to the crop.

RESTRICTIONS

- **Do not** harvest the grass crop for seed or straw within 60 days following the application of **FBNSM 400**.
- **Do not** graze or feed forage from treated areas within 14 days following harvest of seed or straw and at least 74 days after application of **FBNSM 400**.
- **Do not** make more than two applications of **FBNSM 400** per year.
- Minimum retreatment interval is 14 days.
- **Do not** apply more than 6 fl oz/A (0.188 lb ai/A) in a single application and not more than 9 fl oz/A (0.282 lb ai/A) of **FBNSM 400** per year through any combination of applications.
- Applications of **FBNSM 400** to grasses grown for seed species not listed on this label may result in severe injury.

BERRIES GROUP 13

Note: Not all cultivars and types of berries that are included within the Environmental Protection Agency's definition of Berries Group 13 have been tested and shown to have adequate crop safety to products containing mesotrione. Those that have been tested, and are believed to be reasonably fit, are listed below along with use directions for that crop. If **FBNSM 400** is used on berries not listed below, severe crop injury may occur.

HIGH BUSH BLUEBERRY, LINGONBERRY, RED CURRANT, BLACK RASPBERRY, RED RASPBERRY, AND BLACKBERRY

For a list of weeds controlled see Tables 1 and 2. Apply **FBNSM 400** as a pre-bloom post-directed spray in these crops. Apply to bush or caneberries at a rate up to 6 fl oz/A (0.188 lb ai/A). A split application of 3 fl oz/A (0.094 lb ai/A) followed by 3 fl oz/A (0.094 lb ai/A) may be used, with a 14-day spray interval. The use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is advised, but avoid using COC adjuvants that are injurious to bush or caneberry leaves. Do not apply **FBNSM 400** to bush or caneberries after bloom begins, or illegal residues may occur.

LOW BUSH BLUEBERRIES

Apply **FBNSM 400** only in the non-bearing year. This application may be a broadcast application. Apply at a rate up to 6 fl oz/A (0.188 lb ai/A). A split application of 3 fl oz/A (0.094 lb ai/A) followed by 3 fl oz/A (0.094 lb ai/A) may be used, with a 14-day spray interval. The use of a crop oil concentrate (COC) type adjuvant at 1% v/v is advised. Applications of **FBNSM 400** during dry weather conditions and/or temperatures above 85° can cause injury to Lowbush blueberries. Applications of **FBNSM 400** can cause yellowing or necrosis of leaves and under severe conditions, leaf drop may occur especially on “Sourtop” variety blueberries.

RESTRICTIONS

- **Do not** make more than two applications of **FBNSM 400** per year when using reduced application rates.
- **Do not** apply more than 6 fl. oz/A (0.188 lb ai/A) **FBNSM 400** per year through any combination of applications.
- **Do not** apply more than 6 fl. oz/A (0.188 lb ai/A) **FBNSM 400** per application.
- Minimum retreatment interval is 14 days.

**CITRUS FRUIT Group 10-10, POME FRUIT Group 11-10 , STONE FRUIT Group 12-12
AND TREE NUTS Group 14**

Apply **FBNSM 400** for post-emergence and residual control of weeds listed in Tables 1 and 2.

Citrus Fruit Group 10-10 (Australian desert lime, Australian finger lime, Australian round lime, Brown River finger lime, calamondin, citron, citrus hybrids, grapefruit, Japanese summer grapefruit, kumquat, lemon, lime, Mediterranean mandarin, sour orange, sweet orange, pummelo, Russell River lime, Satsuma mandarin, sweet lime, Tachibana orange, Tahiti lime, tangelo, tangerine (Mandarin), tangor, trifoliate orange, unqi fruit, cultivars, varieties and/or hybrids of these)

Pome Fruit Group 11-10 (apple, azarole, crabapple, loquat, mayhaw, medlar, pear, Asian pear, quince, Chinese quince, Japanese quince, tejocote, cultivars, varieties and/or hybrids of these)

Stone Fruit Group 12-12 (apricot, Japanese apricot, capulin, black cherry, Nanking cherry, sweet cherry, tart cherry, Chinese jujube, nectarine, peach, plum, American plum, beach plum, Canada plum, cherry plum, Chickasaw plum, Damson plum, Japanese plum, Klamath plum, prune plum, plumcot, sloe, cultivars, varieties and/or hybrids of these)

Tree Nuts Group 14 (African nut-tree, almond, beech nut, Brazil nut, Brazilian pine, bunya, bur oak, butternut, Cajou nut, candlenut, cashew, chestnut, chinquapin, coconut, Coquito nut, Dika nut, ginkgo, Guiana chestnut, hazelnut (filbert), heartnut, hickory nut, Japanese horse-chestnut, macadamia nut, Mongongo nut, monkey-pot, monkey puzzle nut, Okari nut, Pachira nut, peach palm nut, pecan, pequi, pili nut, pine nut, pistachio, Sapucaia nut, tropical almond, black walnut, English walnut, yellowhorn, cultivars, varieties and/or hybrids of these)

CITRUS FRUIT GROUP 10-10, POME FRUIT GROUP 11-10, STONE FRUIT GROUP 12-12, & TREE NUTS GROUP 14 PRECAUTIONS

- To avoid crop injury, apply the spray to the grove or orchard floor and to the weeds, avoiding contact with crop foliage, stems or fruit. Contact of **FBNSM 400** with the crop may result in bleaching injury that is typically temporary. Use trunk guards to protect plants until adequate bark has developed.
- Specified rates are based on broadcast treatment. For band applications around trees in fruit or nut plantings, reduce the broadcast rate of **FBNSM 400** and carrier per acre in proportion to the area actually sprayed. (See Banded Applications section).

