MEYCHEM

Mesotrione 48 SC Herbicide

An herbicide for the selective contact and residual control of Annual Broadleaf Weeds in Corn (field, seed, sweet, yellow pop), asparagus, citrus fruit, pome fruit, stone fruit, tree nuts, cranberries, flax, oats, okra, pearl millet, rhubarb, sorghum (grain, forage,* and sweet), soybeans, sugarcane and turfgrass.
*Not registered for use by California

Active Ingredient:	
Mesotrione (CAS No. 104206-82-8)	41.0%
Other Ingredients:	59.0%
Total:	100.0%

MEYCHEM Mesotrione 48 SC Herbicide is formulated as a suspension concentrate and contains 4 lbs. of mesotrione per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For chemical emergency assistance with a spill, fire, accident or exposure call CHEMTREC - Day or Night: 1-800-424-9300. For medical emergencies, call the poison control center, day or night, at 1-800-222-1222. For emergency medical treatment information contact the National Pesticides Information Center (NPIC) at 1-800-858-7378,
Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

See inside label booklet for PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, and STORAGE AND DISPOSAL

EPA Reg. No. 87895-12-80967 **EPA Est. No. _____**

Manufactured For:
MEY Corporation
121 S. Estes Drive, Suite 101
Chapel Hill, NC 27514

NET CONTENTS: 265 Gallons

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

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

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical -resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14mils, polyvinyl chloride (PVC) ≥ 14mils, or Viton ≥ 14 mils

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

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

User Safety Recommendations

Users should:

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

ENVIRONMENTAL HAZARDS

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

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

Groundwater Advisory
Mesotrione is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory
This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading for mesotrione from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

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 labeling.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. 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. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 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 for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter treated areas without protective clothing until sprays have dried.

PRODUCT INFORMATION

MEYCHEM Mesotrione 48 SC Herbicide is a systemic preemergence and postemergence herbicide for the selective contact and residual control of broadleaf weeds in field corn, seed corn, yellow popcorn, sweet corn; asparagus; bluegrass, ryegrass (annual and perennial) and tall fescue grown for seed; bush and caneberries; citrus fruit, pome fruit, stone fruit and tree nuts; cranberry; flax; oats; okra; pearl millet; rhubarb; sorghum (grain, forage* and sweet); soybean; sugarcane; and turfgrass. When applied preemergence, weeds absorb the product during emergence from the soil. Dry conditions following application may reduce the preemergence activity of MEYCHEM Mesotrione 48 SC Herbicide. For turfgrass application, if rainfall (0.15 inches) has not occurred within 10 days after a preemergence application, activate with 0.15 inches of irrigation. For application to crops, if rainfall (0.25 inches) is not received within 7-10 days after a preemergence application, where appropriate, rotary hoeing is suggested to activate the herbicide. When used postemergence, susceptible weeds absorb MEYCHEM Mesotrione 48 SC Herbicide through foliar contact and soil absorption. Foliage of treated weeds cease growth after product application, then turn white (loss of chlorophyll) and death may take up to three weeks. For turfgrass, a repeat application is required after two to three weeks for improved postemergence weed control. For best results with turfgrass, add a non-ionic surfactant for postemergence applications.

*Not registered for use by California

MEYCHEM Mesotrione 48 SC Herbicide may cause temporary whitening of turfgrass foliage. Symptoms appear five to seven days after application and last for several weeks. A repeat application to the same site causes less whitening of the plant tissue.

For application to turfgrass, MEYCHEM Mesotrione 48 SC Herbicide is an effective herbicide for weed control prior to or during seeding of certain turfgrasses during turf renovation (see section on use in **New Seedings**). If used preemergence in established turf, tank mixtures with preemergence herbicides including prodiamine are advised for longer residual and broad spectrum weed control.

For application to crops, MEYCHEM Mesotrione 48 SC Herbicide is not effective for the control of most grass weeds. Preemergence grass herbicides or postemergence grass herbicides can be tank mixed with MEYCHEM Mesotrione 48 SC Herbicide to provide broad spectrum weed control in corn (see appropriate section of label for this information). MEYCHEM Mesotrione 48 SC Herbicide can be applied postemergence following a preemergence grass herbicide application. MEYCHEM Mesotrione 48 SC Herbicide can also be used in combination with a burndown herbicide, prior to planting, to provide added burndown and residual weed control in field corn, seed corn, yellow popcorn, and sweet corn.

TURFGRASS USE RESTRICTIONS

- **DO NOT** apply more than 8 fl. oz./A (0.25 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide in a single application.
- **DO NOT** apply more than 16 fl. oz./A (0.50 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** make more than 2 applications per year.
- Wait a minimum of 14 days before retreating.
- **DO NOT** plant any crop other than turfgrass species for 18 months after the last application of MEYCHEM Mesotrione 48 SC Herbicide or injury may occur.
- **DO NOT** apply an organophosphate or carbamate insecticide within seven days of MEYCHEM Mesotrione 48 SC Herbicide application as turf injury may occur.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** apply aerially.
- **DO NOT** use grass clippings from treated turf as mulch around trees or in vegetable/flower gardens.
- **DO NOT** use on golf course putting greens and maintain a five-foot buffer between treated areas and putting greens.

CROP USE RESTRICTIONS

- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to white popcorn or ornamental (Indian) corn.
- **DO NOT** cultivate corn within 7 days before or after a MEYCHEM Mesotrione 48 SC Herbicide application as weed control from the MEYCHEM Mesotrione 48 SC Herbicide application may be reduced.
- **DO NOT** apply this product through any type of irrigation system unless specified otherwise under the specific crop section on the label.
- **DO NOT** apply this product with suspension fertilizers as the carrier.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide postemergence in a tank mix with emulsifiable concentrate grass herbicides, unless specifically addressed under one of the tank mix sections of this label, or injury may occur.
- **DO NOT** use aerial application to apply MEYCHEM Mesotrione 48 SC Herbicide unless specified otherwise under the specific crop section on the label.

TURFGRASS USE PRECAUTIONS

- Bentgrass, *Poa annua*, kikuyugrass, zoysiagrass, seashore paspalum and bermudagrass are sensitive to MEYCHEM Mesotrione 48 SC Herbicide applications. Avoid spraying these turf types unless control and/or injury can be tolerated. Maintain a five-foot buffer between treated areas and bentgrass or *Poa annua* greens.
- Clean sprayer thoroughly after an application of MEYCHEM Mesotrione 48 SC Herbicide if same equipment is used to apply products to bentgrass and bentgrass/*Poa annua* turf areas.
- To reduce movement into sensitive species (e.g. bentgrass), keep people and pets off treated areas until spray has dried and irrigate lightly to move product from turf foliage before resuming normal irrigation.
- Avoid over-spray or drift of spray applications onto ornamentals or flower beds and gardens. Roses and daylilies are sensitive plant species.
- Avoid applications over the top of exposed roots of trees and ornamentals.

FOOD CROP USE PRECAUTIONS

- Severe corn injury resulting in yield loss may occur if MEYCHEM Mesotrione 48 SC Herbicide is applied postemergence to corn that was treated with terbufos or chlorpyrifos.
- Severe corn injury resulting in yield loss may occur if MEYCHEM Mesotrione 48 SC Herbicide is applied foliar postemergence to corn in a tank mix with any organophosphate or carbamate insecticide.
- Severe corn injury resulting in yield loss may occur if any organophosphate or carbamate insecticide is applied foliar postemergence within 7 days before or 7 days after MEYCHEM Mesotrione 48 SC Herbicide 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 MEYCHEM Mesotrione 48 SC Herbicide is made following label directions when weeds are actively growing.
- MEYCHEM Mesotrione 48 SC Herbicide may be applied with pyrethroid type insecticides.

WEED RESISTANCE MANAGEMENT

For resistance management, MEYCHEM Mesotrione 48 SC Herbicide is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to MEYCHEM Mesotrione 48 SC Herbicide 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 must be followed. Users should scout fields before and after application.

To prevent the risk of weeds developing resistance to MEYCHEM Mesotrione 48 SC Herbicide in corn, always use full label rates and rotate to an herbicide with a different mode of action if the maximum number of applications or rate of product has been met or weeds are not being controlled. If applying MEYCHEM Mesotrione 48 SC Herbicide postemergence after a mesotrione containing preemergence herbicide, always add atrazine as a tank mix partner.

Principles of Herbicide Resistant Weed Management Scout and know your field

- Know weed species present in the field to be treated through scouting and field history. An understanding of weed biology is useful in designing a resistance management strategy. Ensure the weed management program will control all weeds present.
- Fields should be scouted prior to application to determine species present and growth stage. Always apply this herbicide at the full labeled rate and correct timing for the weeds present in the field.

Utilize non-herbicidal practices to add diversity

- Use diversified management tactics such as cover crops, mechanical weed control, harvest weed seed control, and crop rotation as appropriate.

Use good agronomic practices, start clean and stay clean

- Use good agronomic practices that enhance crop competitiveness.
- Plant into weed-free fields utilizing tillage or an effective burndown herbicide for control of emerged weeds.
- Sanitize farm equipment to avoid spreading seed or vegetative propagules prior to leaving fields.

Difficult to control weeds

- Fields with difficult to control weeds should be planted in rotation with crops that allow the use of herbicides with an alternative mode of action or different management practices.
- Difficult to control weeds may require sequential applications, such as a broad spectrum preemergence herbicide followed by one or more postemergence herbicide applications. Utilize herbicides containing different modes of action effective on the target weeds in sequential applications.

Do not overuse the technology

- **DO NOT** use more than two applications of this or any other herbicide with the same mode of action in a single growing season unless mixed with an herbicide with a different mode of action which provides overlapping spectrum for the difficult to control weeds.

Scout and inspect fields following application

- Prevent an influx of weeds into the field by controlling weeds in field borders.
- Scout fields after application to verify that the treatment was effective.
- Suspected- herbicide resistant weeds may be identified by these indicators:
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - A spreading patch of non-controlled plants of a particular weed species; and
  - Surviving plants mixed with controlled individuals of the same species.
- Report non-performance of this product to your MEY Corporation representative. If resistance is suspected ensure weed escapes are controlled using an herbicide with an effective mode of action and/or use non-chemical means to prevent further seed production.

