



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

EPA Reg. Number:

92115-14

Date of Issuance:

8/14/18

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
 (under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

FBN 40

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. 92115-14.”

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](mailto:pabel.lisa@epa.gov).

**MESOTRIONE    GROUP    27    HERBICIDE**

**FBN<sup>SM</sup> 40**  
**(ABN: FBN<sup>SM</sup> Mesotrione 4; FBN<sup>SM</sup> Mesotrione 4 Turf)**

Sublabel A (Pages 1-20) FBN<sup>SM</sup> 40: Controls annual broadleaf weeds in Soybean, Corn (field, seed, yellow pop, sweet), and other listed crops

Sublabel B (Pages 21-27) ABN: FBN<sup>SM</sup> 40 Turf: Provides selective and residual control of weeds in Ornamental Turfgrasses

**ACTIVE INGREDIENT:**

**By  
Weight**

Mesotrione: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione ..... 40.0%

**OTHER INGREDIENTS:**..... 60.0%

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

Contains 4 lbs. Mesotrione per gallon.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

<b>FIRST AID</b>	
<b>IF ON SKIN</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOTLINE NUMBER</b>	
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.	

[Optional referral statements when booklets and container labels are used:

See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions For Use.

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

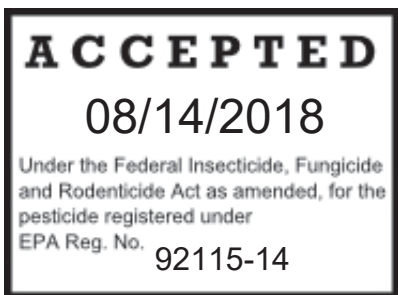
See label booklet for additional Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for Complete Directions For Use.]

**EPA Reg. No.: 92115-NEW**

**EPA Est. No.: XXXXX-XX-XXX**

**Net Contents:** \_\_\_\_\_



**Manufactured for:**  
FBN Inputs LLC  
388 El Camino Real  
San Carlos, CA 94070

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

### PERSONAL PROTECTION EQUIPMENT (PPE)

#### APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, polyethylene, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils)

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 thoroughly with soap and water after handling and 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 and wash contaminated clothing before reuse.
- 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 or 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 of 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 use or store near heat or open flame. Do not use with or store near any oxidizing or reducing agents.

### 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 the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

PPE required for early entry to treated areas that is 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 (barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, polyethylene, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils)

## PRODUCT INFORMATION

**FBN<sup>SM</sup> 40** is a systemic pre-emergence and post-emergence herbicide for selective contact and residual control of broadleaf weeds in labeled crops. In pre-emergence applications, weeds take up the product through the soil during weed emergence. Dry weather conditions reduce pre-emergent effectiveness of **FBN<sup>SM</sup> 40**. At least ¼-inch of rainfall must occur within 7-10 days of application; rotary hoeing activates **FBN<sup>SM</sup> 40**. In post-emergence applications, vulnerable weeds take up the product through treated foliage and stop growing soon after application. It can take up to two weeks for weeds to die. **FBN<sup>SM</sup> 40** is absorbed by soil and/or through foliage of emerged weeds.

**FBN<sup>SM</sup> 40** does not control most species of grass weeds. **FBN<sup>SM</sup> 40** can be tank-mixed with other herbicides registered to control grass weeds (see tank-mix information in this label for additional information). **FBN<sup>SM</sup> 40** can be used in combination with a burndown herbicide prior to planting to provide weed control in field corn, seed corn, yellow popcorn, and sweet corn. For additional information on tank mixtures, refer to the **Use Restrictions**, **Use Precautions**, and specific crop directions for use sections of this label.

### RESISTANCE MANAGEMENT FOR **FBN<sup>SM</sup> 40** (GROUP 27 HERBICIDE)

The efficacy of **FBN<sup>SM</sup> 40** 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, **FBN<sup>SM</sup> 40** is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40** 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 year of **FBN<sup>SM</sup> 40**).

## 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](http://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 **FBN<sup>SM</sup> 40** 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) must be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

## USE PRECAUTIONS - **FBN<sup>SM</sup> 40**

Severe corn injury and/or yield loss can occur:

- From post-emergent application of **FBN<sup>SM</sup> 40** to corn treated with terbufos or chlorpyrifos.
- If foliar post-emergent applications of **FBN<sup>SM</sup> 40** are made to corn in a tank mix with any organophosphate or carbamate insecticide.
- If an organophosphate or carbamate insecticide is applied foliar post-emergence within 7 days before or 7 days after **FBN<sup>SM</sup> 40** application.
- When weeds are stressed due to drought, heat, lack of fertility, flooding, or prolonged cool temperatures, control can be reduced or delayed since the weeds are not actively growing. Weed escapes or regrowth may occur when application is made under prolonged stress conditions. Optimum weed control will be obtained if an application of **FBN<sup>SM</sup> 40** is made following label directions when weeds are actively growing.
- **FBN<sup>SM</sup> 40** may be applied with pyrethroid type insecticides (e.g. bifenthrin, lambda-cyhalothrin, permethrin).

## USE RESTRICTIONS - **FBN<sup>SM</sup> 40**

- **DO NOT** apply this product to white popcorn or ornamental (Indian) corn.
- **DO NOT** cultivate corn within 7 days before or after application of this product as weed control may be reduced.
- **DO NOT** apply this product through any type of irrigation system unless specified under the specific crop section of the label.
- **DO NOT** apply this product with suspension fertilizers as the carrier.
- **DO NOT** apply this product post-emergence in a tank mix with emulsifiable concentrate grass herbicides, unless specifically directed under one of the tank mix sections of this label, or crop injury can occur.
- **DO NOT** make aerial applications of this product unless specified in the specific crop directions of this label.



## 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).

## AERIAL APPLICATION INSTRUCTIONS FOR CORN AND SUGARCANE

Aerial application of **FBN<sup>SM</sup> 40** is permitted only on corn and sugarcane. Make aerial applications with nozzles that produce coarse to very coarse droplets. DO NOT use nozzles producing fine to medium size droplets.

### CORN

**FBN<sup>SM</sup> 40** is approved for aerial application for pre-emergence and post-emergence control in corn in the states of: 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

**FBN<sup>SM</sup> 40** is approved for aerial application for pre-emergence and post-emergence control in sugarcane in the states of: Florida, Louisiana, and Texas. Make aerial applications in a minimum of 2 gallons water per acre.



## APPLICATION INFORMATION

### PRE-EMERGENCE GROUND APPLICATION INSTRUCTIONS

Apply **FBN<sup>SM</sup> 40** pre-emergence with a carrier volume of 10-60 gals./A.

Space spray nozzles of the same size and type uniformly to provide accurate and uniform coverage. Use medium to coarse droplet size nozzles to ensure coverage and avoid drift. Apply in a spray volume of 10-60 gals./A with water or liquid fertilizer (NOT suspension fertilizer) as the carrier. Use a pump that will maintain pump pressure of 35-40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures can be used with extended range or drift reduction nozzles.

Maintain constant agitation until spraying is complete, even if stopping for brief periods of time. If agitation is stopped for longer than 5 minutes, re-suspend the spray solution by running on full agitation prior to spraying.

### POST-EMERGENCE GROUND APPLICATION INSTRUCTIONS

Space spray nozzles of the same size and type uniformly to provide accurate and uniform coverage. Use medium to coarse droplet size nozzles to ensure coverage and avoid drift. Complete 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, at least 15 inches above the crop canopy.

Apply in a spray volume of 10-30 gals./A with water as the carrier. Use a pump that will maintain pump pressure of 35-40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures can be used with extended range or drift reduction nozzles. If weed foliage is dense, use a minimum of 20 gals.

Apply with flat fan nozzles 80°-100° for optimum post-emergent coverage. Do not use flood jet nozzles or controlled droplet application equipment for post-emergence applications.

Angle nozzles forward 45° to enhance product penetration and provide better coverage. In-line strainers and nozzle screens must be a minimum of 50-mesh or coarser.

Maintain constant agitation until spraying is complete, even if stopping for brief periods of time. If agitation is stopped for longer than 5 minutes, resuspend the spray solution by running on full agitation prior to spraying.

## USE DIRECTIONS WITH SPRAY ADDITIVES

### POST-EMERGENCE ADJUVANTS

It is advised that any adjuvant used with **FBN<sup>SM</sup> 40** meet the certification program requirements of the Chemical Producers and Distributors Association (CPDA). The following directions are mainly for use in corn. For other crops refer to the specific crop use directions.