CITRUS FRUIT GROUP 10-10, POME FRUIT GROUP 11-10, STONE FRUIT GROUP 12-12, & TREE NUTS GROUP 14 RESTRICTIONS

- Apply only in pome fruit, stone fruit and nut trees that have been established for a minimum of 12 months. **FBNSM 400** can be applied in citrus trees or plantings that are less than 12 months old which are exhibiting normal growth and vigor.
- **Do not** apply in orchards that are stressed due to poor weather or other abiotic factors.
- **Do not** apply when nuts or fruits are on the ground at harvest.

- **Do not** apply more than a total of 12 fl oz/A (0.376 lb ai/A) of **FBNSM 400** per year through any combination of applications.
- **Do not** apply more than 6 fl oz/A (0.188 lb ai/A) for the first application.
- **Do not** make more than 3 applications of **FBNSM 400** per year.
- As noted in **Table 6** below, for Program 1, the minimum retreatment interval is 12 weeks. For Program 2, 3 & 4 minimum retreatment interval is 6 weeks.
- **Do not** harvest pome fruit, stone fruit or tree nuts within 30 days after application.
- **Do not** harvest citrus fruit within 1 day after application.
- **Do not** use on soils with greater than 20% gravel.
- **Do not** apply through any type of irrigation system.
- **Do not** apply by air.

SPRAY ADDITIVES

For application to emerged weeds, the use of crop oil concentrate (COC) type adjuvant at 1% v/v or non-ionic surfactant (NIS) at 0.25% v/v is advised. Addition of ammonium sulfate or other nitrogen-based adjuvants will increase efficacy when used in combination with COC or NIS. For more information see Spray Additives section on this label.

BANDED APPLICATIONS

When applying a row or banded treatment of **FBNSM 400**, use the following formula to calculate the amount per acre:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{Amount needed per acre of field}$$

TANK MIX INSTRUCTIONS

FBNSM 400 may be mixed and applied in combination with most commonly used herbicides registered for use in the approved crops in order to expand the post-emergence weed control spectrum and to help control or manage the development of resistant weeds.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive direction for use and precautionary statements of each product in the tank mixture.

ACTIVE INGREDIENT
Bromacil
Diuron
Glufosinate
Glyphosate
Indaziflam
Norflurazon
Oryzalin
Oxyfluorfen
Paraquat
Pendimethalin
Rimsulfuron
Simazine
Bromacil + diuron

WEED CONTROL (TABLE 1 AND 2)

FBNSM 400 provides both post-emergence and pre-emergence control of susceptible weeds. For best results, make post-emergence applications before weeds are 5 inches tall (Table 1), or before germination of seed for pre-emerged control (Table 2). Rainfall or irrigation soon after application will improve pre-emergence activity.

USE DIRECTIONS

Apply as a directed or shielded spray. Avoid contact with trunk surfaces, fruit or crop foliage. Ensure that the soil is settled, firm and relatively free of debris at time of application. Also ensure that the soil is free of depressions around trees where rain or irrigation water can concentrate. Make the first application of **FBNSM 400** in late fall/early winter or spring and follow one of the programs noted in the Table 6 for subsequent applications.

Table 6. Application Programs, Rates and Intervals

Apply **FBNSM 400** in a spray volume of 10-40 gal/A.

Program	Application Rate			Minimum Retreatment Interval
	1 st Application	2 nd Application	3 rd Application	
1	6 fl oz/A (0.188 lb ai/A)	6 fl oz/A (0.188 lb ai/A)	-	12 weeks
2	6 fl oz/A (0.188 lb ai/A)	3 fl oz/A (0.094 lb ai/A)	-	6 weeks
3	6 fl oz/A (0.188 lb ai/A)	3 fl oz/A (0.094 lb ai/A)	3 fl oz/A (0.094 lb ai/A)	6 weeks
4	3 fl oz/A (0.094 lb ai/A)	3 fl oz/A (0.094 lb ai/A)	3 fl oz/A (0.094 lb ai/A)	6 weeks

For optimum post-emergence weed control, apply **FBNSM 400** to actively growing weeds in tank mixture with burndown herbicides approved for use on these crops. Apply before weeds are 5 inches tall.

For effective residual weed control, **FBNSM 400** must be moved into the weed seed germination zone. For pre-emergence weed control, apply **FBNSM 400** before rainfall or irrigation. Subsequent application(s) of **FBNSM 400** can be made alone or in a tank mixture, with the herbicides noted above, if weed emergence occurs.

CRANBERRIES

Apply **FBNSM 400** to bearing or non-bearing cranberry beds for control or suppression of bog St. John's wort (*Hypericum boreale*), rushes (*Juncus canadensis*, *J. effuses*, *J. bufonius*, *J. tenuis*), sedges spp. (*Carex* spp.), yellow loosestrife (*Lysimachia terrestris*) and silverleaf (*Potentilla pacifica*) in addition to the weeds listed in Tables 1 and 2. Apply to cranberries at a rate up to 8 fl oz/A (0.25 lb ai/A) in a single application, no more than two applications per year and not more than a total of 16 fl oz/A (0.5 lb ai/A) per year. If two applications are made, they must be made no closer than 14 days apart. The use of a crop oil concentrate (COC) type adjuvant at 1% v/v or non-ionic surfactant (NIS) at 0.25% v/v is advised, however COC adjuvants that are injurious to cranberry leaves must not be used.