Prevent weed escapes before, during, and after harvest

- **DO NOT** allow weed escapes to produce seed or vegetative structures such as tubers or stolons which contribute to spread and survival. Consider harvest weed seed management and control weeds post-harvest to prevent seed production.

Resistant weeds

- Contact your local extension specialist, certified crop advisor and/or MEY Corporation representative for additional resistance management or IPM recommendation. Also, for more information of Weed Resistance Management, visit the Herbicide Resistance Action Committee (HRAC) on the web at: http://www.hracglobal.com. If resistant biotypes have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with a different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver medium or courser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 641 (ASABE S641). If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- **DO NOT** apply during temperature inversions.

Ground Boom Applications:

- **DO NOT** release spray at a height greater than 3 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that deliver medium or courser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boomless Ground Applications:

- Applicators must select a nozzle and pressure that deliver medium or courser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 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 specified 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.

Controlling Droplet Size - Ground Boom

- Adjust Nozzles - Follow nozzle manufacturers' directions for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT - Ground Boom

For ground equipment, the boom should remain level with the crop or turf and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

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.

Handheld Technology Applications: Take precautions to minimize spray drift.

CROP APPLICATION INFORMATION

PREEMERGENCE GROUND APPLICATION

Apply MEYCHEM Mesotrione 48 SC Herbicide preemergence with a carrier volume of 10-60 gal/A.

Spray nozzles must be uniformly spaced, the same size and type, and must provide accurate and uniform application. Use spray nozzles that provide medium to coarse droplet size to provide good coverage and avoid drift. Apply in a spray volume of 10-60 gal/A using water or liquid fertilizer (excluding suspension fertilizers) as the carrier. Use a pump that can maintain a pressure of at least 35-40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures may be used with extended range or drift reduction nozzles.

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

POSTEMERGENCE GROUND APPLICATION

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

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

Flat fan nozzles of 80° or 110° are recommended for optimum postemergence coverage. **DO NOT** use floodjet nozzles or controlled droplet application equipment for postemergence applications.

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

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

Aerial Application

MEYCHEM Mesotrione 48 SC Herbicide can be applied aerially only to corn and sugarcane.

RESTRICTION:

- For aerial application use only nozzles producing coarse-ultra coarse droplets.
- **DO NOT** use nozzles producing fine-medium size droplets.

MEYCHEM Mesotrione 48 SC Herbicide may be applied aerially for preemergence or postemergence weed control in corn only in the following states: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Nebraska, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

MEYCHEM Mesotrione 48 SC Herbicide may be applied aerially for preemergence or postemergence weed control in sugarcane only in the following states: Florida, Louisiana, and Texas.

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

SPRAY ADDITIVES FOR CROP APPLICATION

POSTEMERGENCE ADJUVANTS

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

The following adjuvant recommendations are intended primarily for MEYCHEM Mesotrione 48 SC Herbicide use in corn. Refer to the use directions section of each crop section for specific adjuvant recommendations.

POSTEMERGENCE APPLICATIONS TO FIELD CORN AND SEED CORN

For postemergence applications made after the crop has emerged, add crop oil concentrate (COC) to the spray solution at the rate of 1.0 gal/100 gal. of water (1.0% v/v). The use of a nonionic surfactant (NIS) at 1 qt/100 gallons of water (0.25% v/v) instead of COC is allowed, but the weed control achieved with COC is consistently better than NIS. **The use of methylated seed oil (MSO) adjuvants or MSO blend adjuvants for postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide may cause severe crop injury to occur. DO NOT use MSO adjuvants for postemergence use unless directed for a specific tank mix under the MEYCHEM MESOTRIONE 48 SC HERBICIDE TANK MIXTURES FOR CORN section of this label, or unless permitted by a supplemental MEYCHEM Mesotrione 48 SC Herbicide label**. In addition to COC, always add spray grade UAN (e.g., 28-0-0) to the spray solution at a rate of 2.5% (v/v) or AMS at 8.5 lbs./100 gal. of spray solution, except if precluded elsewhere on this label or by a supplemental MEYCHEM Mesotrione 48 SC Herbicide label.

POSTEMERGENCE APPLICATIONS TO SWEET CORN AND YELLOW POPCORN

DO NOT add UAN or AMS when making postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide to yellow popcorn or sweet corn, or severe crop injury may occur.

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

PREEMERGENCE ADJUVANTS

For MEYCHEM Mesotrione 48 SC Herbicide preplant or preemergence applications, and where weeds are present, the use of any adjuvant for agricultural use is permitted. In these situations, MSO type adjuvants are typically better than COC type adjuvants, which are typically better than NIS type adjuvants for enhancing weed control. UAN or AMS can be added and typically provides better weed control than not adding one of these. It is the pesticide users 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 FOR CROP APPLICATION

Cleaning Equipment After MEYCHEM Mesotrione 48 SC Herbicide Application

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

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

MIXING PROCEDURES FOR CROP APPLICATION

Refer to the **Crop Use Directions** sections of this label for tank mixes.

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates may be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. **DO NOT** tank mix MEYCHEM Mesotrione 48 SC Herbicide with any other insecticide, fungicide, fertilizer solution, or adjuvant not recommended on the label without testing compatibility, as poor mixing may result. It is recommended that the compatibility of any tank mix combination be tested on a small scale such as a jar test before actual tank mixing. It is the pesticide users 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.

Follow the mixing instructions for adding MEYCHEM Mesotrione 48 SC Herbicide to the spray tank:

1. Only use sprayers in good running condition with good agitation. Ensure the sprayer is cleaned according to instructions on the label of the product used prior to MEYCHEM Mesotrione 48 SC Herbicide. For postemergence applications, use only clean water for the spray solution. Ensure that all in-line strainer and nozzle screens in the sprayer are 50-mesh or coarser. **DO NOT** use screens finer than 50-mesh.
2. Liquid fertilizer (excluding suspension fertilizers) may be used as the carrier for preemergence applications.
3. Begin to fill sprayer tank or premix tank with clean water and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
4. When the sprayer or premix tank is half full of water, add AMS and agitate until completely dispersed.
5. Next add MEYCHEM Mesotrione 48 SC Herbicide slowly and agitate until completely dissolved. Wait at least 1 minute after the last of the MEYCHEM Mesotrione 48 SC Herbicide has been added to the tank to allow for complete dispersion. A longer agitation period may be required to disperse MEYCHEM Mesotrione 48 SC Herbicide when using cold water from sources such as deep drilled wells.
6. If tank mixing, add the tank mix product next.
7. Finally, add adjuvant and UAN, if needed, and then continue to fill tank to desired level with water.

CROP APPLICATION WEEDS CONTROLLED

MEYCHEM Mesotrione 48 SC Herbicide applied as directed in this label will control or partially control the weeds listed in Tables 1 and 2.

Where reference is made to weeds partially controlled, partial control can either mean erratic control (good to poor) or consistent control at a level below that generally considered acceptable for commercial weed control.

For best postemergence results, apply MEYCHEM Mesotrione 48 SC Herbicide to actively growing weeds. Dry weather following preemergence application of MEYCHEM Mesotrione 48 SC Herbicide may reduce residual weed control effectiveness. If irrigation is available, apply ½ to 1 inch of water after preemergence application. If irrigation is not available, a uniform shallow cultivation is recommended as soon as weeds emerge.

MEYCHEM Mesotrione 48 SC Herbicide applied alone or in mixture with atrazine will not provide consistent or effective control of weeds identified as resistant to postemergence HPPD inhibiting herbicides.

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

Table 1. Weeds Controlled With Postemergence Applications of MEYCHEM Mesotrione 48 SC Herbicide

Weed Common Name	Weed Scientific Name	MEYCHEM Mesotrione 48 SC Herbicide 3 fl. oz./A (0.09 lbs. ai/A)	MEYCHEM Mesotrione 48 SC Herbicide 2.5-3.0 fl. oz./A (0.08 - 0.09 lbs. ai/A) + Atrazine[1]
		Apply to Weeds <5 Inches Tall[2]	
Amaranth, palmer	*Amaranthus palmeri*	PC[3]	C[3]
Amaranth, powell	*Amaranthus powellii*	C	C
Amaranth, spiny	*Amaranthus spinosus*	C	C
Atriplex	*Chenopodium orach*	C	C
Broadleaf signalgrass	*Urochloa platyphylla*	C[3]	C[3]
Buckwheat, wild	*Polygonum convolvulus*	PC	PC
Buffalobur	*Solanum rostratium*	C	C
Burcucumber	*Sicyos angulatus*	PC	C[3]
Carpetweed	*Mollugo verticillata*	C	C
Carrot, wild	*Daucus carota*	PC	C
Chickweed, common	*Stellaria media*	C	C
Cocklebur, common	*Xanthium strumarium*	C	C
Crabgrass, large	*Digitaria sanguinalis*	C[3]	C[3]

(continued)

Weed Common Name	Weed Scientific Name	MEYCHEM Mesotrione 48 SC Herbicide 3 fl. oz./A (0.09 lbs. ai/A)	MEYCHEM Mesotrione 48 SC Herbicide 2.5-3.0 fl. oz./A (0.08 - 0.09 lbs. ai/A) + Atrazine[1]
		Apply to Weeds <5 Inches Tall[2]	
Dandelion	*Taraxacum officinale*	NC	PC
Dock, curly	*Rumex crispus*	PC	PC
Galinsoga	*Galinsoga parviflora*	C	C
Hemp	*Cannabis sativa*	C	C
Horsenettle	*Solanum carolinense*	PC	C
Jimsonweed	*Datura stramonium*	C	C
Horseweed (marestail)	*Conyza canadensis*	PC	C
Knotweed, prostrate	*Polygonum aviculare*	PC	PC
Kochia	*Kochia scoparia*	PC[3]	C[3]
Lambsquarters, common	*Chenopodium album*	C	C
Mallow, Venice	*Hibiscus trionum*	NC	C
Morningglory, entireleaf	*Ipomoea hederacea*	PC	C
Morningglory, ivyleaf	*Ipomoea hederacea*	PC	C
Morningglory, pitted	*Ipomoea lacunosa*	PC	C
Mustard, wild	*Brassica kaber*	C	C
Nightshade, black	*Solanum nigrum*	C	C
Nightshade, Eastern black	*Solanum ptycanthum*	C	C
Nightshade, hairy	*Solanum sarrachoides*	C	C
Nutsedge, yellow	*Cyperus esculentus*	PC	PC
Pigweed, redroot	*Amaranthus retroflexus*	C	C
Pigweed, smooth	*Amaranthus hybridus*	C	C
Pigweed, tumble	*Amaranthus albus*	C	C
Pokeweed, common	*Phytolacca americana*	PC	PC
Potatoes, volunteer	*Solanum* spp.	C	C
Pusley, Florida	*Richardia scabra*	C[3]	C[3]
Ragweed, common	*Ambrosia artemisiifolia*	PC	C
Ragweed, giant	*Ambrosia trifida*	C[3]	C
Sesbania, hemp	*Sesbania exaltata*	C	C
Sida, prickly (teaweed)	*Sida spinosa*	NC	C[3]
Smartweed, ladysthumb	*Polygonum persicaria*	C[3]	C
Smartweed, pale	*Polygonum lapathifolium*	C[3]	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C[3]	C
Sunflower, common	*Helianthus annuus*	C	C
Thistle, Canada	*Circium arvense*	NC	PC
Velvetleaf	*Abutilon theophrasti*	C	C
Waterhemp, common	*Amaranthus rudis*	C[3]	C
Waterhemp, tall	*Amaranthus tuberculatus*	C[3]	C

