MESOTRIONE | GROUP 27 | HERBICIDE

PULL HERE TO OPEN ►

Broadworks®

Herbicide

syngenta®

For Control of Annual Broadleaf Weeds in Listed Crops

Active Ingredient:	
Mesotrione: (CAS No. 104206-82-8)	40.0%
Other Ingredients:	60.0%
Total:	100.0%

Broadworks® Herbicide is formulated as a suspension concentrate (SC) and contains 4 lb of active ingredient mesotrione per gallon.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1131
EPA Est. 100-NE-001

Product of Switzerland
Formulated in the USA

SCP 1131C-L1B 0318
4093908

1 gallon
(128 fl oz)
Net Contents

®

FIRST AID	
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.
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 mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
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 by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOTLINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal), or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

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

continued…

PRECAUTIONARY STATEMENTS *(continued)*

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves

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

Engineering Controls

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

User Safety Recommendations

Users should:

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

Environmental Hazards

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

Surface Water Advisory

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

Physical and Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves

PRODUCT INFORMATION

Broadworks Herbicide is a systemic preemergence and postemergence herbicide for the selective contact and residual control of broadleaf weeds in listed crops. When used preemergence, weeds take up the product through the soil during emergence. Dry conditions following application may reduce the preemergence activity of Broadworks Herbicide. If an activating rain (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 take up the herbicide through the treated foliage and cease growth soon after application. Complete death of the weeds may take up to 2 weeks. The product is absorbed through the soil and/or by the foliage of emerged weeds.

Broadworks Herbicide is not effective for the control of most grass weeds. Preemergence grass herbicides or postemergence grass herbicides can be tank mixed with Broadworks Herbicide to provide broad spectrum weed control (see appropriate section of label for this information).

WEED RESISTANCE MANAGEMENT

MESOTRIONE	GROUP	27	HERBICIDE

Naturally occurring biotypes of certain broadleaf weed species with resistance to triazines, glyphosate, PPO, HPPD and ALS inhibiting herbicides are known to exist. Performance of Broadworks Herbicide is not affected by the presence of biotypes resistant to triazines, glyphosate, PPO or ALS inhibiting herbicides.

To prevent the risk of weeds developing resistance to Broadworks Herbicide, always use full labeled rates. If additional herbicide must be applied, it is recommended that a different mode of action be used, i.e., other than an HPPD inhibitor (Group 27 Herbicide). Broadworks Herbicide must be applied at full label rates to help prevent selection for, or population shifts toward, marginally resistant weed species and/or species biotypes.

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 Syngenta retailer, Syngenta representative, or call 1-866-Syngenta (866-796-4368). 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 Syngenta representative, retailer, crop advisor or extension agent to determine if weeds resistant to this mode of action are present in your area. 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.

USE RESTRICTIONS

Do not apply this product through any type of irrigation system unless specified otherwise under the specific crop section on the label.

Do not apply this product with suspension fertilizers as the carrier.

Do not use aerial application to apply Broadworks Herbicide.

USE PRECAUTIONS

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 Broadworks Herbicide is made following label directions when weeds are actively growing.

SPRAY DRIFT MANAGEMENT

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

SPRAY DRIFT
Ground Boom Applications

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

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

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

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

WINDBLOWN SOIL PARTICLES

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

APPLICATION INFORMATION

PREEMERGENCE GROUND APPLICATION

Apply Broadworks 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 gal.

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.

SPRAY ADDITIVES

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.

Refer to the use directions section of each crop section for specific adjuvant recommendations.

SPRAY EQUIPMENT

Cleaning Equipment After Broadworks 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

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 Broadworks 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 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.

Follow the mixing instructions for adding Broadworks 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 Broadworks 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 Broadworks Herbicide slowly and agitate until completely dissolved. Wait at least 1 minute after the last of the Broadworks Herbicide has been added to the tank to allow for complete dispersion. A longer agitation period may be required to disperse Broadworks 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.

WEEDS CONTROLLED

Broadworks 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 Broadworks Herbicide to actively growing weeds. Dry weather following preemergence application of Broadworks Herbicide may reduce residual weed control effectiveness. If irrigation is available, apply 1/2 to 1 inch of water after preemergence application. If irrigation is not available, a uniform shallow cultivation is recommended as soon as weeds emerge.