CRANBERRY RESTRICTIONS

- Do not apply more than 16.0 fl oz/A (0.5 lb ai/A) of **FBNSM 400** per year.
- Do not apply more than 8 fl oz/A (0.25 lb ai/A) of **FBNSM 400** per application .
- Do not make more than two applications of **FBNSM 400** per year.
- Minimum retreatment interval is 14 days.

In non-bearing cranberries, make the **FBNSM 400** application(s) after the bud break stage, but at least 45 days before flooding in fall or winter. In bearing cranberries, make the **FBNSM 400** application(s) after the bud break stage, but at least 45 days prior to flooding or harvest.

FBNSM 400 may be applied through irrigation systems (chemigation) including center pivot or solid set.

CHEMIGATION – SPRINKLER IRRIGATION APPLICATION FOR CRANBERRY ONLY

Check the irrigation system to ensure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Maintain good agitation in the pesticide supply tank prior to and during the entire application period. Apply by injecting the specified rate of **FBNSM 400** herbicide into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target areas in 0.1 – 0.2 acre-inch of water. In general, use the least amount of water in this range required for proper distribution and coverage.

Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system. In addition to the above directions, if application is being made during a normal irrigation set of a stationary sprinkler, inject the labeled rate of **FBNSM 400** herbicide for the area covered into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

CHEMIGATION USE DIRECTIONS – SPRINKLER IRRIGATION APPLICATION

Apply this product only through sprinkler irrigation systems including center pivot or solid set. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

Contact State Extension Service Specialists, equipment manufacturers or other experts with any questions about calibration.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person shall shut the system down and make necessary adjustments if the need arises.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back-flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and are capable of being fitted with a system interlock.

Any alternatives to the above required safety devices must conform to the list of EPA approved alternative devices.

RESTRICTIONS - SPRINKLER IRRIGATION APPLICATION

- **Do not apply this product through any other type of irrigation system.**
- **Do not** apply directly to water or areas where surface water is present outside the bog system.
- **Do not** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.
- **Do not** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- **Do not** contaminate water when disposing of equipment wash water or rinsate.
- **Do not** apply within 10 feet of surface water outside the bog system.
- **Do not** spray to runoff.

FLAX

Apply **FBNSM 400** pre-emergence at a rate up to 6 fl oz/A (0.188 lb ai/A). For a list of weeds controlled see Tables 1 and 2. If weeds are emerged at the time of application, the use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is advised. In addition, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% (v/v) or AMS at the rate of 8.5 lb./100 gals. of spray solution may be added to improve the burndown of existing weeds.

Application of **FBNSM 400** to emerged flax can result in severe crop injury.

RESTRICTIONS

- **Do not** make more than one application of **FBNSM 400** per year.
- **Do not** apply more than 6 fl oz/A (0.188 lb ai/A) **FBNSM 400** per year.
- **Do not** apply more than 6 fl oz/A (0.188 lb ai/A) of **FBNSM 400** per application.

OATS

Apply **FBNSM 400** pre-emergence or post-emergence (but not both).

For pre-emergence control or partial control of the weeds listed in Table 2, apply **FBNSM 400** broadcast at a rate of 6.0 fl oz/A (0.188 lb ai/A) prior to oat emergence. For best pre-emergence weed control, the **FBNSM 400** application must be made before weed emergence.

For post-emergence (after oat emergence) control or partial control of the weeds listed in Table 1, apply **FBNSM 400** at a rate of 3.0 fl oz/A (0.094 lb ai/A). For best results, apply to emerged weeds that are less than 5" tall. Post-emergence applications of **FBNSM 400** may result in temporary injury of the oat crop, with symptoms such as leaf bleaching, leaf burn and in extreme conditions, stunting.

If emerged weeds are present at the time of the **FBNSM 400** application, the addition of a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v **or** a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is advised. In addition to COC or NIS, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% v/v **or** ammonium sulfate (AMS) at the rate of 8.5 lb./100 gallons of spray solution may be added for improved weed control. If emerged weeds are not present at the time of the **FBNSM 400** application, no additives are advised. If oat injury is a concern, eliminating the use of UAN or AMS will reduce the risk for post-emergence crop injury. Additionally, the use of NIS instead of COC will also reduce the oat injury risk. However, weed control is also reduced if UAN or AMS is eliminated and when switching from COC to NIS.

Tank mixing other pesticides with **FBNSM 400** post-emergence may increase the risk of injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to **FBNSM 400** for applications made post-emergence to the crop.

RESTRICTIONS

- **Do not** graze or feed forage from treated areas within 30 days following an application of **FBNSM 400**.
- **Do not** harvest oats within 50 days following the application of **FBNSM 400**.
- **Do not** make more than one (pre- or post-emergence) application of **FBNSM 400** per year.
- **Do not** apply more than 6 fl. oz/A (0.188 lb ai/A) **FBNSM 400** per year for all application methods.
- **Do not** apply **FBNSM 400** pre-emergence (prior to oat emergence) at more than 6.0 fl oz/A (0.188 lb ai/A) per year.
- **Do not** apply **FBNSM 400** post-emergence at more than 3.0 fl oz/A (0.094 lb ai/A) per year.
- If the oat crop treated with **FBNSM 400** is lost or destroyed, oats may be replanted immediately. If **FBNSM 400** was applied to the lost oat crop, no additional **FBNSM 400** can be applied to the replanted oat crop.