[1] MEYCHEM Mesotrione 48 SC Herbicide tank mixture with atrazine is approved only for use on corn and sugarcane.
[2] Under certain situations weeds can be controlled at larger than listed sizes, however, to protect crop yield, manage weed resistance and provide consistent control, treat weeds before they exceed 5 inches in height.
[3] Apply before weed exceeds 3 inches in height.

C = Control PC = Partial Control NC = Not Controlled

Table 2. Weeds Controlled With Preemergence Applications of MEYCHEM Mesotrione 48 SC Herbicide

Common Name	Scientific Name	MEYCHEM Mesotrione 48 SC Herbicide Applied Alone[1]	MEYCHEM Mesotrione 48 SC Herbicide + Atrazine[2]
Amaranth, palmer	*Amaranthus palmeri*	C	C
Amarath, powell	*Amaranthus powellii*	C	C
Amaranth, spiny	*Amaranthus spinosus*	C	C
Broadleaf signalgrass	*Urochloa platyphylla*	PC	PC
Buffalobur	*Solanum rostratum*	C	C
Burclover, California	*Medicago polymorpha*	C	C
Carpetweed	*Mollugo verticillata*	C	C
Carrot, wild	*Daucus carota*	C	C
Chickweed, common	*Stellaria media*	C	C
Chickweed, mouseear	*Cerastium vulgatum*	C	C
Cocklebur, common	*Xanthium strumarium*	PC	C
Crabgrass, large	*Digitaria sanguinalis*	PC	PC
Dandelion, common (seedling)	*Taraxacum officinale*	C	C
Deadnettle, purple	*Lamium purpureum*	C	C
Dock, curly	*Rumex crispus*	C	C
Eveningprimrose, cutleaf	*Oenothera laciniata*	C	C
Fiddleneck, coast	*Amsinckia intermedia*	C	C
Filaree, redstem	*Erodium cicutarium*	PC	C
Filaree, whitestem	*Erodium moschatum*	PC	C
Fleabane, hairy	*Conyza bonariensis*	C	C
Galinsoga	*Galinsoga parviflora*	C	C
Geranium, Carolina	*Geranium carolinianum*	C	C
Groundcherry, smooth	*Physalis subglabrata*	C	C
Groundsel, common	*Senecio vulgaris*	C	C
Henbit	*Lamium amplexicaule*	C	C
Horsenettle	*Solanum carolinense*	PC	PC
Horseweed/marestail	*Conyza canadensis*	C	C
Jimsonweed	*Datura stramonium*	C	C
Kochia	*Kochia scoparia*	PC	C
Lambsquarters, common	*Chenopodium album*	C	C
Lettuce, prickly	*Lactuca serriola*	C	C
Mallow, common	*Malva neglecta*	C	C
Mayweed, chamomile	*Anthemis cotula*	C	C
Morningglory, entireleaf	*Ipomoea hederacea*	PC	C
Morningglory, ivyleaf	*Ipomoea hederacea*	PC	C
Morningglory, pitted	*Ipomoea lacunosa*	PC	C
Nettle, burning	*Urtica urens*	C	C
Nightshade, eastern black	*Solanum ptycanthum*	C	C
Nightshade, hairy	*Solanum sarrachoides*	C	C
Pansy	*Viola tricolor*	C	C
Pigweed, redroot	*Amaranthus retroflexus*	C	C
Pigweed, smooth	*Amaranthus hybridus*	C	C
Pigweed, tumble	*Amaranthus albus*	C	C
Pineappleweed	*Matricaria matricariodes*	C	C
Puncturevine, common	*Tribulus terrestris*	C	C

(continued)

Common Name	Scientific Name	MEYCHEM Mesotrione 48 SC Herbicide Applied Alone[1]	MEYCHEM Mesotrione 48 SC Herbicide + Atrazine[2]
Purslane, common	*Portulaca oleracea*	C	C
Pusley, common	*Richardia scabra*	PC	PC
Ragweed, common	*Ambrosia artemisiifolia*	C	C
Ragweed, giant	*Ambrosia trifida*	PC	C
Redmaids	*Calandria caulescens*	C	C
Rocket, London	*Sisymbrium irio*	C	C
Shepherd's-purse	*Capsella bursa-pastoris*	C	C
Smartweed, ladysthumb	*Polygonum persicaria*	C	C
Smartweed, pale	*Polygonum lapathifolium*	C	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C	C
Sowthistle, annual	*Sonchus oleraceus*	C	C
Spanishneedles	*Bidens bipinnata*	C	C
Sunflower, common	*Helianthus annuus*	PC	C
Swinecress	*Coronopus didymus*	C	C
Tasselflower, red	*Emilia sonchifolia*	C	C
Velvetleaf	*Abutilon theophrasti*	C	C
Waterhemp, common	*Amaranthus rudis*	C	C
Vetch, common	*Vicia sativa*	C	C
Vetch, purple	*Vicia benghalensis*	PC	PC
Waterhemp, tall	*Amaranthus tuberculatus*	C	C
Willowherb, panicle	*Epilobium brachycarpum*	C	C

[1] Refer to crop specific sections for applications rates.

[2] MEYCHEM Mesotrione 48 SC Herbicide tank mixture with atrazine is approved only for use on corn grain sorghum, forage sorghum* and sugarcane. Refer to the crop sections on this label for specific use directions.

*Not registered for use by California

C = Control PC = Partial Control

ROTATIONAL CROPS

When MEYCHEM Mesotrione 48 SC Herbicide is applied as directed on this label, follow the crop rotation intervals in Table 3. If MEYCHEM Mesotrione 48 SC Herbicide is tank mixed with other products, follow the most restrictive products crop rotation interval. It is the pesticide users responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Table 3. Time Interval Between MEYCHEM Mesotrione 48 SC Herbicide Application and Replanting or Planting of Rotational Crop

Crop	Replant/Rotational Interval
Asparagus Corn (all types) Cranberry Flax Kentucky bluegrass grown for seed Millet, pearl Oats Rhubarb Ryegrass (perennial and annual) grown for seed Sorghum (grain, forage*and sweet) Sugarcane Tall fescue grown for seed	Anytime
Small grain cereals including wheat, barley and rye	4 Months
Alfalfa Blueberry Canola Cotton Currant Lingonberry Okra Peanuts Peas[1,2] Potato Rice Snap beans[1,2] Soybeans Sunflowers Tobacco	10 Months
Cucurbits Dry beans Red clover Sugar beets All other rotational crops	18 Months

[1] Plant these rotational crops only if the following criteria below have been met. If all criteria are not met, plant peas and snap beans a minimum of 18 months following MEYCHEM Mesotrione 48 SC Herbicide application.

- A minimum of 20" of rainfall plus irrigation has been received between application and planting of the rotational crop.
- Soil pH is 6.0 or greater.
- Application of MEYCHEM Mesotrione 48 SC Herbicide at 3 fl. oz./A (0.094 lbs. ai/A) or less applied no later than June 30th the year preceding rotational crop planting.
- No other HPPD herbicides were applied the year prior to planting peas and snap beans.

[2] **Restriction**

- **DO NOT** plant peas or snap beans on sand, sandy loam or loamy sand soils in Minnesota or Wisconsin.

*Not registered for use by California

CROP USE DIRECTIONS

CORN

MEYCHEM Mesotrione 48 SC Herbicide may be applied by ground for preemergence or postemergence weed control in field corn, seed corn, yellow popcorn, and sweet corn.

MEYCHEM Mesotrione 48 SC Herbicide may also be applied aerially for preemergence or postemergence weed control only in the following states: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.Refer to seed company directions for use on field corn inbred lines. Special adjuvant restrictions must be followed for postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide in yellow popcorn or sweet corn (see the **SPRAY ADDITIVES** section of this label). **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to white popcorn or ornamental (Indian) corn.

Postemergence applications (after crop emergence) of MEYCHEM Mesotrione 48 SC Herbicide may cause crop bleaching in some yellow popcorn and sweet corn hybrids. Crop bleaching is typically transitory and has no effect on final yield or quality. However, herbicide sensitivity in yellow popcorn and sweet corn varies widely, and all yellow popcorn and sweet corn hybrids have not been tested. Contact your popcorn or sweet corn company, Fieldman, or University Specialist about hybrid recommendations before making a postemergence application of MEYCHEM Mesotrione 48 SC Herbicide to yellow popcorn or sweet corn. **DO NOT** include nitrogen based adjuvants (UAN or AMS) when making postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide to yellow popcorn or sweet corn.

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

Apply MEYCHEM Mesotrione 48 SC Herbicide for the control of broadleaf and grass weeds listed in Tables 1 and 2. Corn may be treated up to 30 inches tall or up to the 8-leaf stage of corn growth.

MEYCHEM Mesotrione 48 SC Herbicide USED ALONE - POSTEMERGENCE
Apply MEYCHEM Mesotrione 48 SC Herbicide at 3.0 fl. oz./A (0.094 lbs. ai/A) per application. Always add an appropriate adjuvant to the spray tank (see the **SPRAY ADDITIVES** section of this label).