Broadworks Herbicide applied alone 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 Broadworks Herbicide

Weed Common Name	Weed Scientific Name	Broadworks Herbicide Apply to Weeds <5 Inches Tall[1]
Amaranth, palmer	*Amaranthus palmeri*	PC[2]
Amaranth, powell	*Amaranthus powellii*	C
Amaranth, spiny	*Amaranthus spinosus*	C
Atriplex	*Chenopodium orach*	C
Broadleaf signalgrass	*Urochloa platyphylla*	C[2]
Buckwheat, wild	*Polygonum convolvulus*	PC
Buffalobur	*Solanum rostratium*	C
Burcucumber	*Sicyos angulatus*	PC
Carpetweed	*Mollugo verticillata*	C
Carrot, wild	*Daucus carota*	PC
Chickweed, common	*Stellaria media*	C
Cocklebur, common	*Xanthium strumarium*	C
Crabgrass, large	*Digitaria sanguinalis*	C[2]
Dandelion	*Taraxacum officinale*	NC
Dock, curly	*Rumex crispus*	PC
Galinsoga	*Galinsoga parviflora*	C
Hemp	*Cannabis sativa*	C
Horsenettle	*Solanum carolinense*	PC
Jimsonweed	*Datura stramonium*	C
Horseweed (marestail)	*Conyza canadensis*	PC
Knotweed, prostrate	*Polygonum aviculare*	PC
Kochia	*Kochia scoparia*	PC[2]
Lambsquarters, common	*Chenopodium album*	C
Mallow, Venice	*Hibiscus trionum*	NC
Morningglory, entireleaf	*Ipomoea hederacea*	PC
Morningglory, ivyleaf	*Ipomoea hederacea*	PC
Morningglory, pitted	*Ipomoea lacunosa*	PC
Mustard, wild	*Brassica kaber*	C

continued…

Table 1. Weeds Controlled With Postemergence Applications of Broadworks Herbicide *(continued)*

Weed Common Name	Weed Scientific Name	Broadworks Herbicide Apply to Weeds <5 Inches Tall[1]
Nightshade, black	*Solanum nigrum*	C
Nightshade, Eastern black	*Solanum ptycanthum*	C
Nightshade, hairy	*Solanum sarrachoides*	C
Nutsedge, yellow	*Cyperus esculentus*	PC
Pigweed, redroot	*Amaranthus retroflexus*	C
Pigweed, smooth	*Amaranthus hybridus*	C
Pigweed, tumble	*Amaranthus albus*	C
Pokeweed, common	*Phytolacca americana*	PC
Potatoes, volunteer	*Solanum* spp.	C
Pusley, Florida	*Richardia scabra*	C[2]
Ragweed, common	*Ambrosia artemisiifolia*	PC
Ragweed, giant	*Ambrosia trifida*	C[2]
Sesbania, hemp	*Sesbania exaltata*	C
Sida, prickly (teaweed)	*Sida spinosa*	NC
Smartweed, ladysthumb	*Polygonum persicaria*	C[2]
Smartweed, pale	*Polygonum lapathifolium*	C[2]
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C[2]
Sunflower, common	*Helianthus annuus*	C
Thistle, Canada	*Circium arvense*	NC
Velvetleaf	*Abutilon theophrasti*	C
Waterhemp, common	*Amaranthus rudis*	C[2]
Waterhemp, tall	*Amaranthus tuberculatus*	C[2]

[1]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.

[2]Apply before weed exceeds 3 inches in height.