OKRA

Apply **FBNSM 400** as either a row-middle or as a hooded post-directed treatment (but not both).

PRE-EMERGENCE ROW-MIDDLE APPLICATION

Apply **FBNSM 400** at a rate of 6.0 fl oz/A (0.188 lb ai/A) as a banded application to the row middles before weed emergence. For this banded application, leave one foot of untreated area over the okra row or 6" to each side of the planted row. For banded applications, the application must be made to account for band width, i.e., to deliver 6.0 fl oz/A (0.188 lb ai/A). Do not apply **FBNSM 400** directly over the planted okra row or severe crop injury may occur. Injury risk is greatest on coarse textured soils (sand, sandy loam or loamy sand).

POST-EMERGENCE HOODED APPLICATION

Apply **FBNSM 400** at a rate of 3.0 fl oz/A (0.094 lb ai/A) as a post-emergence directed application using a hooded sprayer for control or partial control of the weeds listed in Table 1. Okra must be at least 3" tall at the time of this application. It is advised that a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. For post-emergence hooded applications, the spray equipment must be set up to minimize the amount of **FBNSM 400** that contact the okra foliage or crop injury will occur. For best post-emergence results, **FBNSM 400** must be applied to actively growing weeds.

RESTRICTIONS

- **Do not** harvest okra within 28 days following the application of **FBNSM 400**.
- **Do not** make more than one application of **FBNSM 400** per year.
- **Do not** apply **FBNSM 400** as a row-middle application at more than 6.0 fl oz/A (0.188 lb ai/A) per year.
- **Do not** apply **FBNSM 400** as a post-directed application at more than 3.0 fl oz/A (0.094 lb ai/A) per year.
- **Do not** apply as a broadcast pre-emergence or broadcast post-emergence application to okra or severe injury will occur.
- If the okra crop treated with **FBNSM 400** is lost or destroyed, okra may be replanted only in the soil band that was not treated with **FBNSM 400**.

PEARL MILLET

FBNSM 400 may be applied pre-emergence in pearl millet, i.e., after planting but before crop emergence, at a rate up to 6 fl oz/A (0.188 lb ai/A). For a list of weeds controlled see Table 2. If weeds are emerged at the time of application, the use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is advised. In addition, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% (v/v) or AMS at the rate of 8.5 lb./100 gals. of spray solution may be added to improve the burndown of existing weeds. Applications of **FBNSM 400** to emerged pearl millet can result in severe crop injury.

RESTRICTIONS

- **Do not** make more than one application of **FBNSM 400** per year.
- **Do not** apply more than 6 fl oz/A (0.188 lb ai/A) per year.

RHUBARB

Apply **FBNSM 400** prior to crop emergence in established rhubarb.

Apply **FBNSM 400** at a rate of 6.0 fl oz/A (0.188 lb ai/A) to dormant rhubarb (before spring green-up) for control or partial control of the weeds listed in Table 2. If weeds are emerged at the time of application, it is advised that a crop oil concentrate (COC) type adjuvant at 1% v/v or a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. Applications of **FBNSM 400** to rhubarb that is not dormant may result in temporary bleaching symptoms. Rainfall or irrigation after the **FBNSM 400** application may increase the risk of injury to emerging rhubarb.

RESTRICTIONS

- **Do not** harvest rhubarb within 21 days following the application of **FBNSM 400**.
- **Do not** make more than one application of **FBNSM 400** per year.
- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) **FBNSM 400** per year.

SORGHUM (GRAIN AND SWEET)

PRE-EMERGENCE APPLICATION

Apply **FBNSM 400** pre-emergence or pre-plant non-incorporated up to 21 days before planting sorghum for control or partial control of the weeds listed in Table 2.

Apply pre-emergence at a rate of 6.0 – 6.4 fl oz/A (0.188 – 0.20 lb ai/A) as a broadcast non-incorporated application prior to sorghum emergence. Applying **FBNSM 400** less than 7 days before sorghum planting will increase the risk of crop injury, especially if irrigation or rainfall is received following the application. Injury symptoms include

temporary bleaching of newly emerging sorghum leaves. Applying **FBNSM 400** more than 7 days (but not more than 21) prior to planting will reduce the risk of crop injury.

If **FBNSM 400** is applied prior to planting, minimize disturbance of the herbicide treated soil barrier during the planting process in order to lessen the potential for weed emergence.

If emerged weeds are present at the time of the pre-emergence application, it is advised that a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v or a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v be added to the spray solution. In addition to COC or NIS, a spray grade UAN at a rate of 2.5% v/v or ammonium sulfate (AMS) at a rate of 8.5 lb./100 gallons of spray solution can be added to the spray solution.

PRE-EMERGENCE APPLICATION RESTRICTIONS

- Do not apply more than 6.4 fl oz/A (0.20 lb ai/A) of **FBNSM 400** per year.
- Do not apply more than 6.4 fl oz/A (0.20 lb ai/A) of **FBNSM 400** per application.
- Do not make more than one application of **FBNSM 400** per year.
- Do not apply **FBNSM 400** to emerged sorghum or severe crop injury may occur.
- Do not use **FBNSM 400** in the production of forage sorghum, sudangrass, sorghum-sudangrass hybrids, or dual purpose sorghum.
- Do not apply **FBNSM 400** to sorghum that is grown on coarse textured soils (e.g., sandy loam, loamy sand, sand).
- In the State of Texas, do not apply **FBNSM 400** to sorghum grown south of Interstate 20 (I-20) or east of Highway 277.