For best results, apply MEYCHEM Mesotrione 48 SC Herbicide to actively growing weeds. For a list of weeds controlled see Table 1. Susceptible weeds which emerge soon after application of MEYCHEM Mesotrione 48 SC Herbicide may be controlled after they absorb the herbicide from the soil.

MEYCHEM Mesotrione 48 SC Herbicide will not control most grass weeds.

Restrictions:
Two postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide may be made with the following restrictions.

- Only one postemergence application may be made if MEYCHEM Mesotrione 48 SC Herbicide has been applied preemergence.
- **DO NOT** exceed a total of two applications per year.
- **DO NOT** exceed a total of 7.7 fl. oz./A (0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** make the second application within 14 days of the first application.
- Unless specified otherwise on this label or an MEY Corporation supplemental label, **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide at rates less than 3.0 fl. oz./A (0.094 lbs. ai/A). Application of MEYCHEM Mesotrione 48 SC Herbicide at rates less than 3.0 fl. oz./A (0.094 lbs. ai/A) postemergence may result in incomplete weed control and loss of residual control.
- **DO NOT** exceed a total of 6.0 fl. oz./A (0.188 lbs. ai/A) for the two postemergence applications.
- **DO NOT** exceed 3.0 fl. oz./A (0.094 lbs. ai/A) in a single postemergence application.
- If MEYCHEM Mesotrione 48 SC Herbicide is applied postemergence to ground that received a preemergence application of a mesotrione-containing herbicide, atrazine must be tank mixed with MEYCHEM Mesotrione 48 SC Herbicide.
- If atrazine is mixed with MEYCHEM Mesotrione 48 SC Herbicide, **DO NOT** apply to corn that is more than 12 inches in height.
- Corn may be treated up to 30 inches tall or up to the 8-leaf stage of corn growth.
- **DO NOT** feed or harvest forage, grain, or stover within 45 days after application.

MEYCHEM MESOTRIONE 48 SC HERBICIDE USED ALONE - PREEMERGENCE
Apply MEYCHEM Mesotrione 48 SC Herbicide alone at 6.0 - 7.7 fl. oz./A (0.188 - 0.24 lbs. ai/A) by ground sprayers in a spray volume of 10-30 gal. of water (up to 80 gal. if applied with liquid fertilizers) per acre for broadleaf weed control. For a list of weeds controlled, refer to Table 2. MEYCHEM Mesotrione 48 SC Herbicide may be tank mixed with preemergence grass herbicides for grass control.

Refer to the tank mix section for a list of partners.

Restrictions:

- **DO NOT** apply more than one preemergence application per year.
- **DO NOT** exceed a total of 7.7 fl. oz./A (0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** exceed a total of 7.7 fl. oz./A (0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per application.

MEYCHEM MESOTRIONE 48 SC HERBICIDE TANK MIXTURES FOR CORN

MEYCHEM Mesotrione 48 SC Herbicide may be tank mixed with other registered herbicides for improved spectrum of weed control in burndown, preemergence or postemergence applications. Additionally these tank mixtures can be used to include a different mode of action herbicide to help control or manage the development of resistant weed biotypes.

Burndown Tank Mixtures in Corn

MEYCHEM Mesotrione 48 SC Herbicide may be applied in tank mixture with other registered herbicides for burndown plus residual weed control.

For improved broadleaf weed control with limited residual control prior to planting corn and before corn emergence, apply MEYCHEM Mesotrione 48 SC Herbicide at 3.0 fl. oz./A (0.094 lbs. ai/A) in tank mixes with paraquat dichloride brands, glyphosate brands, dicamba brands and/or 2,4-D. For greater residual control, use 6.0 - 7.7 fl. oz./A (0.188 - 0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide (see Table 2) with the above products. Use the adjuvant system recommended 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 users 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.

Preemergence Tank Mixtures in Corn

MEYCHEM Mesotrione 48 SC Herbicide may be applied at a rate of 5.3 - 7.7 fl. oz./A (0.16 - 0.24 lbs. ai/A) in tank mixture with other registered herbicides (Table 4) for preemergence residual weed control. Refer to Table 2 for a list of weeds controlled by MEYCHEM Mesotrione 48 SC Herbicide and MEYCHEM Mesotrione 48 SC Herbicide plus atrazine applied preemergence.

Table 4. MEYCHEM Mesotrione 48 SC Herbicide Tank Mixtures for Preemergence Application in Corn[1]

Atrazine
Acetochlor
Dimethenamide-P
Pendimethalin
S-Metolachlor

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

Postemergence Tank Mixtures in Corn

The tank mixtures with MEYCHEM Mesotrione 48 SC Herbicide identified in Table 5 may be applied postemergence to corn (i.e., after corn has emerged).

Always add an appropriate adjuvant to the spray tank (see the **SPRAY ADDITIVES** section of this label). Refer to 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 field corn, yellow popcorn, or sweet corn.

Table 5. MEYCHEM Mesotrione 48 SC Herbicide Tank Mixtures for Postemergence Application in Corn

Tank Mix Partners[1]	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.
Sodium bentazon	• Use this mixture for additional broadleaf weed control. Refer to product label for list of weeds controlled.
Rimsulfuron + thifensulfuron Or Atrazine + nicosulfuron + rimsulfuron	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Atrazine + S-metolachlor	• When using these tank mixtures, it is recommended to leave the nitrogen based adjuvant (UAN or AMS) out of the mixture or apply as a post-directed spray to minimize contact with crop foliage. • To further reduce the risk of crop injury, the user may also leave out the crop oil concentrate (COC), or replace it with a nonionic surfactant (NIS). • In all cases, the control of emerged weeds may be reduced somewhat due to less than optimum adjuvant effect or weed coverage.
Bromoxynil octanoate	• Use this mixture for additional broadleaf weed control.
Glyphosate-only brands, excludes premixed products containing glyphosate	• For use only in glyphosate-tolerant corn. • Application of this mixture to a corn hybrid that does not contain the glyphosate-tolerant trait will result in crop death. • Add spray-grade ammonium sulfate (AMS) at a rate that delivers 8.5-17.0 lbs. of AMS/100 gallons of water. • If the glyphosate product label calls for an adjuvant in addition to AMS, add a non-ionic surfactant (NIS) at 0.25-0.5% v/v (1-2 quart/100 gallons). • **DO NOT** add urea ammonium nitrate (UAN), crop oil concentrate (COC), or methylated seed oil (MSO) type adjuvants to this tank mixture or crop injury may occur.
Glufosinate	• Use this tank mixture only on corn designated as glufosinate-tolerant. • Application of this mixture to a corn hybrid that does not contain the glufosinate resistant trait will result in severe crop injury or death. • **DO NOT** use crop oil concentrate (COC) as an adjuvant for this mixture or severe crop injury may occur.
Dicamba, sodium salt + imazapyr + imazethapyr	• For use only on corn designated as Clearfield® or imidazoline-tolerant. • Application of this mixture to a corn hybrid that does not contain the Clearfield or imidazoline-tolerant trait will result in severe crop injury or death. • **DO NOT** use a Methylated Seed Oil (MSO), or an MSO blend with this mixture or severe crop injury may result.
Dicamba, sodium salt + primisulfuron-methyl	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Azoxystrobin + pydiflumetofen + propiconazole	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Primisulfuron-methyl + prosulfuron	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Nicosulfuron + rimsulfuron	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.
Nicosulfuron + thifensulfuron	• Use this mixture for additional weed control. Refer to product label for list of weeds controlled.

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

ASPARAGUS

MEYCHEM Mesotrione 48 SC Herbicide can be applied broadcast or banded at a rate of 3.0 - 7.7 fl. oz./A (0.09 - 0.24 lbs. 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 (0.09 lbs. ai/A) rate for postemergence 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 lbs. ai/A) rate for preemergence 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. (0.09 - 0.24 lbs. ai) per treated acre. For the best preemergence weed control with spring applications, MEYCHEM Mesotrione 48 SC Herbicide 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 preemergence in the spring must be taken into account so as not to exceed the 7.7 fl. oz. (0.24 lbs. ai/A) 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 MEYCHEM Mesotrione 48 SC Herbicide application, the addition of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v **or** a nonionic surfactant (NIS) at the rate of 0.25% v/v is recommended. In addition to COC or NIS, a spray grade UAN (e.g. 28-0-0) at the rate of 2.5% v/v **or** ammonium sulfate (AMS) at the rate of 8.5 lb./100 gallons of spray solution may be added for improved burndown of emerged weeds. If weeds have not yet emerged, no adjuvant is recommended.

Restrictions:

- **DO NOT** apply more than 7.7 fl. oz./A (0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 7.7 fl. oz./A (0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per application.
- **DO NOT** make more than two MEYCHEM Mesotrione 48 SC Herbicide applications per year.
- **DO NOT** make the second application within 14 days of the first application.

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

MEYCHEM Mesotrione 48 SC Herbicide can be applied to bluegrass, annual ryegrass, perennial ryegrass, or tall fescue which is grown for seed. MEYCHEM Mesotrione 48 SC Herbicide can be applied as a preemergence application to bare soil (new seeding) or as a postemergence application to an emerged grass crop.

Preemergence Application: Apply MEYCHEM Mesotrione 48 SC Herbicide as a broadcast, surface spray at a rate of 6.0 fl. oz./A (0.188 lbs. ai/A) to a newly seeded crop. The MEYCHEM Mesotrione 48 SC Herbicide 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 MEYCHEM Mesotrione 48 SC Herbicide. Grass crop injury symptoms include temporary bleaching of newly emerged leaves, or in extreme conditions, stunting. For a list of preemergence weeds controlled or partially controlled see Table 2. In addition to the weeds listed in Table 2, MEYCHEM Mesotrione 48 SC Herbicide applied preemergence will control mannagrass.

Postemergence Application: Apply MEYCHEM Mesotrione 48 SC Herbicide as a broadcast postemergence spray at a rate of 3.0 - 6.0 fl. oz./A (0.09 - 0.188 lbs. ai/A) to emerged bluegrass, perennial ryegrass or tall fescue grown for seed. Use the 3.0 fl. oz./A (0.09 lbs. ai/A) rate for postemergence control or partial control of the weeds listed in Table 1. In addition to the weeds listed in Table 2, MEYCHEM Mesotrione 48 SC Herbicide applied postemergence will control mannagrass (up to 3 tillers).