### ADJUVANT USE IN POST-EMERGENCE APPLICATIONS TO FIELD AND SEED CORN

After corn emerges, add 1.0 gal./100 gals. of water (1.0% v/v) Crop Oil Concentrate (COC) to the spray solution. 1 qt./100 gals. of water (0.25% v/v) of a non-ionic surfactant (NIS) can be used, but better weed control is achieved with the use of a COC compared to NIS.

**DO NOT** use methylated seed oil (MSO) or MSO adjuvant blends for post-emergence applications of **FBN<sup>SM</sup> 40** or severe crop injury can occur. **DO NOT** use MSO adjuvants unless it is specifically permitted in the **Tank Mixtures for Corn** section of this label.

In addition to COC, add 2.5% (v/v) of a spray grade UAN (e.g., 28-0-0) to the spray solution, or 8.5 lbs./100 gallons of ammonium sulfate (AMS), except if precluded elsewhere on this label.

### ADJUVANT USE POST-EMERGENCE TO SWEET AND YELLOW CORN

**DO NOT** use UAN or AMS on sweet and yellow corn as severe crop injury can occur.

Use a NIS instead of a COC to reduce the likelihood of crop injury. COCs will maximize weed control under dry growing conditions, but will significantly injure crops under lush growing conditions. To optimize weed control, add atrazine wherever rotational or local atrazine restrictions allow.

### PRE-EMERGENCE ADJUVANT USE

Any adjuvant approved for use on agriculture is permitted when making **FBN<sup>SM</sup> 40** pre-plant or pre-emergence applications. MSO adjuvants perform better than COC and NIS adjuvants under pre-plant/pre-emergence conditions. UAN and AMS adjuvants will provide better weed control than not using any adjuvant. If **FBN<sup>SM</sup> 40** is being tank-mixed with another registered herbicide, refer to the tank mix partner label for adjuvant 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.

## SPRAY EQUIPMENT CLEANING

It is important to follow the procedures below for cleaning equipment before spraying a crop other than corn. Mix only as much spray solution as is needed.

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare cleaning solution of 1 gal. of household ammonia per 25 gals. of water. Commercial spray tank cleaners can be used in lieu of ammonia/water solution.
3. Using a pressure washer, clean the inside of the spray tank with the cleaning solution. Wash ALL parts of the tank, including the inside top surface. If a pressure washer is not available, 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 spray and recirculate the cleaning solution for a minimum of 15 minutes. All visible deposits of spray solution must be removed from the spray tank before making any other applications.
4. Flush hoses, spray lines, and nozzles with cleaning solution for a minimum of 1 minute.
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 previous steps.
8. Rinse the complete spray system with clean water.

## MIXING INSTRUCTIONS

See the **Crop Use Directions** sections of the label for specific tank mix instructions.

**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.**

### MIXING RESTRICTIONS

- **DO NOT** exceed any dosage rates specified on labels.
- **DO NOT** mix this product with any product containing a label prohibition against such mixing.
- **DO NOT** tank mix **FBN<sup>SM</sup> 40** with any other insecticide, fungicide, fertilizer, or adjuvant not specified on this label without first testing compatibility, as poor mixing can occur. Test compatibility on a small scale (such as a jar test) before actual tank mixing.

### MIXING PROCEDURE

1. Use sprayers in good operating condition with good agitation. Ensure that the sprayer is cleaned according to the label instructions of the product label used prior to **FBN<sup>SM</sup> 40**. For post-emergence applications, use clean water only for the spray solution. Ensure that all in-line strainers and nozzle screens in the sprayer are 50-mesh or coarser. **DO NOT** use screens finer than 50-mesh.
2. Use liquid fertilizer (NOT suspension fertilizer) as the carrier for pre-emergence applications.
3. Start filling spray tank or pre-mix tank with clean water and begin agitation. Maintain constant agitation.
4. When sprayer or pre-mix is half full of water, add AMS, maintaining agitation until dispersed.
5. Add **FBN<sup>SM</sup> 40** slowly and agitate until completely dissolved. Wait at least 1 minute after the last of the **FBN<sup>SM</sup> 40** has been added to allow for complete dispersion. If using cold water, a longer agitation period may be required to ensure adequate dispersing.
6. If tank mixing, add the tank mix product.
7. Add the adjuvant and UAN, if needed, and continue to fill tank to desired level with water.

## FBN<sup>SM</sup> 40 WEED CONTROL TABLES

**FBN<sup>SM</sup> 40** applied as directed in this label will control or partially control the weeds listed in Tables 1 and 2.

Partial control means either erratic control (good to poor control) or control that is below what is generally regarded as acceptable control for commercial weed control.

For best post-emergence results, apply **FBN<sup>SM</sup> 40** to actively growing weeds.

Dry weather following pre-emergence applications may reduce efficacy of residual weed control. If irrigation is available, apply ½-1-inch water after pre-emergence application. If irrigation is not available, make a uniform shallow cultivation as soon as weeds emerge.

**FBN<sup>SM</sup> 40** applied alone or in a tank-mix with atrazine will not provide consistent or adequate control of weeds that are resistant to post-emergence HPPD inhibiting herbicides.

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

**Table 1. Weeds Controlled with Post-Emergence Applications of FBN<sup>SM</sup> 40**

Common Name	Scientific Name	FBN <sup>SM</sup> 40	FBN <sup>SM</sup> 40 <sup>1</sup>
		3 Fl oz/A (0.094 lb ai/A) Applied Alone	2.5-3.0 Fl oz/A (0.079-0.094 lb ai/A)+ Atrazine
Apply to Weeds <5" Tall <sup>2</sup>			
Amaranth, palmer	<i>Amaranthus palmeri</i>	PC <sup>+</sup>	C <sup>+</sup>
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 <sup>+</sup>	C <sup>+</sup>
Buckwheat, wild	<i>Polygonum convolvulus</i>	PC	PC
Buffalobur	<i>Solanum rostratum</i>	C	C
Burcucumber	<i>Sicyos angulatus</i>	PC	C <sup>+</sup>
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 <sup>+</sup>	C <sup>+</sup>
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 stramonium</i>	C	C
Horseweed (maretail)	<i>Coryza canadensis</i>	PC	C
Knotweed, prostrate	<i>Polygonum aviculare</i>	PC	PC
Kochia	<i>Kochia scoparia</i>	PC <sup>+</sup>	C <sup>+</sup>
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 ptychanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	C
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 spp.</i>	C	C
Pusley, Florida	<i>Richardia scabra</i>	C <sup>+</sup>	C <sup>+</sup>
Ragweed, common	<i>Ambrosia artemisiifolia</i>	PC	C
Ragweed, giant	<i>Ambrosia trifida</i>	C <sup>+</sup>	C
Sesbania, hemp	<i>Sesbania exaltata</i>	C	C
Sida, prickly (teaweed)	<i>Sida spinosa</i>	NC	C <sup>+</sup>
Smartweed, ladysthumb	<i>Polygonum persicaria</i>	C <sup>+</sup>	C
Smartweed, pale	<i>Polygonum lapathifolium</i>	C <sup>+</sup>	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C <sup>+</sup>	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 <sup>+</sup>	C
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C <sup>+</sup>	C

<sup>1</sup>FBN<sup>SM</sup> 40 tank mixture with atrazine is approved only for use on corn and sugarcane.

<sup>2</sup>Weeds can be controlled at larger than listed sizes; however, to protect crop yield, manage weed resistance, and provide effective control, treat weeds before they reach 5" tall.

\*Apply before weeds exceed 3" tall.

C = Control      NC = Not Controlled      PC = Partial Control

**Table 2. Weeds Controlled with Pre-Emergence Applications of FBN<sup>SM</sup> 40**

Common Name	Scientific Name	FBN <sup>SM</sup> 40 Applied Alone	FBN <sup>SM</sup> 40 + Atrazine <sup>1</sup>
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
Carpetweed	<i>Mollugo verticillata</i>	C	C
Chickweed, common	<i>Stellaria media</i>	C	C
Cocklebur, common	<i>Xanthium strumarium</i>	PC	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	PC	PC
Galinsoga	<i>Galinsoga parviflora</i>	C	C
Jimsonweed	<i>Datura stramonium</i>	C	C
Kochia	<i>Kochia scoparia</i>	PC	C
Lambsquarters, common	<i>Chenopodium album</i>	C	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
Nightshade, Eastern black	<i>Solanum ptychanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	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
Ragweed, common	<i>Ambrosia artemisiifolia</i>	C	C
Ragweed, giant	<i>Ambrosia trifida</i>	PC	C
Smartweed, ladythumb	<i>Polygonum persicaria</i>	C	C
Smartweed, pale	<i>Polygonum lapathifolium</i>	C	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C	C
Sunflower, common	<i>Helianthus annuus</i>	PC	C
Velvetleaf	<i>Abutilon theophrasti</i>	C	C
Waterhemp, common	<i>Amaranthus rudis</i>	C	C
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C	C

<sup>1</sup>FBN<sup>SM</sup> 40 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      PC = Partial Control

## ROTATIONAL CROP INTERVALS

If FBN<sup>SM</sup> 40 is applied alone, follow the crop rotation intervals listed below in Table 3. If FBN<sup>SM</sup> 40 is tank-mixed with other products, then follow the most restrictive product's crop rotation interval.