POST-DIRECTED

Apply **FBNSM 400** post-directed to grain sorghum for control or partial control of the weeds listed in Table 1. For best results, apply **FBNSM 400** to actively growing weeds.

Apply at a rate of 3 fl oz/A (0.094 lb ai/A) as a post-directed application when the grain sorghum is at least 8 inches tall, by directing the spray between the crop rows and towards the base of the grain sorghum plant. Direct application of **FBNSM 400** onto grain sorghum foliage can result in crop injury including temporary bleaching. If crop injury does occur, newly emerging leaves following application are typically unaffected.

It is advised that a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v or a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v be added to the spray solution. In addition to COC or NIS, a spray grade Urea Ammonium Nitrate (UAN) at a rate of 2.5% v/v or ammonium sulfate (AMS) at a rate of 8.5 lb./100 gallons of spray solution can be added to the spray solution.

FBNSM 400 may be tank mixed with other herbicides registered for grain sorghum for improved spectrum of weed control. Additionally, these tank mixtures can be used to include a herbicide with a different mode of action to help control or manage the development of resistant weed biotypes. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, 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.

POST-DIRECTED APPLICATION RESTRICTIONS

- Do not make more than one post-directed application of **FBNSM 400** per year.
- Do not apply more than 3.0 fl oz/A (0.094 lb ai/A) of **FBNSM 400** post-directed and not more than 6.4 fl oz/A (0.20 lb ai/A) of **FBNSM 400** per year.
- Do not apply **FBNSM 400** broadcast over-the-top to emerged sorghum or severe crop injury may occur.
- Do not harvest grain sorghum for forage for 30 days following application.
- Do not harvest for grain or stover for 60 days following application.
- Do not apply **FBNSM 400** after the sorghum seedhead has begun to emerge.
- Do not use **FBNSM 400** in the production of forage sorghum, sudangrass, or sorghum-sudangrass hybrids.

SOYBEANS

PRE-EMERGENCE APPLICATION

For pre-emergence control of the weeds listed in Table 2, apply **FBNSM 400** prior to soybean emergence at a rate of 6.0 fl oz/A (0.188 lb ai/A). Use the higher rate for longer residual control. This product may be tank mixed with other registered soybean herbicides. Refer to the tank mix partner label and follow all precautions and restrictions. 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.

If weeds are emerged at the time of application, add either a non-ionic surfactant (NIS) at 1 qt./100 gallons (0.25% v/v) or a crop oil concentrate (COC) at 1 gallon/100 gallons (1% v/v). In addition to NIS or COC, it is also advised to add either ammonium sulfate (AMS) at 8.5-17 lbs./100 gallon (or equivalent).

RESTRICTIONS

- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) of **FBNSM 400** per year.
- **Do not** make more than one application of **FBNSM 400** per year.
- **Do not** apply **FBNSM 400** to emerged soybeans.
- **Do not** graze or feed soybean forage or hay to livestock.

SUGARCANE

Apply **FBNSM 400** by ground for pre-emergence, post-emergence over-the-top or post-emergence directed weed control.

FBNSM 400 may also be applied aerially for pre-emergence or post-emergence weed control in Florida, Louisiana and Texas only.

PRE-EMERGENCE APPLICATIONS

Apply **FBNSM 400** for pre-emergence weed control at 6.0-7.7 fl oz/A (0.188 – 0.24 lb ai/A) after the planting of plant-cane or after harvest of ratoon-cane. For a list of weeds controlled pre-emergence, refer to Table 2. If some weeds are already emerged at the time of application, add a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v or a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v to the spray solution. In addition to COC or NIS, a spray grade UAN at a rate of 2.5% v/v or ammonium sulfate (AMS) at a rate of 8.5 lb./100 gallons of spray solution can be added to the spray solution. For improved pre-emergence weed control, atrazine or ametryn can be tank mixed with **FBNSM 400**. Refer to the tank mix partner label for specific rates and use directions. 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.

POST-EMERGENCE APPLICATIONS

Apply **FBNSM 400** post-emergence at 3.0 fl oz/A (0.094 lb ai/A) for control of the weeds listed in Table 1. Post-emergence applications may be made as a post-over-the-top or as a post-directed spray to the base of the sugarcane. If a pre-emergence application was made earlier in the season, only one post-emergence application can be made. If no pre-emergence application was made earlier in the season, both a post-over-the-top and a post-directed application can be made. For best results, **FBNSM 400** must be applied to actively growing weeds.

For post-emergence applications, it is advised that a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v or a nonionic surfactant (NIS) type adjuvant be added to the spray solution. In addition to COC or NIS, the use of a spray grade UAN (e.g., 28-0-0) at 2.5% v/v or ammonium sulfate (AMS) at a rate of 8.5 lb./100 gallons of spray solution can be added for improved control of weeds.

For additional post-emergence weed control, **FBNSM 400** can be tank mixed with atrazine, asulam-sodium and/or trifloxysulfuron-sodium. Refer to the tank mix product labels for specific rates and use directions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, 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.

RESTRICTIONS

- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBNSM 400** as a pre-emergence application.