Use the 6.0 fl. oz./A (0.188 lbs. ai/A) rate for postemergence weed control plus extended residual weed control (see Table 2). The addition of a crop oil concentrate type adjuvant at 1% v/v **or** a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is recommended. Postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide 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 postemergence weed control but will also increase the risk of grass crop injury, especially at MEYCHEM Mesotrione 48 SC Herbicide rates greater than 3.0 fl. oz./A (0.09 lbs. ai/A). If grass crop injury is a concern, **DO NOT** add UAN or AMS to the spray solution.

Tank mixing other pesticides with MEYCHEM Mesotrione 48 SC Herbicide postemergence may increase the risk of crop injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to MEYCHEM Mesotrione 48 SC Herbicide for applications made postemergence to the crop.

Restrictions:

- **DO NOT** harvest the grass crop for seed or straw within 60 days following the application of MEYCHEM Mesotrione 48 SC Herbicide.
- **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 MEYCHEM Mesotrione 48 SC Herbicide.
- **DO NOT** make more than two applications of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** make the second application within 14 days of the first application.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) in a single application.
- **DO NOT** apply more than 9 fl. oz./A (0.282 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per acre per year.
- Applications of MEYCHEM Mesotrione 48 SC Herbicide to grasses grown for seed species not listed on this label may result in severe injury.

BUSH AND CANEBERRIES (CROP GROUP 13-07A and 13-07B)

Caneberry Subgroup 13-07A: Blackberry; loganberry*; raspberry, red and black; wild raspberry*; cultivars, varieties, and/or hybrids of these*.
Bushberry Subgroup 13-07B: Aronia berry*; blueberry, highbush; blueberry, lowbush; buffalo currant*; Chilean guava*; currant, black; currant, red; elderberry*; European, barberry*; gooseberry*; cranberry, highbush*; honeysuckle, edible*; huckleberry*; jostaberry*; Juneberry*; lingonberry; native currant*; salal*; sea buckthorn*; cultivars, varieties, and/or hybrids of these*.
*Not registered for use by California.

Note: Not all cultivars and types of berries that are included within the Environmental Protection Agencies definition of bush and caneberries (Crop Subgroups 13-07A and 13-07B) have been tested and shown to have adequate crop safety to MEYCHEM Mesotrione 48 SC Herbicide. Those that have been tested, and are believed to be reasonably fit, are listed below along with use directions for that crop. If MEYCHEM Mesotrione 48 SC Herbicide is used on bush or caneberries not listed below, severe crop injury may occur.

MEYCHEM Mesotrione 48 SC Herbicide 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. MEYCHEM Mesotrione 48 SC Herbicide may be applied in bush or caneberries at a rate up to 6 fl. oz./A (0.188 lbs. ai/A). If a split application weed control program is desired, 3 fl. oz./A (0.094 lbs. ai/A) followed by 3 fl. oz./A (0.094 lbs. ai/A) may be used. The use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is recommended, but avoid using COC adjuvants that are injurious to blueberry and lingonberry leaves.

In low bush blueberries, MEYCHEM Mesotrione 48 SC Herbicide may only be applied in the non-bearing year. This application may be a broadcast application. Up to 6 fl. oz./A (0.188 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide may be applied in a single application, or 3 fl. oz./A (0.094 lbs. ai/A) followed by 3 fl. oz./A (0.094 lbs. ai/A) if used in a split application program. The use of a crop oil concentrate (COC) type adjuvant at 1% v/v is recommended. Applications of MEYCHEM Mesotrione 48 SC Herbicide during dry weather conditions and/or temperatures above 85° can cause injury to Lowbush blueberries. Applications of MEYCHEM Mesotrione 48 SC Herbicide can cause yellowing or necrosis of leaves and under severe conditions, leaf drop may occur especially on “Sourtop” variety blueberries.

Restrictions:
- **DO NOT** make more than two applications of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per application.
- If two applications are made, they must be made no closer than 14 days apart.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to bush or caneberries after the onset of the bloom stage or illegal residues may occur.

CITRUS FRUIT, POME FRUIT*, STONE FRUIT AND TREE NUTS (CROP GROUP 10-10, 11-10, 12-12 AND 14-12)

*Not registered for use by California

MEYCHEM Mesotrione 48 SC Herbicide may be used for postemergence and residual control of weeds listed in Tables 1 and 2 in the following crops.

Citrus fruit (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*, Mount White lime*, New Guinea wild lime*, sour orange, sweet orange, pummelo*, Russell River lime*, Satsuma mandarin*, sweet lime*, Tachibana orange*, Tahiti lime*, tangelo, tangerine (Mandarin), tangor*, trifoliate orange*, uniq fruit*, cultivars, varieties and/or hybrids of these†)
*Not registered for use by California
†In California, only cultivars, varieties and/or hybrids of listed California uses

Pome fruit* (apple, azarole, crabapple, loquat, mayhaw, medlar, pear, Asian pear, quince, Chinese quince, Japanese quince, tejocote, cultivars, varieties and/or hybrids of these)
*Not registered for use by California

Stone fruit (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†)
*Not registered for use by California
†In California, only cultivars, varieties and/or hybrids of listed California uses

Tree nuts (African nut-tree*, almond, beechnut*, 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†)
*Not registered for use by California
†In California, only cultivars, varieties and/or hybrids of listed California uses

Precautions

- To avoid crop injury, apply the spray to the grove or orchard floor and to the weeds, avoiding contact with crop foliage, stems or fruit. Contact of MEYCHEM Mesotrione 48 SC Herbicide with the crop may result in bleaching injury that is typically temporary. Use trunk guards to protect plants until adequate bark has developed.
- Specified rates are based on broadcast treatment. For band applications around trees in fruit or nut plantings, reduce the broadcast rate of MEYCHEM Mesotrione 48 SC Herbicide and carrier per acre in proportion to the area actually sprayed. (See Banded Applications Section.)
- Application of MEYCHEM Mesotrione 48 SC Herbicide in nectarine, plum or tree nuts grown in coarse soils may cause bleaching, especially when applied during time of heavy water use and root growth such as during bud break or rapid shoot expansion.
- MEYCHEM Mesotrione 48 SC Herbicide can only be applied in pome fruit, stone fruit and nut trees that have been established for one full growing season and are in good health and vigor. MEYCHEM Mesotrione 48 SC Herbicide can be applied in citrus trees or citrus tree plantings that are less than 12 months old and are exhibiting normal growth and vigor.

Restrictions

- **DO NOT** apply in orchards that are stressed due to poor weather or other abiotic factors.
- **DO NOT** exceed a total of 12 fl. oz. per acre (0.376 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** exceed 6 fl. oz. per acre (0.188 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per application.
- **DO NOT** exceed 3 applications per year or in a 12-month period.
- Allow at least 12 weeks between applications of MEYCHEM Mesotrione 48 SC Herbicide at 6 fl. oz./A (0.188 lbs. ai/A) and at least 6 weeks between applications of 6 fl. oz./A (0.188 lbs. ai/A) and subsequent applications of 3 fl. oz./A (0.094 lbs. ai/A). (Applications must follow one of the four programs listed in Table 6 below.)
- **DO NOT** harvest pome fruit, stone fruit or tree nuts within 30 days after application.
- **DO NOT** harvest citrus fruit within 1 day after application.
- **DO NOT** use on soils with greater than 20% gravel.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide through any type of irrigation system.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide by air.

Spray Additives

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

Banded Applications

When applying a row or banded treatment of MEYCHEM Mesotrione 48 SC Herbicide, the following formula may be used to calculate the amount per acre:

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

Tank Mix Instructions

MEYCHEM Mesotrione 48 SC Herbicide may be mixed and applied in combination with most commonly used herbicides registered for use in the approved crops in order to expand the postemergence (paraquat dichloride, glyphosate brands, glufosinate, or oxyfluorfen) or residual (simazine, norflurazon, rimsulfuron, oxyfluorfen, pendimethalin, diuron, bromacil, or indaziflam) weed control spectrum. These tank mixtures can be used to help control or manage the development of resistant weeds. The application of mixtures or sequences of effective herbicides, with different sites of action, can provide the diversity needed for management of herbicide resistance.

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.

Weed Control (Table 1 and 2)

MEYCHEM Mesotrione 48 SC Herbicide provides both postemergence and preemergence control of susceptible weeds. Best control is obtained if postemergence applications are made before weeds reach 5 inches in height (Table 1) or before germination of seed for preemergence control (Table 2). Rainfall or irrigation soon after application will enhance preemergence activity.

Use Directions

Apply as a directed or shielded spray. Avoid contact with trunk surfaces, fruit or crop foliage. **DO NOT** apply when nuts or fruits are on the ground at harvest. Ensure that the soil is settled, firm and relatively free of debris at time of application. Also ensure that the soil is free of depressions around trees where rain or irrigation water can concentrate. Apply the first application of MEYCHEM Mesotrione 48 SC Herbicide in late fall/early winter or spring and subsequent applications utilizing one of the programs noted in the Table 6.

Table 6. MEYCHEM Mesotrione 48 SC Herbicide Application Programs, Rates and Intervals

Program	Application Rate (fl. oz. (lbs. ai)/A)			Application Interval (wk)
	1st Application	2nd Application	3rd Application	
1	6 (0.19)	6 (0.19)	-	12
2	6 (0.19)	3 (0.094)	-	6
3	6 (0.19)	3 (0.094)	3 (0.094)	6
4	3 (0.094)	3 (0.094)	3 (0.094)	6

For optimum postemergence weed control, apply MEYCHEM Mesotrione 48 SC Herbicide to actively growing weeds in tank mixture with burndown herbicides such as: paraquat dichloride, glyphosate brands, glufosinate or oxyfluorfen before weeds exceed 5 inches in height.

For effective residual weed control, MEYCHEM Mesotrione 48 SC Herbicide must be moved into the weed seed germination zone. For preemergence weed control, apply MEYCHEM Mesotrione 48 SC Herbicide before rainfall or irrigation. For optimum residual control MEYCHEM Mesotrione 48 SC Herbicide can be tank mixed with herbicides such as: simazine, norflurazon, rimsulfuron, oryzalin, oxyfluorfen, pendimethalin, diuron, bromacil, or indaziflam, where approved for use.

Subsequent application(s) of MEYCHEM Mesotrione 48 SC Herbicide can be made alone or in tank mixture, with the herbicides noted above, if weed emergence occurs.