**Table 3. Time Interval between FBN<sup>SM</sup> 40 Application and Replanting/Planting of Rotational Crop**

Replant/Rotational Interval	Crop
Anytime	Asparagus, Corn (all types), Cranberry, Flax, Kentucky bluegrass grown for seed, Pearl Millet, Oats, Rhubarb, Ryegrass (perennial and annual) grown for seed, Sorghum (grain and sweet), Sugarcane, Tall fescue grown for seed
4 Months	Small grain cereals (wheat, barley, rye)
10 Months	Alfalfa, Blueberry, Canola, Cotton, Currant, Lingonberry, Okra, Peanuts, Peas*, Potato, Rice, Snap Beans*, Soybeans, Sunflowers, Tobacco
18 Months	Cucurbits, Dry beans, Red Clover, Sugar Beets, All other crops

\*Plant these rotation crops ONLY if the criteria listed below have been met. If all criteria have NOT been met, plant peas and snap beans a minimum of 18 months following FBN<sup>SM</sup> 40 application.

- A minimum of 20 inches of rainfall plus irrigation has occurred between application and planting of the rotational crop.
- Soil pH is greater than 6.0.
- 3 fl oz/A (0.094 lb ai/A) or less of this product has been applied no later than June 30<sup>th</sup> the year preceding rotational crop planting.
- No other HPPD herbicides (including, but not limited to, products containing isoxaflutole, mesotrione, tembotrione, or topramezone) were applied the year prior to planting peas and snap beans.
- **Do not** plant peas or snap beans on sand, sandy loam, or loamy sand soils in Minnesota or Wisconsin.



## CROP USE DIRECTIONS

### CROP USE DIRECTIONS – CORN

Apply **FBN<sup>SM</sup> 40** by ground for pre-emergence or post-emergence weed control in field corn, seed corn, yellow popcorn, and sweet corn. Apply **FBN<sup>SM</sup> 40** to corn up to 30" tall or up to the 8-leaf stage of corn growth to control broadleaf and grass weeds listed in Tables 1 and 2.

Aerial applications of **FBN<sup>SM</sup> 40** can be made pre-emergence or post-emergence 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.**

See seed company instructions for use on field corn inbred lines. Special adjuvant restrictions must be followed for post-emergence applications of **FBN<sup>SM</sup> 40** in yellow popcorn or sweet corn (see the **Spray Additives** section of this label). Do not apply **FBN<sup>SM</sup> 40** to white popcorn or ornamental (Indian) corn.

Post-emergence application of **FBN<sup>SM</sup> 40** to yellow popcorn and sweet corn designated as Clearfield®, LibertyLink® and Roundup Ready may cause crop bleaching. Bleach is transitory and will not affect final yield or quality. Herbicide sensitivity, however, can vary widely in yellow popcorn and sweet corn designated as Clearfield®, LibertyLink® and Roundup Ready and all of these have not been tested. Contact your local popcorn/sweet corn company, Fieldman, or University Specialist to learn about Clearfield®, LibertyLink® and Roundup Ready instructions before making a post-emergence application of **FBN<sup>SM</sup> 40** to yellow popcorn or sweet corn. Do not include nitrogen based adjuvants (UAN or AMS) when making post-emergence applications of **FBN<sup>SM</sup> 40** to yellow popcorn or sweet corn.

Temporary transient bleaching may occur in field corn treated with **FBN<sup>SM</sup> 40** post-emergence under extreme weather conditions or when the crop is under stress. Field corn will quickly outgrow this condition and develop normally.

### CORN RESTRICTIONS

- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** make more than 2 applications of **FBN<sup>SM</sup> 40** per year.
- **Do not** exceed 7.7 fl oz/A (0.24 lb ai/A) of **FBN<sup>SM</sup> 40** in a single application.
- Minimum retreatment interval is 14 days.
- **Do not** feed or harvest forage, grain, or stover within 45 days after application.

### **FBN<sup>SM</sup> 40 USED ALONE – POST-EMERGENCE**

Apply 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).

Apply to actively growing weeds. See Table 1 for a complete list of weeds controlled. Susceptible weeds that emerge post-application may be controlled after the herbicide is absorbed into the soil. **FBN<sup>SM</sup> 40** will not control most grass weeds.

Two post-emergence applications of **FBN<sup>SM</sup> 40** may be made under the following restrictions:

- Only one post-emergence application may be made if **FBN<sup>SM</sup> 40** has been applied pre-emergence.
- **Do not** exceed a total of 7.7 fl oz/A (0.24 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** make more than 2 applications of **FBN<sup>SM</sup> 40** per year.
- Minimum retreatment interval is 14 days.
- Applications made at rates lower than 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** post-emergence may not provide adequate weed control and may result in reduced residual control.
- **Do not** exceed a total of 6.0 fl oz/A (0.19 lb ai/A) of **FBN<sup>SM</sup> 40** for the two post-emergence applications.
- If a post-emergence application of **FBN<sup>SM</sup> 40** was made to ground that received pre-emergence treatment of another mesotrione-containing herbicide, atrazine must be tank mixed with **FBN<sup>SM</sup> 40**.
- If mixing **FBN<sup>SM</sup> 40** with atrazine, do not apply to corn taller than 12".
- Treat corn up to 30" tall or up to the 8-leaf stage of growth.
- **Do not** harvest, forage, or stover within 45 days post-application.

### **FBN<sup>SM</sup> 40 USED ALONE – PRE-EMERGENCE**

Apply 6.0-7.7 fl oz/A (0.188-0.24 lb ai/A) by ground sprayer in 10-30 gals. of water per acre to control broadleaf weeds (up to 80 gals. if applied with liquid fertilizer). See Table 2 for a complete list of weeds controlled. **FBN<sup>SM</sup> 40** can be tank mixed with other approved pre-emergence grass herbicides to control grasses. Refer to the tank mix section for a list of tank-mix 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.

### **FBN<sup>SM</sup> 40 TANK MIXTURES FOR CORN**

Apply **FBN<sup>SM</sup> 40** in tank mix with other registered herbicides to improve spectrum of weed control in burndown, pre-emergence, or post-emergence applications. These tank mixtures can also be used to include a different mode of action

herbicide to control and 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 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.

### BURNDOWN TANK MIXTURES IN CORN

Apply **FBN<sup>SM</sup> 40** in tank mixture with other registered herbicides for burndown and residual weed control.

Apply 3.0 fl oz/A (0.094 lb ai/A **FBN<sup>SM</sup> 40** with paraquat, glyphosate, and/or dicamba for improved broadleaf weed control with limited residual control before planting corn and before corn emergence. For better residual control, apply 6.0-7.7 fl oz/A (0.188 – 0.24 lb ai/A) **FBN<sup>SM</sup> 40** (see Table 2) with the products listed. Use the adjuvant system specified by the burndown herbicide. 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.

### PRE-EMERGENCE TANK MIXTURE IN CORN

Apply 5.3-7.7 fl oz/A (0.167 – 0.24 lb ai/A) of **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40** applied pre-emergence.

**Table 4. FBN<sup>SM</sup> 40 Tank Mixtures for Pre-Emergence Application in Corn**

Refer to the individual product labels of the products listed for precautionary statements, restrictions, use 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

See Table 5 below for a list of tank mixtures that can be applied after corn has emerged. Do not apply less than 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** unless specified on this label, as a loss of residual control can occur.

Always add an appropriate adjuvant to the spray tank (See the **Spray Additives** section of this label). Refer to the individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds controlled. Not all of the tank mix pesticides listed are registered for use on field corn, yellow popcorn, or sweet corn.