- **Do not** apply more than 3.0 fl oz/A (0.094 lb ai/A) of **FBNSM 400** in a post-emergence application.
- **Do not** make more than two applications of **FBNSM 400** per year. If a pre-emergence application of **FBNSM 400** is made, only one post-emergence application is allowed.
- Minimum retreatment interval is 14 days.
- **Do not** apply more than 10.7 fl oz/A (0.334 lb ai/A) of **FBNSM 400** per year.
- **Do not** harvest sugarcane within 114 days following a post-over-the-top application of **FBNSM 400** (114-day PHI).
- **Do not** harvest sugarcane within 100 days following a post-directed application of **FBNSM 400** (100-day PHI).

TURFGRASS USES

FBNSM 400 is applied pre-emergence and post-emergence to provide selective contact and residual control of turfgrass weeds. If applied pre-emergence, **FBNSM 400** is absorbed by the weeds as they emerge from the soil. Pre-emergence activity and control is reduced under dry conditions, and therefore **FBNSM 400** must be activated with 0.15 inches of irrigation if rain hasn't fallen within 10 days of application.

Post-emergent control is obtained by absorption into the soil and contact with foliage. Growth ceases post-application, weeds turn white from chlorophyll loss, and die within three weeks. A repeat application 2-3 weeks after the initial application will improve post-emergence weed control. Add a non-ionic surfactant (NIS) when making post-emergence applications.

Turfgrass color can temporarily become white after treatment, typically occurring 5-7 days post-application and lasting for several weeks. A second application to the same site will cause less whitening of plant tissue.

FBNSM 400 controls weeds prior to and during seeding of certain turfgrasses during turf renovation (see New Seedings). If making pre-emergence application to established turf, tank mix **FBNSM 400** with other pre-emergence herbicides including those containing pendimethalin for longer residual and broad spectrum control.

Apply **FBNSM 400** at reduced rates of 4 fl oz/A (0.125 lb ai/A) or less if tank mixing with atrazine, bentazon, or simazine. Before tank mixing **FBNSM 400** with other herbicides, conduct a compatibility, safety, and efficacy test before treating larger areas. See tank mix partner labels for directions and precautions. The most restrictive directions apply. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, 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.

USE SITES

FBNSM 400 may be applied to commercial and residential turfgrasses. Non-crop area use sites include golf courses, sod farms, athletic fields, parks, residential and commercial properties, cemeteries, airports, and lawns. Do not use on golf course putting greens; maintain a minimum of a 5-foot buffer between putting greens and treated areas.

TURFGRASS USE PRECAUTIONS

- Thoroughly clean application equipment after use to avoid injury to sensitive plants.
- To avoid injury to sensitive species, keep traffic out of treated areas until sprays have dried; irrigate soil lightly to move **FBNSM 400** from turf foliage before resuming normal irrigation.

TURFGRASS USE RESTRICTIONS

- **Do not** overspray or allow spray to drift to ornamentals or flower beds and gardens. Roses and daylilies are particularly sensitive to **FBNSM 400**.
- **Do not** apply more than 16 fl oz/A (0.50 lb ai/A) of **FBNSM 400** per year.
- **Do not** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBNSM 400** per application.
- **Do not** make more than two applications of **FBNSM 400** per acre per year.
- Minimum retreatment interval is 14 days.
- **Do not** plant any crop other than turfgrass for 18 months post-application of **FBNSM 400** to avoid turfgrass injury.
- **Do not** apply organophosphate or carbamate insecticides within 7 days of applying **FBNSM 400**.

- **Residential Lawns:** Do not make broadcast applications for pre- and post-emergent weed control unless the home lawn is being reseeded and/or renovated as whitening of some turfgrasses may occur.
- **Do not** apply **FBNSM 400** through any type of irrigation system.
- **Do not** apply by air.
- **Do not** use treated clippings to mulch trees or vegetable/flower gardens.
- **Do not** apply this product on bentgrass, *Poa annua*, kikuyugrass, zoysiagrass, seashore paspalum, and bermudagrass when plant injury is unacceptable. Maintain a 5-foot buffer between treated areas and bentgrass or *Poa annua* greens.
- **Do not** apply over the top of exposed roots of trees and ornamentals.
- **Do not** use on golf course putting greens; maintain a minimum of a 5-foot buffer between putting greens and treated areas.

Turfgrass Species Controlled by **FBNSM 400**

Species	Application Rate (Fl Oz per Acre)
Kentucky bluegrass (<i>Poa pratensis</i>)	5-8 fl oz (0.157-0.25 lb ai)
Centipedegrass (<i>Eremochloa ophiuroides</i>)	5-8 fl oz (0.157-0.25 lb ai)
Buffalograss (<i>Buchloe dactyloides</i>)	5-8 fl oz (0.157-0.25 lb ai)
Tall fescue (<i>Festuca arundinacea</i>)	5-8 fl oz (0.157-0.25 lb ai)
Perennial ryegrass* (<i>Lolium perenne</i>)	5 fl oz (0.157 lb ai)
Fine fescue* (creeping red, chewings and hard) (<i>Festuca</i> spp.)	5 fl oz (0.157 lb ai)
St. Augustinegrass* (grown for sod) (<i>Stenotaphrum secundatum</i>)	4 fl oz (0.125 lb ai)

*See additional rate instructions below.

APPLICATION INSTRUCTIONS

PRE-EMERGENCE APPLICATIONS

Apply 4-8 fl oz/A (0.125-0.25 lb ai/A) of **FBNSM 400** in at least 30 gallons of water per acre before seeds germinate and as close to seed germination as possible. Combine this product with another pre-emergence herbicide including pendimethalin for extended control of crabgrass and foxtail.