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

Apply MEYCHEM Mesotrione 48 SC Herbicide in a spray volume of 10-40 gal/A.

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

CRANBERRY

MEYCHEM Mesotrione 48 SC Herbicide may be applied at a rate up to 8 fl. oz./A (0.25 lbs. ai/A) to bearing or non-bearing cranberry beds for control or suppression of bog St. John's wort (*Hypericum boreala*), rushes (*Juncus canadensis*, *J. effuses*, *J. bufonlus*, *J. tenuis*), sedges spp. (*Carex* spp.), yellow loosestrife (*Lysimachia terrestris*) and silverleaf (*Potentilla pacifica*) in addition to the weeds listed in Tables 1 and 2. MEYCHEM Mesotrione 48 SC Herbicide may be applied in cranberries at a rate up to 8 fl. oz./A (0.25 lbs. ai/A).

The use of a crop oil concentrate (COC) type adjuvant at 1% v/v or non- ionic surfactant (NIS) at 0.25% v/v is recommended. Avoid using COC adjuvants that are injurious to cranberry leaves. In non-bearing cranberries, make the MEYCHEM Mesotrione 48 SC Herbicide application(s) after the bud break stage, but not less than 45 days before flooding in fall or winter. In bearing cranberries, make the MEYCHEM Mesotrione 48 SC Herbicide application(s) after the bud break stage, but not less than 45 days prior to flooding or harvest.

MEYCHEM Mesotrione 48 SC Herbicide may be applied through irrigation systems (chemigation) including center pivot or solid set.

Restrictions:

- **DO NOT** make more than two applications of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 16 fl. oz./A (0.5 lbs. ai/A) in total per acre per year.
- **DO NOT** apply more than 8 fl. oz./A (0.25 lbs. ai/A) in a single application.
- If two applications are made, they must be made no closer than 14 days apart.

Chemigation - Sprinkler Irrigation Application for Cranberry Only

Check the irrigation system to ensure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period. Apply by injecting the specified rate of MEYCHEM Mesotrione 48 SC Herbicide into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target areas in 0.1-0.2 acre-inch of water. In general, use the least amount of water in this range required for proper distribution and coverage.

Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system. In addition to the above directions, if application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of MEYCHEM Mesotrione 48 SC Herbicide for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

Chemigation Use Directions - Sprinkler Irrigation Application

1. Apply this product only through sprinkler irrigation systems including center pivot or solid set. **DO NOT** apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
3. If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.
4. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person shall shut the system down and make necessary adjustments should the need arise.
6. 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.
7. The pesticide injection pipeline must contain a functional, automatic, quick- closing check valve to prevent the flow of fluid back toward the injection pump.
8. 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.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
10. 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.
11. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and are capable of being fitted with a system interlock.
12. Any alternatives to the above required safety devices must conform to the list of EPA approved alternative devices.
13. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment or nonuniform distribution of treated water.

Additional Restrictions: 1) **DO NOT** apply directly to water or areas where surface water is present outside the bog system. 2) **DO NOT** contaminate water when disposing of equipment wash water or rinsate. 3) **DO NOT** apply within 10 feet of surface water outside the bog system. 4) **DO NOT** spray to runoff.

FLAX

MEYCHEM Mesotrione 48 SC Herbicide may be applied preemergence in flax, i.e. after planting but before crop emergence, at a rate up to 6 fl. oz./A (0.188 lbs. ai/A). For a list of weeds controlled see Tables 1 and 2. If weeds are emerged at the time of application, the use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is recommended. 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 gal. of spray solution may be added to improve the burndown of existing weeds. Applications of MEYCHEM Mesotrione 48 SC Herbicide to emerged flax can result in severe crop injury.

Restrictions:

- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) per year in flax.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) per application.

OATS

MEYCHEM Mesotrione 48 SC Herbicide can be applied preemergence or postemergence (but not both) for weed control in oats.

For preemergence control or partial control of the weeds listed in Table 2, apply MEYCHEM Mesotrione 48 SC Herbicide broadcast at a rate of 6.0 fl. oz./A (0.188 lbs. ai/A) prior to oat emergence. For best preemergence weed control, the MEYCHEM Mesotrione 48 SC Herbicide application must be made prior to weed emergence.

For postemergence (after oat emergence) control or partial control of the weeds listed in Table 1, apply MEYCHEM Mesotrione 48 SC Herbicide at a rate of 3.0 fl. oz./A (0.094 lbs. ai/A). For best results, MEYCHEM Mesotrione 48 SC Herbicide must be applied to emerged weeds that are less than 5" tall. Postemergence applications of MEYCHEM Mesotrione 48 SC Herbicide 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 MEYCHEM Mesotrione 48 SC Herbicide application, the addition of a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v **or** a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is recommended. 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 MEYCHEM Mesotrione 48 SC Herbicide application, no additives are recommended. If oat injury is a concern, eliminating the use of UAN or AMS will reduce the risk for postemergence 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 MEYCHEM Mesotrione 48 SC Herbicide postemergence may increase the risk of injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to MEYCHEM Mesotrione 48 SC Herbicide for applications made postemergence to the crop.

Restrictions:

- **DO NOT** graze or feed forage from treated areas within 30 days following an application of MEYCHEM Mesotrione 48 SC Herbicide.
- **DO NOT** harvest oats within 50 days following the application of MEYCHEM Mesotrione 48 SC Herbicide.
- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide preemergence (prior to oat emergence) at more than 6.0 fl. oz./A (0.19 lbs. ai/A) per acre per year.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide postemergence at more than 3.0 fl. oz./A (0.094 lbs. ai/A) per year.
- **DO NOT** apply more than 6.0 fl. oz./A (0.188 lbs. ai/A) per application.
- If the oat crop treated with MEYCHEM Mesotrione 48 SC Herbicide is lost or destroyed, oats may be replanted immediately. If MEYCHEM Mesotrione 48 SC Herbicide was applied to the lost oat crop, no additional MEYCHEM Mesotrione 48 SC Herbicide can be applied to the replanted oat crop.

OKRA

MEYCHEM Mesotrione 48 SC Herbicide can be applied as a row-middle or a hooded post-direct treatment (but not both) for weed control in okra.

Preemergence row-middle application: Apply MEYCHEM Mesotrione 48 SC Herbicide at a rate of 6.0 fl. oz./A (0.188 lbs. 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. (0.188 lbs. ai) per treated acre. **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide 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).

Postemergence hooded application: Apply MEYCHEM Mesotrione 48 SC Herbicide at a rate of 3.0 fl. oz./A (0.094 lbs. ai/A) as a postemergence directed application using a hooded sprayer for control or partial control of the weeds listed in Table
1. Okra must be at least 3" tall at the time of this application. It is recommended that a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. For postemergence hooded applications, the spray equipment must be set up to minimize the amount of MEYCHEM Mesotrione 48 SC Herbicide that contacts the okra foliage or crop injury will occur. For best postemergence results, MEYCHEM Mesotrione 48 SC Herbicide must be applied to actively growing weeds.

Restrictions:

- **DO NOT** harvest okra within 28 days following the application of MEYCHEM Mesotrione 48 SC Herbicide.
- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply as a row-middle application at more than 6.0 fl. oz./A (0.19 lbs. ai/A) per acre per year.
- **DO NOT** apply as a post-directed application at more than 3.0 fl. oz./A (0.094 lbs. ai/A) per year.
- **DO NOT** apply more than 6.0 fl. oz./A (0.188 lbs. ai/A) per application.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide as a broadcast preemergence or broadcast postemergence application to okra or severe injury will occur.
- If the okra crop treated with MEYCHEM Mesotrione 48 SC Herbicide is lost or destroyed, okra can be replanted only in the soil band that was not treated with MEYCHEM Mesotrione 48 SC Herbicide.

PEARL MILLET

MEYCHEM Mesotrione 48 SC Herbicide may be applied preemergence in pearl millet, i.e. after planting but before crop emergence, at a rate up to 6 fl. oz./A (0.188 lbs. ai/A). For a list of weeds controlled see Table 2. If weeds are emerged at the time of application, the use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is recommended. 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 gal. of spray solution may be added to improve the burndown of existing weeds. Applications of MEYCHEM Mesotrione 48 SC Herbicide to emerged pearl millet can result in severe crop injury.

Restrictions:

- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) per year.
- **DO NOT** apply more than 6 fl. oz./A (0.188 lbs. ai/A) per application.

RHUBARB

MEYCHEM Mesotrione 48 SC Herbicide can be applied prior to crop emergence for weed control in established rhubarb.

Apply MEYCHEM Mesotrione 48 SC Herbicide at a rate of 6.0 fl. oz./A (0.188 lbs. 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 recommended that a crop oil concentrate (COC) type adjuvant at 1% v/v **or** a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. Applications of MEYCHEM Mesotrione 48 SC Herbicide to rhubarb that is not dormant may result in a temporary bleaching symptomology. Rainfall or irrigation after the MEYCHEM Mesotrione 48 SC Herbicide application may increase the risk of injury to emerging rhubarb.

Restrictions:

- **DO NOT** harvest rhubarb within 21 days following the application of MEYCHEM Mesotrione 48 SC Herbicide.
- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6.0 fl. oz./A (0.188 lbs. ai/A) per year.
- **DO NOT** apply more than 6.0 fl. oz./A (0.188 lbs. ai/A) per application.

SORGHUM (GRAIN, FORAGE* AND SWEET)

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*Not registered for use by California

Preemergence Application: MEYCHEM Mesotrione 48 SC Herbicide can be applied preemergence or preplant non-incorporated up to 21 days before planting sorghum for control or partial control of the weeds listed in Table 2.

Apply MEYCHEM Mesotrione 48 SC Herbicide preemergence at a rate of 6.0 - 6.4 fl. oz./A (0.19 - 0.2 lbs. ai/A) as a broadcast non-incorporated application prior to sorghum emergence. Applying MEYCHEM Mesotrione 48 SC Herbicide less than 7 days before sorghum planting will increase the risk of crop injury, especially if irrigation or rainfall is received following the application. Injury symptoms include temporary bleaching of newly emerging sorghum leaves. Applying MEYCHEM Mesotrione 48 SC Herbicide more than 7 days (but not more than 21) prior to planting will reduce the risk of crop injury.