**Table 5. FBN<sup>SM</sup> 40 Tank Mixtures for Post-Emergence Application to Corn**

Refer to the individual product labels for products listed for precautionary statements, restrictions, use 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(s)	Directions
Atrazine	• Refer to Table 1 on this label for application rates and weeds controlled.
Nicosulfuron	• Use this mixture for additional grass control. Refer to product label for list of weeds controlled.
Bentazon	• Use this mixture for additional broadleaf weed control. Refer to product label for list of weeds controlled.
Rimsulfuron + thifensulfuron methyl	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Atrazine + s-metolachlor	• 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.



Active Ingredient(s)	Directions
	<ul style="list-style-type: none"> <li>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).</li> <li>In all cases, the control of emerged weeds may be reduced somewhat due to less than optimum adjuvant effect or weed coverage.</li> </ul>
Atrazine, glyphosate, metolachlor	<ul style="list-style-type: none"> <li>For use only in corn containing the Roundup Ready trait.</li> <li>Application of this mixture to corn not containing the Roundup Ready trait will result in crop death</li> <li>Do not add urea ammonium nitrate (UAN) or methylated seed oil (MSO) type adjuvants to this tank mixture or crop injury may occur.</li> </ul>
Bromoxynil + atrazine	<ul style="list-style-type: none"> <li>Use this mixture for additional broadleaf weed control.</li> <li>Refer to label for use rates</li> </ul>
Glufosinate	<ul style="list-style-type: none"> <li>Use this tank mixture only on corn designated as LibertyLink<sup>®</sup>.</li> <li>Application of this mixture to a corn hybrid that is not designated as LibertyLink<sup>®</sup> will result in severe crop injury or death.</li> <li>Do not use crop oil concentrate (COC) as an adjuvant for this mixture or severe crop injury may occur.</li> </ul>
Glyphosate	<ul style="list-style-type: none"> <li>For use only in corn containing the Roundup Ready trait.</li> <li>Application of this mixture to a corn hybrid that is does not contain the Roundup Ready trait will result in crop death.</li> <li>Add spray-grade ammonium sulfate (AMS) at a rate that delivers 8.5-17.0 lbs. of AMS/100 gallons of water.</li> <li>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).</li> <li>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.</li> </ul>
Imazethapyr + imazapyr	<ul style="list-style-type: none"> <li>For use only on corn designated as Clearfield<sup>®</sup> corn.</li> <li>Application of this mixture to corn that is not Clearfield<sup>®</sup> corn will result in severe crop injury or death.</li> <li>Do not use a Methylated Seed Oil (MSO), or an MSO blend with this mixture or severe crop injury may result</li> </ul>
Prosulfuron	<ul style="list-style-type: none"> <li>Use this mixture for additional weed control. Refer to product label for list of weeds controlled.</li> </ul>
Primisulfuron methyl + prosulfuron	<ul style="list-style-type: none"> <li>Use this mixture for additional weed control. Refer to product label for list of weeds controlled.</li> </ul>
Nicosulfuron rimsulfuron +	<ul style="list-style-type: none"> <li>Use this mixture for additional weed control. Refer to product label for list of weeds controlled.</li> </ul>
Nicosulfuron thifensulfuron methyl +	<ul style="list-style-type: none"> <li>Use this mixture for additional weed control. Refer to product label for list of weeds controlled.</li> </ul>
Primisulfuron methyl + sodium salt of dicamba	<ul style="list-style-type: none"> <li>Use this mixture for additional weed control. Refer to product label for list of weeds controlled.</li> </ul>

## CROP USE DIRECTIONS – ASPARAGUS

**FBN<sup>SM</sup> 40** can be applied 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, **FBN<sup>SM</sup> 40** must be applied after fern mowing, disking or other tillage operation but prior to asparagus spear emergence.

When making post-harvest applications, the rate applied pre-emergence in the spring must be taken into account so as not to exceed the 7.7 fl oz/A (0.24 lb ai/A) per year rate limit. 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 **FBN<sup>SM</sup> 40** application, the addition of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v or a non-ionic surfactant (NIS) at the rate of 0.25% v/v is needed. 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 lbs./100 gallons of spray solution may be added for improved burndown of emerged weeds. If weeds have not yet emerged, no adjuvant is required.

#### ASPARAGUS RESTRICTIONS

- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBN<sup>SM</sup> 40** per year through any combination of applications.
- **Do not** make more than two **FBN<sup>SM</sup> 40** applications per year when using reduced application rates.
- **Do not** apply more than 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** per application post-emergence.
- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBN<sup>SM</sup> 40** per application pre-emergence.
- Minimum retreatment interval is 14 days.

#### CROP USE DIRECTIONS - BLUEGRASS, RYEGRASS (ANNUAL AND PERENNIAL), AND TALL FESCUE GROWN FOR SEED

**FBN<sup>SM</sup> 40** can be applied to bluegrass, annual ryegrass, perennial ryegrass, or tall fescue which is grown for seed. **FBN<sup>SM</sup> 40** can be applied as a pre-emergence application to bare soil (new seeding) or as a post-emergence application to an emerged grass crop.

#### PRE-EMERGENCE APPLICATIONS

Apply **FBN<sup>SM</sup> 40** as a broadcast, surface spray at a rate of 6.0 fl oz/A (0.188 lb ai/A) to a newly seeded crop. The **FBN<sup>SM</sup> 40** application must be made 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 **FBN<sup>SM</sup> 40**. 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, **FBN<sup>SM</sup> 40** applied pre-emergence will control mannagrass.

#### POST-EMERGENCE APPLICATIONS

Apply **FBN<sup>SM</sup> 40** as a broadcast post-emergence spray at a rate of 3.0-6.0 fl oz/A (0.094-0.188 lb ai/A) to emerged bluegrass, perennial ryegrass or tall fescue grown for seed. 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, **FBN<sup>SM</sup> 40** 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 non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is needed. Post-emergence applications of **FBN<sup>SM</sup> 40** 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 lbs./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 **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40** post-emergence may increase the risk of crop injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40**.
- **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 **FBN<sup>SM</sup> 40**.
- **Do not** make more than two applications of **FBN<sup>SM</sup> 40** per year.
- Minimum retreatment interval is 14 days.
- **Do not** apply more than 6 fl oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** in a single application and not more than 9 fl oz/A (0.282 lb ai/A) of **FBN<sup>SM</sup> 40** per year through any combination of applications.
- Applications of **FBN<sup>SM</sup> 40** to grasses grown for seed species not listed on this label may result in severe injury.

#### CROP USE DIRECTIONS – 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 mesotrione. Those that have been tested, and are believed to be reasonably fit, are listed below along with use directions for that crop. If **FBN<sup>SM</sup> 40** is used on berries not listed below, severe crop injury may occur.

**FBN<sup>SM</sup> 40** may be applied as a pre-bloom post-directed spray in high bush blueberry, lingonberry, red currant, black currant, black raspberry, red raspberry, and blackberry. For a list of weeds controlled see Tables 1 and 2. **FBN<sup>SM</sup> 40** may be applied in bush or caneberries at a rate up to 6 fl oz/A (0.188 lb ai/A). If a split application weed control program is desired, 3 fl oz/A (0.094 lb ai/A) followed by 3 fl oz/A (0.094 lb ai/A) may be used, but no more than two applications per year are allowed and not more than 6 fl oz/A (0.188 lb ai/A) in total 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 the rate of 1% v/v is needed, but avoid using COC adjuvants that are injurious to bush or caneberry leaves. Do not apply **FBN<sup>SM</sup> 40** to bush or caneberries after the onset of the bloom stage or illegal residues may occur.

In low bush blueberries, **FBN<sup>SM</sup> 40** may only be applied in the non-bearing year. This application may be a broadcast application. Up to 6 fl oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** may be applied in a single application, or 3 fl oz/A (0.094 lb ai/A) followed by 3 fl oz/A (0.094 lb ai/A) if used in a split application program. No more than two applications per year are allowed and not more than 6 fl oz/A (0.188 lb ai/A) in total 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 is needed. Applications of **FBN<sup>SM</sup> 40** during dry weather conditions and/or temperatures above 85° can cause injury to low bush blueberries. Applications of **FBN<sup>SM</sup> 40** can cause yellowing or necrosis of leaves and under severe conditions, leaf drop may occur especially on "Sourtop" variety blueberries.

#### BUSH & CANEBERRY RESTRICTIONS

- **Do not** make more than two applications of **FBN<sup>SM</sup> 40** per year when using reduced application rates.
- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) per year through any combination of applications.
- **Do not** apply more than 6 fl. oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** per application.
- Minimum retreatment interval is 14 days.