PRE-EMERGENCE APPLICATION PRECAUTIONS

- **FBNSM 400** is most effective on established turf when applied post-emergence unless it is combined with another soil active herbicide.

PRE-EMERGENCE APPLICATION RESTRICTIONS

- **DO NOT** apply more than 16 fl oz./A (0.50 lb. ai/A) of **FBNSM 400** per year for all Turfgrass applications.
- **DO NOT** make more than two applications per acre of **FBNSM 400** per year for all Turfgrass applications.
- Minimum retreatment interval is 14 days.
- **DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBNSM 400** per application.
- **DO NOT** exceed 5 fl oz/A (0.157 lb ai/A) of **FBNSM 400** per application to perennial ryegrass, fine fescues, or mixed stands that consist of >50% perennial ryegrass and/or fine fescue.
- **St. Augustinegrass sod: DO NOT** exceed 4 fl oz/A (0.125 lb ai/A) per year.

APPLICATION TO NEW SEEDINGS/NEW LAWNS

Apply 5-8 fl oz/A (0.157 – 0.25 lb ai/A) **FBNSM 400** in at least 30 gallons of water per acre before seeding or after seeding of sensitive turfgrass species listed below, except fine fescue, as application to fine fescue can reduce grass density. **FBNSM 400** can be effectively used on grass seed blends that contain <20% by weight hard/fine fescue. For optimal control, apply at grass seeding or as close to seeding as possible.

NEW SEEDINGS/NEW LAWNS RESTRICTIONS

- **DO NOT** spray on newly germinated turfgrass. Delay treatment until grass has been mowed 2-4 times and/or 4 weeks after emergence (whichever is longer).
- **DO NOT** apply more than 16 fl oz./A (0.50 lb. ai/A) of **FBNSM 400** per year for all Turfgrass applications.
- **DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBNSM 400** per application.
- **DO NOT** make more than two applications of **FBNSM 400** per acre per year for all Turfgrass applications.

- Minimum retreatment interval is 14 days.

POST-EMERGENCE APPLICATION INSTRUCTIONS

Apply 4-8 fl oz/A (0.125-0.25 lb ai/A) of **FBNSM 400** in at least 30 gallons of water per acre with a NIS surfactant. Make a repeat application 2-3 weeks later for optimal weed control. Apply to young, actively growing weeds.

POST-EMERGENCE APPLICATION PRECAUTIONS

- Moisture stress and application to mature weeds can reduce herbicide efficacy.

BENTGRASS (*AGROSTIS* SPP.) /NIMBLEWEED (*MUHLENBERGIA SCHREBERI*) TREATMENT

Apply 5 fl oz/A (0.157 lb ai/A) **FBNSM 400** in at least 30 gallons of water per acre combined with a NIS surfactant at 2-3 week intervals for a maximum of 3 applications. For optimal weed control, apply in late summer/early fall just prior to new growth.

ST. AUGUSTINEGRASS (SOD USES ONLY) AND CENTIPEDEGRASS TREATMENT

Apply to established turf ONLY.

ST. AUGUSTINEGRASS (SOD USES ONLY) AND CENTIPEDEGRASS RESTRICTIONS

- **Do not** apply more than 16 fl oz/A (0.50 lb ai/A) of **FBNSM 400** per year for all Turfgrass applications.
- **Do not** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBNSM 400** per application.
- Do not make more than two applications per acre per year of **FBNSM 400** for all Turfgrass applications.
- Minimum retreatment interval is 14 days.
- Do not exceed 4 fl oz/A (0.125 lb ai/A) per application of **FBNSM 400** if tank mixing with Atrazine or Simazine.
- **Do not** exceed 0.5 lb./A atrazine or simazine active ingredient per application. See atrazine/simazine labels for precautions and restrictions.

DORMANT BERMUDAGRASS APPLICATION ONLY

Apply 5 fl oz/A (0.157 lb ai/A) of **FBNSM 400** to control winter weeds listed in the Weeds Controlled table below. Make a repeat application 2-3 weeks later. Application of **FBNSM 400** to semi-dormant turf will cause bermudagrass whitening.

SPOT APPLICATIONS

Spray Mix	Application Rate	Rate of this Product	Rate of NIS Adjuvant
2 gallons	1 gallon per 1,000 sq. ft.	1 teaspoon	3 teaspoons

SPOT APPLICATION RESTRICTIONS

- **DO NOT** apply more than 16 fl oz./A (0.50 lb. ai/A) of **FBNSM 400** per year for all Turfgrass applications.
- **DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBNSM 400** per application.
- **DO NOT** make more than two applications of **FBNSM 400** per acre per year for all Turfgrass applications.
- Minimum retreatment interval is 14 days.

WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION

Apply **FBNSM 400** with a grass pre-emergence herbicide except when used to control weeds in new seedings. **FBNSM 400** will control the following weeds using pre-emergence application:

Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crusgalli</i>
Bentgrass (Creeping)	<i>Agrostis stolonifera</i>
Bluegrass (Annual) – suppression only	<i>Poa annua</i>
Buckhorn Plantain	<i>Plantago lanceolata</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed (Common)	<i>Stellaria media</i>
Chickweed (Mouseear)	<i>Cerastium vulgatum</i>
Clover (Large Hop)	<i>Trifolium aureum</i>
Clover (White)	<i>Trifolium repens</i>

Common Name	Scientific Name
Crabgrass (Large)	<i>Digitaria sanguinalis</i>
Crabgrass (Smooth)	<i>Digitaria ischaemum</i>
Crabgrass (Southern)	<i>Digitaria ciliaris</i>
Foxtail (Yellow)	<i>Setaria glauca</i>
Galinsoga	<i>Galinsoga ciliate</i>
Lambsquarters (Common)	<i>Chenopodium album</i>
Pigweed (Redroot)	<i>Amaranthus retroflexus</i>
Pigweed (Smooth)	<i>Amaranthus hybridus</i>
Purslane (Common)	<i>Portulaca oleracea</i>
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Smartweed (Pale)	<i>Polygonum lapathifolium</i>
Smartweed (Pennsylvania)	<i>Polygonum pennsylvanicum</i>
Speedwell (Persian)	<i>Veronica persica</i>
Speedwell (Purslane)	<i>Veronica peregrine</i>
Wild Carrot	<i>Daucus carota</i>

WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION

Make a second application of **FBNSM 400** 2-3 weeks after initial treatment. For optimal control add a NIS-type surfactant and apply to young, actively growing weeds. **FBNSM 400** will control the following weeds using post-emergence application:

Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crusgalli</i>
Bentgrass (Creeping)	<i>Agrostis stolonifera</i>
Buckhorn Plantain	<i>Plantago lanceolata</i>
Buttercup	<i>Ranunculus sardous</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed (Common)	<i>Stellaria media</i>
Chickweed (Mouseear)	<i>Cerastium vulgatum</i>
Clover (Large Hop)	<i>Trifolium aureum</i>
Clover (White)	<i>Trifolium repens</i>
Crabgrass (Large)*	<i>Digitaria sanguinalis*</i>
Crabgrass (Smooth)*	<i>Digitaria ischaemum*</i>
Crabgrass (Southern)*	<i>Digitaria ciliaris*</i>
Curly dock	<i>Rumex crispus</i>
Dandelion (Catsear)	<i>Hypochoeris radicata</i>
Dandelion (Common)	<i>Taraxacum officinale</i>
Florida Betony	<i>Stachys floridana</i>
Florida Pusley	<i>Richardia scabra</i>
Foxtail (Yellow)	<i>Setaria glauca</i>
Galinsoga	<i>Galinsoga ciliate</i>
Goosegrass*	<i>Eleusine indica*</i>
Ground Ivy	<i>Glechoma hederacea</i>
Healall	<i>Prunella vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Lambsquarters (Common)	<i>Chenopodium album</i>
Lawn Burweed	<i>Soliva sessilis</i>
Lovegrass (Tufted)	<i>Eragrostis pectinacean</i>
Marestail	<i>Conyza Canadensis</i>
Nimblewill	<i>Muhlenbergia schreberi</i>
Nutsedge (Yellow)	<i>Cyperus esculentus</i>
Oxalis	<i>Oxalis stricta</i>
Pigweed (Redroot)	<i>Amaranthus retroflexus</i>
Pigweed (Smooth)	<i>Amaranthus hybridus</i>
Purslane (Common)	<i>Portulaca oleracea</i>

Common Name	Scientific Name
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Smartweed (Pale)	<i>Polygonum lapathifolium</i>
Smartweed (Pennsylvania)	<i>Polygonum pennsylvanicum</i>
Sowthistle	<i>Sonchus oleraceus</i>
Swinecress	<i>Coronopus didymus</i>
Thistle (Canada)	<i>Cirsium arvense</i>
Verbena	<i>Verbena hastate</i>
Wild Carrot	<i>Daucus carota</i>
Wild Violet	<i>Viola pratincole</i>
Windmillgrass	<i>Chloris verticillata</i>

*For optimal control, apply to less than 4 tiller crabgrass and goosegrass.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep container tightly closed when not in use. Do not store near seed, fertilizers, or foodstuffs. Can be stored at temperatures as low as -20°F. Keep away from heat and flame.

PESTICIDE DISPOSAL: Open dumping is prohibited. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

[Nonrefillable Container (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

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[Optional graphics to be used on any panel of final market label:]





FARMERS BUSINESS NETWORKSM

[any color]

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

FBNSM 400
(ABN: FBNSM MESOTRIONE 4SC)**ACTIVE INGREDIENT:**

Mesotrione: (CAS No. 104206-82-8).....40.0%

OTHER INGREDIENTS:.....60.0%**TOTAL:**.....100.0%

Contains 4 lbs. active ingredient mesotrione per gallon.

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID	
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> 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 IN EYES:	<ul style="list-style-type: none"> 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.
IF INHALED:	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24-hour Medical Emergency Assistant (Human or Animal), call 1-800-222-1222. For Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), call ChemTrec at 1-800-424-9300.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep container tightly closed when not in use. Do not store near seed, fertilizers, or foodstuffs. Can be stored at temperatures as low as -20°F. Keep away from heat and flame.**PESTICIDE DISPOSAL:** Open dumping is prohibited. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.**CONTAINER HANDLING:****[Nonrefillable Container (five gallons or less):]**
Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.**[Nonrefillable Container (greater than five gallons):]**
Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

See label booklet for additional Precautionary Statements and Directions for Use.

EPA Reg. No. 92115-NEW
EPA Est. No. xxxxxx-xx-xxx

Lot No.: see container

Net Contents: _____**Manufactured For:**
FBN Inputs LLC
388 El Camino Real
San Carlos, CA 94070