If MEYCHEM Mesotrione 48 SC Herbicide is applied prior to planting, minimize disturbance of the herbicide treated soil barrier during the planting process in order to lessen the potential for weed emergence.

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

Preemergence Application Restrictions:

- **DO NOT** apply more than 6.4 fl. oz./A (0.2 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6.4 fl. oz./A (0.2 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per application.
- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to emerged sorghum or severe crop injury may occur.
- **DO NOT** use MEYCHEM Mesotrione 48 SC Herbicide in the production of sudangrass OR sorghum-sudangrass hybrids.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to sorghum that is grown on coarse textured soils (e.g. sandy loam, loamy sand, sand).
- In the State of Texas, **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to sorghum grown south of Interstate 20 (I-20) or east of Highway 277.

Post-Directed: MEYCHEM Mesotrione 48 SC Herbicide can be applied post-directed to grain sorghum for control or partial control of the weeds listed in Table 1. For best results, apply MEYCHEM Mesotrione 48 SC Herbicide to actively growing weeds.

Apply MEYCHEM Mesotrione 48 SC Herbicide at a rate of 3 fl. oz./A (0.094 lbs. ai/A) as a post-directed application when the grain sorghum is a minimum of 8 inches tall. Make the application by directing the spray between the crop rows and towards the base of the grain sorghum plant. Direct application of MEYCHEM Mesotrione 48 SC Herbicide onto grain sorghum foliage can result in crop injury including temporary bleaching. If crop injury does occur, newly emerging leaves following application are typically unaffected.

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

MEYCHEM Mesotrione 48 SC Herbicide may be tank mixed with other herbicides registered for grain sorghum for improved spectrum of weed control. Additionally, these tank mixtures can be used to include an herbicide with a different mode of action to help control or manage the development of resistant weed biotypes.

Post-Directed Restrictions:

- **DO NOT** apply more than one post-directed application of MEYCHEM Mesotrione 48 SC Herbicide.
- **DO NOT** apply more than 3.0 fl. oz./A (0.094 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide post- directed and not more than 6.4 fl. oz./A (0.2 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply more than 6.4 fl. oz./A (0.2 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per application.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide broadcast over-the-top to emerged sorghum or severe crop injury may occur.
- **DO NOT** harvest grain sorghum for forage for 30 days following application.
- **DO NOT** harvest for grain or stover for 60 days following application.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide after the sorghum seedhead has begun to emerge.
- **DO NOT** use MEYCHEM Mesotrione 48 SC Herbicide in the production of forage sorghum, sudangrass, or sorghum-sudangrass hybrids.

SOYBEAN*

*Not for use in California

MEYCHEM Mesotrione 48 SC Herbicide can be applied preemergence to soybeans that are identified as mesotrione tolerant. Applications to soybeans that are not mesotrione tolerant will result in significant crop injury. For a list of mesotrione tolerant soybean varieties, contact your seed provider.

Preemergence Application: For preemergence control of the weeds listed in Table 2, apply MEYCHEM Mesotrione 48 SC Herbicide prior to soybean emergence at a rate of 6.0 fl. oz./A (0.188 lbs. ai/A). Apply the higher rate for longer residual control. MEYCHEM Mesotrione 48 SC Herbicide may be tank mixed with other registered soybean herbicides such as S-metolachlor and S-metolachlor + fomesafen. Refer to the tank mix partner label and follow all precautions and restrictions.

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

Restrictions:

- **DO NOT** apply more than 6.0 fl. oz./A (0.188 lbs. ai/A) per year.
- **DO NOT** apply more than 6.0 fl. oz./A (0.188 lbs. ai/A) per application.
- **DO NOT** make more than one application of MEYCHEM Mesotrione 48 SC Herbicide per year.
- **DO NOT** apply MEYCHEM Mesotrione 48 SC Herbicide to emerged soybeans.
- **DO NOT** graze or feed soybean forage or hay to livestock.

SUGARCANE

MEYCHEM Mesotrione 48 SC Herbicide can be applied by ground for preemergence, postemergence over- the-top or postemergence directed weed control in sugarcane.

MEYCHEM Mesotrione 48 SC Herbicide may also be applied aerially for preemergence or postemergence weed control only in the following states: Florida, Louisiana, and Texas.

Preemergence Applications: Apply MEYCHEM Mesotrione 48 SC Herbicide for preemergence weed control at 6.0 - 7.7 fl. oz./A (0.188 - 0.24 lbs. ai/A) after the planting of plant-cane or after harvest of ratoon-cane. For a list of weeds controlled preemergence, refer to Table 2. If some weeds are already emerged at the time of application, add a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v **or** a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v to the spray solution. In addition to COC or NIS, a spray grade UAN at a rate of 2.5% v/v **or** ammonium sulfate (AMS) at a rate of 8.5 lbs./100 gallons of spray solution can be added to the spray solution. For improved preemergence weed control, atrazine or ametryn can be tank mixed with MEYCHEM Mesotrione 48 SC Herbicide. Refer to the tank mix partner label for specific rates and use directions. It is the pesticide users 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.

Postemergence Applications: Apply MEYCHEM Mesotrione 48 SC Herbicide postemergence at 3.0 fl. oz./A (0.094 lbs. ai/A) for control of the weeds listed in Table 1. Postemergence applications may be made as a post-over-the-top or as a post-directed spray to the base of the sugarcane. If a preemergence application was made earlier in the season, only one postemergence application can be made. If no preemergence application was made earlier in the season, both a post-over-the-top and a post-directed application can be made. For best results, MEYCHEM Mesotrione 48 SC Herbicide must be applied to actively growing weeds.

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

For additional postemergence weed control, MEYCHEM Mesotrione 48 SC Herbicide can be tank mixed with atrazine, sodium salt of asulam, and/or trifloxysulfuron-sodium. Refer to the tank mix product labels for specific rates and use directions.

Restrictions:

- **DO NOT** apply more than 7.7 fl. oz./A (0.24 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide in a preemergence application.
- **DO NOT** apply more than 3.0 fl. oz./A (0.094 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide in a postemergence application.
- **DO NOT** make more than two applications of MEYCHEM Mesotrione 48 SC Herbicide per year. If a preemergence application of MEYCHEM Mesotrione 48 SC Herbicide is made, only one postemergence application is allowed.
- **DO NOT** make the second application within 14 days of the first application.
- **DO NOT** apply more than 10.7 fl. oz./A (0.334 lbs. ai/A) of MEYCHEM Mesotrione 48 SC Herbicide per acre per year.
- **DO NOT** harvest sugarcane within 114 days following a post-over-the-top application of MEYCHEM Mesotrione 48 SC Herbicide (114 day PHI).
- **DO NOT** harvest sugarcane within 100 days following a post-directed application of MEYCHEM Mesotrione 48 SC Herbicide (100 day PHI).

TURFGRASS USE DIRECTIONS

USE SITES

MEYCHEM Mesotrione 48 SC Herbicide may be used for weed control in turfgrass species listed on this label in commercial and residential sites. Use sites include non-crop areas: golf courses, sod farms, athletic fields, parks, residential and commercial properties, cemeteries, airports, and lawns.

TANK MIXTURES

It is the pesticide users 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.

Mesotrione has been tested in tank mixtures with prodiamine, dicamba, triclopyr, carfentrazone, bentazon, simazine, atrazine, and metribuzin for safety and efficacy on turfgrasses. Other tank mixture partners may be safe but have not been tested**.** Turf managers wanting to tank mix mesotrione with other herbicides are advised to test on a small basis for compatibility, safety and efficacy before treating large areas.

TURFGRASS SPECIES

Mesotrione has been tested on these species and found to be safe under trial conditions.

Species		Rate per Acre	Rate (lbs. ai/A)
Kentucky bluegrass	*Poa pratensis*	5 - 8 fl. oz.	0.156 - 0.25
Centipedegrass	*Eremochloa ophiuroides*	5 - 8 fl. oz.	0.156 - 0.25
Buffalograss	*Buchloe dactyloides*	5 - 8 fl. oz.	0.156 - 0.25
Tall fescue	*Festuca arundinacea*	5 - 8 fl. oz.	0.156 - 0.25
Perennial ryegrass*	*Lolium perenne*	5 fl. oz.	0.156
Fine fescue* (creeping red, chewings and hard)	*Festuca* spp.	5 fl. oz.	0.156
St. Augustinegrass* (grown for sod)	*Stenotaphrum secundatum*	4 fl. oz.	0.125

*See additional rate instructions below.

WEEDS CONTROLLED

Common Name	Scientific Name	Preemergence[1]	Postemergence[2]
Barnyardgrass	*Echinochloa crusgalli*	Y	Y
Bentgrass, Creeping	*Agrostis stolonifera*	Y	Y
Bluegrass, Annual	*Poa annua*	Suppression	N
Buckhorn Plantain	*Plantago lanceolata*	Y	Y
Buttercup	*Ranunculus sardous*	-[3]	Y
Carpetweed	*Mollugo verticillata*	Y	Y
Chickweed, Common	*Stellaria media*	Y	Y
Chickweed, Mouseear	*Cerastium vulgatum*	Y	Y
Clover, Large Hop	*Trifolium aureum*	Y	Y
Clover, White	*Trifolium repens*	Y	Y
Crabgrass, Large	*Digitaria sanguinalis*	Y	Y[4]
Crabgrass, Smooth	*Digitaria ischaemum*	Y	Y[4]
Crabgrass, Southern	*Digitaria ciliaris*	Y	Y[4]
Curly dock	*Rumex crispus*	-	Y
Dandelion, Catsear	*Hypochoeris radicata*	-	Y
Dandelion, Common	*Taraxacum officinale*	-	Y
Florida Betony	*Stachys floridana*	-	Y
Florida Pusley	*Richardia scabra*	-	Y
Foxtail, Yellow	*Setaria glauca*	Y	Y
Galinsoga	*Galinsoga ciliata*	Y	Y
Goosegrass	*Eleusine indica*	-	Y[4]
Ground Ivy	*Glechoma hederacea*	-	Y

(continued)