### CROP USE DIRECTIONS – CITRUS FRUIT Group 10-10, POME FRUIT Group 11-10 , STONE FRUIT Group 12-12 AND TREE NUTS Group 14

**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)

**FBN<sup>SM</sup> 40** may be applied as a directed or shielded spray for post-emergence and residual control of weeds in citrus fruit, pome fruit, stone fruit, and tree nuts. For a list of weeds controlled see Tables 1 and 2. **FBN<sup>SM</sup> 40** may be applied at a rate up to 6 fl oz/A (0.188 lb ai/A) for the first application. If a weed control program is desired, allow at least 5 months between applications of **FBN<sup>SM</sup> 40** at 6 fl oz/A (0.188 lb ai/A) and at least 6 weeks between applications of 6 fl oz/A (0.188 lb ai/A) and subsequent applications of 3 fl oz/A (0.094 lb ai/A). Applications must be made using one of the application programs listed in this label. Refer to the **Application Programs** table below. Apply no more than three treatments per year and no more than 12 fl oz/A (0.376 lb ai/A) in total per year. For best results, post-emergence applications of **FBN<sup>SM</sup> 40** must be made to weeds that are less than 5" tall or before germination of seed for pre-emergence control. **FBN<sup>SM</sup> 40** must be moved into the weed seed germination zone. Rainfall or irrigation soon after application will enhance pre-emergence activity.

Apply **FBN<sup>SM</sup> 40** in a spray volume of 10-40 gals./A.

If emerged weeds are present at the time of the **FBN<sup>SM</sup> 40** application, the addition of a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v **or** a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is needed. In addition to COC or NIS, an ammonium sulfate or other nitrogen-based adjuvants may be added for improved weed control. Refer to the **Spray Additives** section for additional information.

#### BANDED APPLICATIONS

Listed use rates are based on broadcast treatment. For banded applications around trees in fruit or nut plantings, reduce the broadcast rate of **FBN<sup>SM</sup> 40** and carrier per acre in proportion to the area actually sprayed. When applying **FBN<sup>SM</sup> 40** as a row or banded treatment, the below formula may be used to calculate the amount per acre:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Amount Needed er Acre}$$

Make the first treatment of **FBN<sup>SM</sup> 40** in late fall/early winter or spring and subsequent applications using one of the below programs:

#### FBN<sup>SM</sup> 40 APPLICATION PROGRAMS

Program	Application Rate (Fl oz/Acre)			Minimum Retreatment Interval (Weeks)
	1 <sup>st</sup> Application	2 <sup>nd</sup> Application	3 <sup>rd</sup> Application	
1	6	6	-	12
2	6	3	-	6
3	6	3	3	6
4	3	3	3	6

**TANK MIXTURES**

**FBN<sup>SM</sup> 40** may be applied in tank mixture with most commonly used herbicides registered for use in the listed crops to broaden the spectrum of post-emergence weed control. Use of these products in tank mix combination can support weed resistant management. Consult the **Resistance Management** section of this label or your local agricultural advisor for additional information on weed resistance management.

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. Always conduct a compatibility test prior to any tank mixture.

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

For optimum post-emergence weed control, apply **FBN<sup>SM</sup> 40** 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, **FBN<sup>SM</sup> 40** must be moved into the weed seed germination zone. For pre-emergence weed control, apply **FBN<sup>SM</sup> 40** before rainfall or irrigation. Subsequent application(s) of **FBN<sup>SM</sup> 40** can be made alone or in a tank mixture, with the herbicides noted above, if weed emergence occurs.

If weed emergence occurs, subsequent application(s) of **FBN<sup>SM</sup> 40** can be made alone or in tank mixture, with the herbicides listed above.

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

- To avoid crop injury, make application to the grove or orchard floor and to the weeds, avoiding contact with crop foliage, stems or fruit. Contact of **FBN<sup>SM</sup> 40** with the crop may result in bleaching injury that is typically temporary. Use trunk guards to protect plants until adequate bark has developed.
- Ensure that the soil is settled, firm and relatively free of debris at time of treatment. Also ensure that the soil is free of depressions around trees where rain or irrigation water can concentrate.

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

- Application of **FBN<sup>SM</sup> 40** may only be made in pome fruit, stone fruit and nut trees that have been established for a minimum of 12 months. Application of **FBN<sup>SM</sup> 40** may be made in citrus trees or plantings that are less than 12 months old and are exhibiting normal growth and vigor.
- **Do not** apply this product through any other type of irrigation system.
- **Do not** apply by air.
- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** during the first application.
- **Do not** apply more than 12.0 fl oz/A (0.376 lb ai/A) of **FBN<sup>SM</sup> 40** per year through any combination of applications.
- **Do not** make more than three applications of **FBN<sup>SM</sup> 40** per year.
- As noted in the table above, **FBN<sup>SM</sup> 40 APPLICATION PROGRAMS**, for Program 1, the minimum retreatment interval is 12 weeks. For Program 2, 3 & 4 minimum retreatment interval is 6 weeks.
- **Do not** make application in orchards that are stressed due to poor weather or other abiotic factors.
- **Do not** make application when nuts or fruits are on the ground at harvest.
- **Do not** harvest pome fruit, stone fruit or tree nuts within 30 days following the application of **FBN<sup>SM</sup> 40**.
- **Do not** harvest citrus fruit within 1 day following the application of **FBN<sup>SM</sup> 40**.
- **Do not** use on soils with greater than 20% gravel.



## CROP USE DIRECTIONS – CRANBERRY

Apply **FBN<sup>SM</sup> 40** to bearing or non-bearing cranberry beds to control or suppress the weeds listed in Tables 1 and 2, and:

- bog St. John's wort (*Hypericum boreale*)
- rushes (*Juncus canadensis*, *J. effuses*, *J. bufonulus*, *J. tenuis*)
- sedges spp. (*Carex* spp.)
- silverleaf (*Potentilla pacifica*)
- yellow loosestrife (*Lysimachia terrestris*)

### BEARING/NON-BEARING APPLICATION RATES

- Apply up to 8 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> 40** in a single application, but do not apply more than 16 fl oz/A (0.5 lb ai/A) in total per year.
- Make no more than two 8 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> 40** applications per year.
- If two applications are made, do not make them closer than 14 days apart. Use 1% v/v of a crop oil concentrate (COC) or 0.25% v/v non-ionic surfactant (NIS).
- **Do not** use COC adjuvants that are known to injure cranberry leaves.
- **Non-bearing Cranberries:** Apply after the bud break stage no less than 45 days before flooding in fall or winter.
- **Bearing Cranberries:** Apply after the bud break stage no less than 45 days before flooding or harvest.

**FBN<sup>SM</sup> 40** can be applied through irrigation systems (chemigation) including center pivot or solid set.

### CRANBERRY RESTRICTIONS

- **Do not** apply more than 16.0 fl oz/A (0.5 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> 40** per application .
- **Do not** make more than two applications of **FBN<sup>SM</sup> 40** per year.
- Minimum retreatment interval is 14 days.

## SPRINKLER IRRIGATION APPLICATION – CRANBERRIES ONLY

Check the irrigation system to ensure uniform application of water to all areas. Thorough coverage of foliage is required for optimal control. Maintain good agitation in the pesticide supply tank prior to and during the entire application process. Inject the specified rate of **FBN<sup>SM</sup> 40** into the irrigation system with a metering device designed to introduce a constant flow and that will distribute the product to target areas in 0.1-0.2 acre-inch of water. Use the least amount of water with this rate range required for proper distribution and coverage.

After application is complete, flush the entire irrigation and injection systems with clean water before stopping the system. If application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of **FBN<sup>SM</sup> 40** for the area covered needs to be injected into the system only during the end of the irrigation set for sufficient time to provide optimal coverage and distribution.

## CHEMIGATION USE PRECAUTIONS – SPRINKLER IRRIGATION APPLICATION

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

Non-uniform distribution of treated water can cause crop injury, product ineffectiveness, and/or illegal pesticide residues in the crop. Contact State Extension Service Specialists, equipment manufacturers or other experts if you have questions about calibrating equipment.

Do not connect an irrigation system or greenhouse system used for pesticide application to any public water system. A public water system is any system used for 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. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible personal 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 also use a metering pump, including 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.

**CHEMIGATION USE RESTRICTIONS – SPRINKLER IRRIGATION APPLICATION**

- **Do not** apply this product through any other type of irrigation system.
- **Do not** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.
- **Do not** apply directly to water or areas where surface water is present outside the bog system.
- **Do not** contaminate water when disposing of equipment washwater or rinsate.
- **Do not** apply within 10 feet of surface water outside the bog system.
- **Do not** spray to runoff.

**CROP USE DIRECTIONS – FLAX**

**FBN<sup>SM</sup> 40** may be applied pre-emergence in flax, 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 Tables 1 and 2. Do not apply more than one application, and not more than 6 fl oz/A (0.188 lb ai/A), per year in flax. 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 needed. 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 lbs./100 gals. of spray solution may be added to improve the burndown of existing weeds. Applications of **FBN<sup>SM</sup> 40** to emerged flax can result in severe crop injury.

**FLAX RESTRICTIONS**

- **Do not** make more than one application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 6 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 6 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> 40** per application.

**CROP USE DIRECTIONS – OATS**

**FBN<sup>SM</sup> 40** can be applied pre-emergence or post-emergence (but not both) for weed control in oats.

For pre-emergence control or partial control of the weeds listed in Table 2, apply **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40** application must be made prior to weed emergence.

For post-emergence (after oat emergence) control or partial control of the weeds listed in Table 1, apply **FBN<sup>SM</sup> 40** at a rate of 3.0 fl oz/A (0.094 ai/A). For best results, **FBN<sup>SM</sup> 40** must be applied to emerged weeds that are less than 5" tall. Post-emergence applications of **FBN<sup>SM</sup> 40** may result in temporary injury of the oat crop. Injury symptoms may include leaf bleaching, leaf burn and in extreme conditions, stunting.

If emerged weeds are present at the time of the **FBN<sup>SM</sup> 40** application, the addition of a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v **or** a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is needed. 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 lbs./100 gallons of spray solution may be added for improved weed control. If emerged weeds are not present at the time of the **FBN<sup>SM</sup> 40** 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 **FBN<sup>SM</sup> 40** post-emergence may increase the risk of injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to **FBN<sup>SM</sup> 40** for applications made post-emergence to the crop.

**OAT RESTRICTIONS**

- **Do not** graze or feed forage from treated areas within 30 days following an application of **FBN<sup>SM</sup> 40**.
- **Do not** harvest oats within 50 days following the application of **FBN<sup>SM</sup> 40**.
- **Do not** make more than one (pre- or post-emergence) application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 6 fl. oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply pre-emergence (prior to oat emergence) at more than 6.0 fl oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply post-emergence at more than 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- If the oat crop treated with **FBN<sup>SM</sup> 40** is lost or destroyed, oats may be replanted immediately. If **FBN<sup>SM</sup> 40** was applied to the lost oat crop, no additional **FBN<sup>SM</sup> 40** can be applied to the replanted oat crop.

**CROP USE DIRECTIONS – OKRA**

**FBN<sup>SM</sup> 40** can be applied as a row-middle or a hooded post-direct treatment (but not both) for weed control in okra.

**PRE-EMERGENCE ROW-MIDDLE APPLICATIONS**

Apply **FBN<sup>SM</sup> 40** at a rate of 6.0 fl oz/A (0.188 lb ai/A) as a banded application to the row middles prior to 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 **FBN<sup>SM</sup> 40** 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 APPLICATIONS**

Apply **FBN<sup>SM</sup> 40** 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. A non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v must be added to the spray solution. For post-emergence hooded applications, the spray equipment must be set up to minimize the amount of **FBN<sup>SM</sup> 40** that contacts the okra foliage or crop injury will occur. For best post-emergence results, **FBN<sup>SM</sup> 40** must be applied to actively growing weeds.

**OKRA RESTRICTIONS**

- **Do not** harvest okra within 28 days following the application of **FBN<sup>SM</sup> 40**.
- **Do not** make more than one application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply **FBN<sup>SM</sup> 40** as a row-middle application at more than 6.0 fl oz/A (0.188 lb ai/A) per year.
- **Do not** apply **FBN<sup>SM</sup> 40** as a post-directed application at more than 3.0 fl oz/A (0.094 lb ai/A) per year.
- **Do not** apply **FBN<sup>SM</sup> 40** as a broadcast pre-emergence or broadcast post-emergence application to okra or severe injury will occur.
- If the okra crop treated with **FBN<sup>SM</sup> 40** is lost or destroyed, okra can be replanted only in the soil band that was not treated with **FBN<sup>SM</sup> 40**.

**CROP USE DIRECTIONS - PEARL MILLET**

**FBN<sup>SM</sup> 40** 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. Do not apply more than one application, and not more than 6 fl oz/A (0.188 lb ai/A) per year in pearl millet. 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 needed. 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 lbs./100 gals. of spray solution may be added to improve the burndown of existing weeds. Applications of **FBN<sup>SM</sup> 40** to emerged pearl millet can result in severe crop injury.

**PEARL MILLET RESTRICTIONS**

- **Do not** make more than one application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) per year.

**CROP USE DIRECTIONS – RHUBARB**

**FBN<sup>SM</sup> 40** can be applied prior to crop emergence for weed control in established rhubarb.

Apply **FBN<sup>SM</sup> 40** at a rate of 6.0 fl oz/A (0.188 lb ai/A) to dormant (prior to any spring green-up) rhubarb for control or partial control of the weeds listed in Table 2. If weeds are emerged at the time of application, it is required that a crop oil concentrate (COC) type adjuvant at 1% v/v or a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. Applications of **FBN<sup>SM</sup> 40** to rhubarb that is not dormant may result in a temporary bleaching symptomology. Rainfall or irrigation after the **FBN<sup>SM</sup> 40** application may increase the risk of injury to emerging rhubarb.

**RHUBARB RESTRICTIONS**

- **Do not** harvest rhubarb within 21 days following the application of **FBN<sup>SM</sup> 40**.
- **Do not** make more than one application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) per year.

**CROP USE DIRECTIONS – SORGHUM (GRAIN and SWEET)****PRE-EMERGENCE APPLICATION DIRECTIONS**

Make pre-emergence application of **FBN<sup>SM</sup> 40** or pre-plant non-incorporated applications up to 21 days before planting sorghum for control or partial control of the weeds listed in Table 2.

Apply 6.0-6.4 fl oz/A (0.188 -0.20 lb ai/A) broadcast non-incorporated application prior to sorghum emergence. Making the application less than 7 days before planting will increase the risk of plant injury, especially if rainfall or irrigation occurs after the application. Injury symptoms include temporary bleaching of newly emerged leaves. Making application of this product 8-21 days prior to planting will decrease risk of crop injury.

If **FBN<sup>SM</sup> 40** is applied prior to planting, minimize disturbance of soil treated with herbicide during the planting process in order to reduce the potential for weed emergence.

If emerged weeds are present at the time of pre-emergence application, use 0.25% v/v of a non-ionic surfactant (NIS) adjuvant or 1% v/v of crop oil concentrate (COC) and add it to the spray solution. A spray-grade UAN applied at a rate of 2.5% v/v or 8.5 lbs./100 gallons of spray solution of ammonium sulfate (AMS) can be added to the spray solution in addition to the COC or NIS.

**PRE-EMERGENCE APPLICATION RESTRICTIONS**

- **Do not** apply more than 6.4 fl oz/A (0.20 lb ai/A) of **FBN<sup>SM</sup> 40** per year for pre and post application.
- **Do not** apply more than 6.4 fl oz/A (0.20 lb ai/A) of **FBN<sup>SM</sup> 40** per application.
- **Do not** make more than one application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply to emerged sorghum or severe crop injury can occur.

- **Do not** use **FBN<sup>SM</sup> 40** in the production of forage sorghum, sudangrass, sorghum-sudangrass hybrids, or dual purpose sorghum.
- **Do not** apply to sorghum that is grown on coarse textured soils (e.g., sandy loam, loamy sand, sand).
- **Texas Restriction:** Do not apply to sorghum grown south of Interstate 20 (I-20) or east of Highway 277.

### POST-EMERGENCE APPLICATION DIRECTIONS

Apply **FBN<sup>SM</sup> 40** post-directed to grain sorghum to control and/or partially control weeds listed in Table 1. Apply to actively growing weeds for optimal control.

Apply 3.0 fl oz/A (0.094 lb ai/A) post-directed application when sorghum is at least 8" tall. Make the application by directing the spray between crop rows, and toward the base of the plant. Direct application of **FBN<sup>SM</sup> 40** onto foliage can result in crop injury including temporary bleaching. If leaves do bleach, newly emerged leaves following application will not be affected.

Use 0.25% v/v of a non-ionic surfactant (NIS) adjuvant or 1% v/v of crop oil concentrate (COC) and add it to the spray solution. A spray-grade UAN applied at a rate of 2.5% v/v or 8.5 lbs./100 gallons of spray solution of ammonium sulfate (AMS) can be added to the spray solution in addition to the COC or NIS.