Common Name	Scientific Name	Preemergence[1]	Postemergence[2]
Healall	*Prunella vulgaris*	-	Y
Henbit	*Lamium amplexicaule*	-	Y
Lambsquarters, Common	*Chenopodium album*	Y	Y
Lawn Burweed	*Soliva sessilis*	-	Y
Lovegrass, Tufted	*Eragrostis pectinacea*	-	Y
Marestail	*Conyza canadensis*	-	Y
Nimblewill	*Muhlenbergia schreberi*	-	Y
Nutsedge, Yellow	*Cyperus esculentus*	-	Y
Oxalis	*Oxalis stricta*	-	Y
Pigweed, Redroot	*Amaranthus retroflexus*	Y	Y
Common Name	**Scientific Name**	**Preemergence[1]**	**Postemergence[2]**
Pigweed, Smooth	*Amaranthus hybridus*	Y	Y
Purslane, Common	*Portulaca oleracea*	Y	Y
Shepherd's purse	*Capsella bursa- pastoris*	Y	Y
Smartweed, Pale	*Polygonum lapathifolium*	Y	Y
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	Y	Y
Speedwell, Persian	*Veronica persica*	Y	-
Speedwell, Purslane	*Veronica peregrina*	Y	-
Sowthistle	*Sonchus oleraceus*	-	Y
Swinecress	*Coronopus didymus*	-	Y
Thistle, Canada	*Cirsium arvense*	-	Y
Verbena	*Verbena hastata*	-	Y
Wild Carrot	*Daucus carota*	Y	Y
Wild Violet	*Viola pratincola*	-	Y
Windmillgrass	*Chloris verticillata*	-	Y

[1] For broad spectrum preemergence activity apply with a grass preemergence herbicide such as prodiamine, except when used for weed control in new seedings.
[2] Weed control with postemergence applications require a second application after 2 to 3 weeks. Apply to young, actively growing weeds with a NIS type surfactant.
[3] " - " Not tested.
[4] For best postemergence control, apply to less than 4 tiller crabgrass and goosegrass.

TURFGRASS APPLICATION INFORMATION

Please read and understand the TURFGRASS USE PRECAUTIONS AND RESTRICTIONS under the PRODUCT INFORMATION section above prior to making applications.

Preemergence Application - Apply MEYCHEM Mesotrione 48 SC Herbicide at 4-8 fl. oz. per acre (0.125-0.25 lbs. ai/A) in at least 30 gallons of water per acre prior to weed seed germination. Make application close to anticipated weed seed germination. MEYCHEM Mesotrione 48 SC Herbicide should be combined with a preemergence herbicide such as prodiamine for extended control of key annual monocot weeds including crabgrass and foxtail.

New Seedlings/New Lawn Establishment - Apply MEYCHEM Mesotrione 48 SC Herbicide at 5-8 fl. oz. per acre (0.156-0.25 lbs. ai/A) in at least 30 gallons of water per acre prior to seeding or post seeding of tolerant turfgrass species listed on this label, **except fine fescue**. MEYCHEM Mesotrione 48 SC Herbicide may reduce density of fine fescue seedings. MEYCHEM Mesotrione 48 SC Herbicide can be used on grass seed blends that contain less than 20% by weight of hard or fine fescue. MEYCHEM Mesotrione 48 SC Herbicide will control many monocot and dicot weeds that compete with and slow the establishment of the turfgrass stands. Apply at grass seeding or close to seeding for best performance. Avoid spraying on newly germinated turfgrass plants. Wait until the newly germinated turf has been mowed two times or four weeks after emergence (whichever is longer) before making a postemergence application.

Postemergence Application - Apply MEYCHEM Mesotrione 48 SC Herbicide at 4-8 fl. oz. per acre (0.125-0.25 lbs. ai/A) in at least 30 gallons of water per acre. Apply with a NIS type surfactant. A repeat application at two to three weeks may be required for adequate weed control. Weed control is most effective on young, actively growing weeds. Efficacy will be reduced under moisture stress or from applications to mature weeds.

Control of bentgrass (*Agrostis* spp.) and nimblewill (*Muhlenbergia schreberi)* - Apply MEYCHEM Mesotrione 48 SC Herbicide at 5 fl. oz. per acre (0.156 lbs. ai/A) in at least 30 gallons of water per acre at two to three week interval for up to three applications. Apply with a NIS surfactant. Bentgrass control may be more effective in the late summer/early fall just prior to onset of renewed bentgrass growth, than spring/early summer applications.

St. Augustinegrass (sod uses only) and Centipedegrass, if MEYCHEM Mesotrione 48 SC Herbicide is tank mixed with atrazine or simazine **DO NOT** exceed 4 fl. oz. of MEYCHEM Mesotrione 48 SC Herbicide and 0.5 lb. active ingredient per acre of atrazine or simazine. Apply combination to established turf only. See atrazine and simazine labels for restrictions.

Dormant bermudagrass applications only - Apply MEYCHEM Mesotrione 48 SC Herbicide at 5 fl. oz./A (0.156 lbs. ai/A) to control winter weeds (listed in the **WEEDS CONTROLLED** Table) on dormant bermudagrass. Repeat application in 2 to 3 weeks. Applications made to semi-dormant turf will cause whitening of the bermudagrass.

For Use Only in the State of Florida - For control of goosegrass on bermudagrass athletic fields and golf courses (except greens), apply MEYCHEM Mesotrione 48 SC Herbicide at 5 to 8 fl. oz./A (0.156 to 0.25 lbs. ai/A) + simazine followed two weeks later by MEYCHEM Mesotrione 48 SC Herbicide (5 to 8 fl. oz./A) + simazine + s-metolachlor. Refer to the tank mix partner label for specific rates and use directions. Application may be applied during spring, mid-summer or early fall. Use higher rates on larger weeds or heavy infestation. Apply mixtures in 40 to 60 gallons of water per 1,000 sq ft with flat-fan nozzles producing medium to coarse droplets. Add a non-ionic surfactant at 0.25% v/v of final spray solution. These treatments induce mild to moderate phytotoxicity in 'Tifway 419' hybrid bermudagrass. Full recovery typically occurs within 7 to 14 days after application, but the severity and recovery time vary based on turf conditions and environmental factors. Certain common bermudagrass varieties (including Sahara, Vamont, Yukon, and Mohawk) and zoysiagrasses are very sensitive to the mixture of MEYCHEM Mesotrione 48 SC Herbicide + simazine. Before applying on a large scale, test the mixture in an inconspicuous location to determine the level of turf safety in your location. The safety of this mixture has not been tested on seashore paspalum or bermudagrass varieties other than those listed above.

Spot Application of MEYCHEM Mesotrione 48 SC Herbicide (apply at 1 gallon per 1000 sq. ft.)

Spray Mix	Rate of MEYCHEM Mesotrione 48 SC Herbicide (teaspoons)	NIS adjuvant (teaspoons)
2 gal	1	3

Restrictions:

- **DO NOT** apply more than 16 fl. oz./A (0.50 lbs. ai/A) per acre per year.
- **DO NOT** apply more than 8 fl. oz./A (0.25 lbs. ai/A) per application.
- **DO NOT** apply more than 5 fl. oz./A (0.156 lbs. ai/A) per application to perennial ryegrass or fine fescues or mixed stands that contain greater than 50% perennial ryegrass and/or fine fescue.
- **DO NOT** apply more than 4 fl. oz./A (0.125 lbs. ai/A) to St. Augustinegrass sod per application.
- **DO NOT** plant any crop other than turfgrass species for 18 months after the last application of MEYCHEM Mesotrione 48 SC Herbicide or injury may occur.
- **DO NOT** apply an organophosphate or carbamate insecticide within seven days of MEYCHEM Mesotrione 48 SC Herbicide application as turn injury may occur.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** apply aerially.
- **DO NOT** use on grass clippings from treated turf as mulch around trees or in vegetable/flower gardens.
- **DO NOT** use on golf course putting greens and maintain a five-foot buffer between treated areas and putting greens.

MEYCHEM Mesotrione 48 SC Herbicide Rate Conversion Table

fl. oz. product/1000 sq ft	fl. oz. product/A	lb. a.i./A
0.092	4	0.125
0.115	5	0.156
0.184	8	0.25

STORAGE AND DISPOSAL

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

Pesticide Storage

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

Pesticide Disposal

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

Container Handling

Containers Less Than or Equal to 5 Gallons

Non-refillable plastic 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 and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Containers Greater Than 5 Gallons

Non-refillable plastic 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.

LIMIT OF WARRANTY AND LIABILITY

MEY Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

To the extent consistent with applicable law, buyer and all users shall promptly notify MEY Corporation of any claims whether based in contract, negligence, strict liability, other tort or otherwise. To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of MEY Corporation, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF MEY CORPORATION OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF MEY CORPORATION OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MEY CORPORATION OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

MESOTRIONE	GROUP 27	HERBICIDE

MEYCHEM

Mesotrione 48 SC Herbicide

An herbicide for the selective contact and residual control of Annual Broadleaf Weeds in Corn (field, seed, sweet, yellow pop), asparagus, citrus fruit, pome fruit, stone fruit, tree nuts, cranberries, flax, oats, okra, pearl millet, rhubarb, sorghum (grain, forage,* and sweet), soybeans, sugarcane and turfgrass.

*Not registered for use by California

ACTIVE INGREDIENT:	% BY WT.
Mesotrione (CAS No. 104206-82-8)	41.0%
OTHER INGREDIENTS:	59.0%
TOTAL:	**100.0%**

MEYCHEM Mesotrione 48 SC Herbicide is formulated as a suspension concentrate and contains 4 lbs. of mesotrione per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For chemical emergency assistance with a spill, fire, accident or exposure call CHEMTREC - Day or Night: 1-800-424-9300. For medical emergencies, call the poison control center, day or night, at 1-800-222-1222. For emergency medical treatment information contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

See inside label booklet for additional PRECAUTIONARY STATEMENTS and DIRECTIONS FOR USE.

Manufactured For:
MEY Corporation
121 S. Estes Drive, Suite 101
Chapel Hill, NC 27514

EPA Reg. No.: 87895-12-80967

EPA Est. No.:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

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.

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

Groundwater Advisory: Mesotrione is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading for mesotrione from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

PHYSICAL AND CHEMICAL HAZARDS: DO NOT use or store near heat or open flame.

STORAGE AND DISPOSAL

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

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

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

Container Handling: Containers Less Than or Equal to 5 Gallons

Non-refillable plastic 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 and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Containers Greater Than 5 Gallons: Non-refillable plastic 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.

NET CONTENTS: 265 GALLONS

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