**FBN<sup>SM</sup> 40** can be tank-mixed with herbicides registered for use on sorghum to improve weed control. These tank-mixtures can also include a herbicide with a different mode of action to help control or manage the development of resistant weed biotypes.

### POST-DIRECTED RESTRICTIONS

- **Do not** make more than one post-directed application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply more than 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** per application post-directed, and not more than 6.4 fl oz/A (0.20 lb ai/A) per year.
- **Do not** apply **FBN<sup>SM</sup> 40** broadcast over-the-top to emerged sorghum or severe crop injury can occur.
- **Do not** harvest sorghum for forage for 30 days following application of **FBN<sup>SM</sup> 40**.
- **Do not** harvest **FBN<sup>SM</sup> 40** for grain or stover for 60 days following application.
- **Do not** apply **FBN<sup>SM</sup> 40** after the sorghum seedhead emerges.
- **Do not** use **FBN<sup>SM</sup> 40** in the production of forage sorghum, sudangrass, or sorghum-sudangrass hybrids.

## CROP USE DIRECTIONS – SOYBEAN

### PRE-EMERGENCE APPLICATIONS

For pre-emergence control of the weeds listed in Table 2, apply **FBN<sup>SM</sup> 40** prior to soybean emergence at a rate of 6.0 fl oz/A (0.188 lb ai/A). Apply the higher rate for longer residual control. **FBN<sup>SM</sup> 40** may be tank mixed with other registered soybean herbicides. 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, also add either ammonium sulfate (AMS) at 8.5-17 lbs./100 gallons (or equivalent).

### SOYBEAN RESTRICTIONS

- **Do not** apply more than 6.0 fl oz/A (0.188 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** make more than one application of **FBN<sup>SM</sup> 40** per year.
- **Do not** apply **FBN<sup>SM</sup> 40** to emerged soybeans.
- **Do not** graze or feed soybean forage or hay to livestock.

## CROP USE DIRECTIONS – SUGARCANE

Apply **FBN<sup>SM</sup> 40** by ground for pre-emergence, post-emergence over-the-top or post-emergence direct weed control in sugarcane.

Apply **FBN<sup>SM</sup> 40** aerially for pre-emergence and post-emergence weed control in the states of: **Florida, Louisiana, and Texas.**

### PRE-EMERGENCE APPLICATIONS

Apply 6.0-7.7 fl oz/A (0.188 – 0.24 lb ai/A) of **FBN<sup>SM</sup> 40** to control weeds listed in Table 2. Make application after the planting of plant-cane or after harvest of ratoon cane. If weeds are emerged at the time of application, add a crop oil concentrate (COC) type adjuvant at 1% v/v OR a non-ionic surfactant (NIS) type adjuvant at 0.25% v/v to the spray solution. In addition to the 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 lbs./100 gals. of spray solution can be added to the spray solution. Tank mix atrazine or ametryn with **FBN<sup>SM</sup> 40** to improve weed control. 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 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** to control weeds listed in Table 1. Apply 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 single post-emergence application can be made. If no pre-emergence application was made earlier in the season, then both a post-over-the-top and a post-directed spray application can be made. For optimum weed control, apply to actively growing weeds.

Add either a crop oil concentrate (COC) adjuvant at 1% v/v OR a non-ionic surfactant (NIS) adjuvant to the spray solution. In addition to the COC or NIS, use a spray grade UAN (e.g., 28-0-0) at 2.5% v/v OR ammonium sulfate (AMS) at 8.5 lbs./100 gals. of spray solution to improve weed control.

For additional post-emergence weed control, tank mix **FBN<sup>SM</sup> 40** 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.

### SUGARCANE RESTRICTIONS

- **Do not** apply more than 7.7 fl oz/A (0.24 lb ai/A) of **FBN<sup>SM</sup> 40** in a pre-emergence application.
- **Do not** apply more than 3.0 fl oz/A (0.094 lb ai/A) of **FBN<sup>SM</sup> 40** in a post-emergence application.
- **Do not** make more than 2 applications of **FBN<sup>SM</sup> 40** per year. If a pre-emergence application is made, only one post-emergence application can be made.
- Minimum retreatment interval is 14 days.
- **Do not** apply more than 10.7 fl oz/A (0.334 lb ai/A) of **FBN<sup>SM</sup> 40** per year.
- **Do not** harvest sugarcane within 114 days following a post-over-the-top treatment of **FBN<sup>SM</sup> 40** (114-day PHI).
- **Do not** harvest sugarcane with 100 days following a post-directed application of **FBN<sup>SM</sup> 40** (100-day PHI).

### STORAGE AND DISPOSAL

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

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

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

**Container Handling ≤ 5 Gallons:** Non-refillable 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 formulation equipment. Fill the container ¼ 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 formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Handling ≥ 5 Gallons:** Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Handling [Greater Than 5 Gallons]:** Non-refillable container. Do not reuse or refill this container. 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 ¼ 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 puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**IMPORTANT WARRANTY AND DISCLAIMER STATEMENT NOTICE - READ BEFORE USE:** Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before buying or using this product. If you do not accept these terms, do not use product. By using this product, you accept the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, the manner of handling, use or application of Product, or other influencing factors which are abnormal, not reasonably foreseeable or beyond the control of FBN INPUTS, LLC, its affiliates, and their respective officers, directors, employees, agents, and successors ("FBN"). To the extent consistent with applicable law, you assume all such risks. FBN's sole and exclusive warranty is that the product conforms to the label.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FBN MAKES NO OTHER WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, NON-INFRINGEMENT, SUITABILITY OF THE PRODUCT TO CONTROL ANY SPECIFIC AGRICULTURAL PEST OR DISEASE, THE PRODUCT'S COMPATIBILITY WITH OTHER PRODUCTS OR PERMITTED TANK MIXES, OR THAT THE USE OF THE PRODUCT WILL CAUSE OR RESULT IN ANY PARTICULAR CROP OR SEED PERFORMANCE OUTCOME THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No affiliate, officer, director, employee, agent, or successor of FBN is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FBN DISCLAIMS ANY AND ALL LIABILITY WHATSOEVER, UNDER ANY CIRCUMSTANCE OR LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, TORT, CONTRACT, STRICT LIABILITY, OR OTHERWISE) FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, INCLUDING DAMAGES FOR LOST PROFITS OR UNREALIZED SAVINGS, CROP LOSS, LOSS OF YIELD, LOSS OF GOOD WILL, AND WORK STOPPAGE TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, YOUR EXCLUSIVE REMEDY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, UNDER ANY CIRCUMSTANCE OR LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, TORT, CONTRACT, STRICT LIABILITY, OR OTHERWISE), SHALL, AT FBN'S ELECTION, BE THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT.

[All trademarks are the property of their respective owners.]

[The sprout logo, "FBN", and "Farmers Business Network" are the registered service marks of Farmers Business Network, Inc.]

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



FARMERS BUSINESS NETWORK<sup>SM</sup>

[any color]

MESOTRIONE	GROUP	27	HERBICIDE
------------	-------	----	-----------

## ABN: FBN<sup>SM</sup> Mesotrione 4 Turf

Sublabel B (Pages 21-27): Provides Selective and Residual Control of Weeds in Ornamental Turfgrasses

<b>Active Ingredient:</b>	<b>By Weight</b>
Mesotrione: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione .....	40.0%
<b>Other Ingredients:</b> .....	<b>60.0%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>

Contains 4 lbs. Mesotrione per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION

<b>FIRST AID</b>	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>HOTLINE NUMBER</b>	
<p>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.</p>	

[Optional referral statements when booklets and container labels are used:

See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions For Use.

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for additional Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for Complete Directions For Use.]

**EPA Reg. No.: 92115-NEW**

**EPA Est. No.:** \_\_\_\_\_

**Net Contents:** \_\_\_\_\_

**Manufactured For:**

FBN Inputs LLC

388 El Camino Real

San Carlos, CA 94070



## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

#### Personal Protection Equipment (PPE)

##### Applicators and Other Handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton)

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.

#### USER SAFETY RECOMMENDATIONS

##### Users should:

- Wash hands thoroughly with soap and water after handling and 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 and wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### Engineering 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.

#### 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 or 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 of 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 use or store near heat or open flame.

#### 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 the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

PPE required for early entry to treated areas that is 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 (barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, polyethylene, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils)

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard, 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.

**Do not enter treated areas without protection clothing until sprays have dried.**

**FBN<sup>SM</sup> Mesotrione 4 Turf** is applied pre- and post-emergence to provide selective contact and residual control of turfgrass weeds. If applied pre-emergence, it is absorbed when emerging from the soil. Pre-emergence activity and control is reduced under dry conditions. Activate **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 will die within three weeks. Make a repeat application after 2-3 weeks to improve post-emergence weed control. Add a non-ionic surfactant when making post-emergence applications.

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

**FBN<sup>SM</sup> Mesotrione 4 Turf** controls weeds prior to and during seeding of certain turfgrasses during tur renovation (see **New Seedings**). If making pre-emergence application to established turf, tank mix **FBN<sup>SM</sup> Mesotrione 4 Turf** with other pre-emergence herbicides including pendimethalin for longer residual and broad spectrum control.

### Approved Use Sites

**FBN<sup>SM</sup> Mesotrione 4 Turf** can 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.

Apply **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 **FBN<sup>SM</sup> Mesotrione 4 Turf** with other herbicides, conduct a compatibility, safety, and efficacy test before treating larger areas. 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.

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 **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 **FBN<sup>SM</sup> Mesotrione 4 Turf**.
- **DO NOT** apply more than 16 fl oz./A (0.50 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** per year.
- **DO NOT** apply more than 8 fl oz./A (0.25 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** per application.
- **DO NOT** make more than two applications per acre per year.
- Minimum retreatment interval is 14 days.
- **DO NOT** plant any crop other than turfgrass for 18 months post-application of **FBN<sup>SM</sup> Mesotrione 4 Turf** to avoid turfgrass injury.
- **DO NOT** apply organophosphate or carbamate insecticides within 7 days of applying **FBN<sup>SM</sup> Mesotrione 4 Turf**.
- **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 **FBN<sup>SM</sup> Mesotrione 4 Turf** through any type of irrigation system.
- **DO NOT** make aerial applications.
- **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, if 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 & Application Rates**

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

\*See additional rate instructions below.

**RESISTANCE MANAGEMENT**

The efficacy of **FBN<sup>SM</sup> Mesotrione 4 Turf** 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, **FBN<sup>SM</sup> Mesotrione 4 Turf** is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 **FBN<sup>SM</sup> Mesotrione 4 Turf** or other Group 27 herbicides with different herbicide groups that control the same weeds.
- 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 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.
- 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. Prevent movement of resistant weed seeds by cleaning equipment.
- 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 for additional pesticide resistance-management and/or integrated weed-management recommendations.

- 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 the area to be treated before and after herbicide application.
- Control weeds early when they are relatively small (less than 4 inches).
- Incorporate other herbicides (e.g., a selective and/or a residual herbicide) 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.
- Use clean equipment 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.

## APPLICATION INSTRUCTIONS

### Pre-Emergence Applications:

Apply 4-8 fl oz/A (0.125-0.25 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** 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:

- **FBN<sup>SM</sup> Mesotrione 4 Turf** 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) **FBN<sup>SM</sup> Mesotrione 4 Turf** per year for all Turfgrass applications.
- **DO NOT** make more than two applications of **FBN<sup>SM</sup> Mesotrione 4 Turf** per acre per year for all Turfgrass applications.
- **DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) **FBN<sup>SM</sup> Mesotrione 4 Turf** per application.
- Minimum retreatment interval is 14 days.
- **DO NOT** exceed 5 fl oz/A (0.157 lb ai/A) **FBN<sup>SM</sup> Mesotrione 4 Turf** 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) **FBN<sup>SM</sup> Mesotrione 4 Turf** 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. **FBN<sup>SM</sup> Mesotrione 4 Turf** 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) **FBN<sup>SM</sup> Mesotrione 4 Turf** per year for all Turfgrass applications.
- **DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) **FBN<sup>SM</sup> Mesotrione 4 Turf** per application.
- **DO NOT** make more than two applications of **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 **FBN<sup>SM</sup> Mesotrione 4 Turf** 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*) Control:**

Apply 5 fl oz/A (0.157 lb ai/A) **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 Bentgrass 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** exceed 4 fl oz/A (0.125 lb ai/A) **FBN<sup>SM</sup> Mesotrione 4 Turf** if tank mixing with Atrazine or Simazine.
- DO NOT** exceed 0.5 lb/A atrazine or simazine active ingredient. See atrazine/simazine labels for precautions and restrictions.
- DO NOT** apply more than 16 fl oz/A (0.5 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** per year for all applications.
- DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** per application.
- DO NOT** make more than two applications per acre per year of **FBN<sup>SM</sup> Mesotrione 4 Turf** for all Turfgrass applications.
- Minimum retreatment interval is 14 days.

**Dormant Bermudagrass Application only:**

Apply 5 fl oz/A (0.157 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** to control winter weeds listed in the **Weeds Controlled** table below. Make a repeat application 2-3 weeks later. Application of **FBN<sup>SM</sup> Mesotrione 4 Turf** 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 **FBN<sup>SM</sup> Mesotrione 4 Turf** per year for all Turfgrass applications.
- DO NOT** apply more than 8 fl oz/A (0.25 lb ai/A) of **FBN<sup>SM</sup> Mesotrione 4 Turf** per application.
- DO NOT** make more than two applications of **FBN<sup>SM</sup> Mesotrione 4 Turf** per acre per year for all Turfgrass applications.
- Minimum retreatment interval is 14 days.

**WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION**

Apply **FBN<sup>SM</sup> Mesotrione 4 Turf** with a grass pre-emergence herbicide including Barricade 65WG Herbicide, except when used to control weeds in new seedings. **FBN<sup>SM</sup> Mesotrione 4 Turf** 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)*	<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>
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	<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>

\*Suppression only.

### WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION

Make a second application of **FBN<sup>SM</sup> Mesotrione 4 Turf** 2-3 weeks after initial treatment. For optimal control add a NIS-type surfactant and apply to young, actively growing weeds. **FBN<sup>SM</sup> Mesotrione 4 Turf** 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>
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>
Heal-All	<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 pectinacea</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>
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 pratincola</i>
Windmill-grass	<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. Keep away from heat and flame. Do not store near seed, fertilizers, or foodstuffs. Can be stored at temperatures as low as minus 20°F. Keep away from heat and flame.

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

**Container Handling ≤ 5 Gallons:** Non-refillable 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 formulation equipment. Fill the container ¼ 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 formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Handling ≥ 5 Gallons:** Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Handling [Greater Than 5 Gallons]:** Non-refillable container. Do not reuse or refill this container. 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 ¼ 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 puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**IMPORTANT WARRANTY AND DISCLAIMER STATEMENT NOTICE - READ BEFORE USE:** Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before buying or using this product. If you do not accept these terms, do not use product. By using this product, you accept the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, the manner of handling, use or application of Product, or other influencing factors which are abnormal, not reasonably foreseeable or beyond the control of FBN INPUTS, LLC, its affiliates, and their respective officers, directors, employees, agents, and successors ("FBN"). To the extent consistent with applicable law, you assume all such risks. FBN's sole and exclusive warranty is that the product conforms to the label.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FBN MAKES NO OTHER WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, NON-INFRINGEMENT, SUITABILITY OF THE PRODUCT TO CONTROL ANY SPECIFIC AGRICULTURAL PEST OR DISEASE, THE PRODUCT'S COMPATIBILITY WITH OTHER PRODUCTS OR PERMITTED TANK MIXES, OR THAT THE USE OF THE PRODUCT WILL CAUSE OR RESULT IN ANY PARTICULAR CROP OR SEED PERFORMANCE OUTCOME THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No affiliate, officer, director, employee, agent, or successor of FBN is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FBN DISCLAIMS ANY AND ALL LIABILITY WHATSOEVER, UNDER ANY CIRCUMSTANCE OR LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, TORT, CONTRACT, STRICT LIABILITY, OR OTHERWISE) FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, INCLUDING DAMAGES FOR LOST PROFITS OR UNREALIZED SAVINGS, CROP LOSS, LOSS OF YIELD, LOSS OF GOOD WILL, AND WORK STOPPAGE TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, YOUR EXCLUSIVE REMEDY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, UNDER ANY CIRCUMSTANCE OR LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, TORT, CONTRACT, STRICT



LIABILITY, OR OTHERWISE), SHALL, AT FBN'S ELECTION, BE THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT.

[All trademarks are the property of their respective owners.]

[The sprout logo, "FBN", and "Farmers Business Network" are the registered service marks of Farmers Business Network, Inc.]

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



FARMERS BUSINESS NETWORK<sup>SM</sup>  
[any color]