C = Control PC = Partial Control NC = Not Controlled

Table 2. Weeds Controlled With Preemergence Applications of Broadworks Herbicide

Common Name	Scientific Name	Broadworks Herbicide
Amaranth, palmer	*Amaranthus palmeri*	C
Amarath, powell	*Amaranthus powellii*	C
Amaranth, spiny	*Amaranthus spinosus*	C
Broadleaf signalgrass	*Urochloa platyphylla*	PC
Buffalobur	*Solanum rostratum*	C
Burclover, California	*Medicago polymorpha*	C
Carpetweed	*Mollugo verticillata*	C
Carrot, wild	*Daucus carota*	C
Chickweed, common	*Stellaria media*	C
Chickweed, mouseear	*Cerastium vulgatum*	C
Cocklebur, common	*Xanthium strumarium*	PC
Crabgrass, large	*Digitaria sanguinalis*	PC
Dandelion, common (seedling)	*Taraxacum officinale*	C
Deadnettle, purple	*Lamium purpureum*	C
Dock, curly	*Rumex crispus*	C
Eveningprimrose, cutleaf	*Oenothera laciniata*	C
Fiddleneck, coast	*Amsinckia intermedia*	C
Filaree, redstem	*Erodium cicutarium*	PC
Filaree, whitestem	*Erodium moschatum*	PC
Fleabane, hairy	*Conyza bonariensis*	C
Galinsoga	*Galinsoga parviflora*	C
Geranium, Carolina	*Geranium carolinianum*	C
Groundcherry, smooth	*Physalis subglabrata*	C
Groundsel, common	*Senecio vulgaris*	C
Henbit	*Lamium amplexicaule*	C
Horsenettle	*Solanum carolinense*	PC
Horseweed/marestail	*Conyza canadensis*	C
Jimsonweed	*Datura stramonium*	C

continued…

Table 2. Weeds Controlled With Preemergence Applications of Broadworks Herbicide *(continued)*

Common Name	Scientific Name	Broadworks Herbicide
Kochia	*Kochia scoparia*	PC
Lambsquarters, common	*Chenopodium album*	C
Lettuce, prickly	*Lactuca serriola*	C
Mallow, common	*Malva neglecta*	C
Mayweed, chamomile	*Anthemis cotula*	C
Morningglory, entireleaf	*Ipomoea hederacea*	PC
Morningglory, ivyleaf	*Ipomoea hederacea*	PC
Morningglory, pitted	*Ipomoea lacunosa*	PC
Nettle, burning	*Urtica urens*	C
Nightshade, eastern black	*Solanum ptycanthum*	C
Nightshade, hairy	*Solanum sarrachoides*	C
Pansy	*Viola tricolor*	C
Pigweed, redroot	*Amaranthus retroflexus*	C
Pigweed, smooth	*Amaranthus hybridus*	C
Pigweed, tumble	*Amaranthus albus*	C
Pineappleweed	*Matricaria matricariodes*	C
Puncturevine, common	*Tribulus terrestris*	C
Purslane, common	*Portulaca oleracea*	C
Pusley, common	*Richardia scabra*	PC
Ragweed, common	*Ambrosia artemisiifolia*	C
Ragweed, giant	*Ambrosia trifida*	PC
Redmaids	*Calandria caulescens*	C
Rocket, London	*Sisymbrium irio*	C
Shepherd's-purse	*Capsella bursa-pastoris*	C
Smartweed, ladysthumb	*Polygonum persicaria*	C
Smartweed, pale	*Polygonum lapathifolium*	C

Common Name	Scientific Name	Broadworks Herbicide
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C
Sowthistle, annual	*Sonchus oleraceus*	C
Spanishneedles	*Bidens bipinnata*	C
Sunflower, common	*Helianthus annuus*	PC
Swinecress	*Coronopus didymus*	C
Tasselflower, red	*Emilia sonchifolia*	C
Velvetleaf	*Abutilon theophrasti*	C
Waterhemp, common	*Amaranthus rudis*	C
Vetch, common	*Vicia sativa*	C
Vetch, purple	*Vicia benghalensis*	PC
Waterhemp, tall	*Amaranthus tuberculatus*	C
Willowherb, panicle	*Epilobium brachycarpum*	C

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

C = Control PC = Partial Control

ROTATIONAL CROPS

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

Table 3. Time Interval Between Broadworks Herbicide Application and Replanting or Planting of Rotational Crop

Crop	Replant/Rotational Interval
Asparagus Corn (all types) Flax Millet, pearl Oats Rhubarb Sorghum (grain and sweet) Sugarcane	Anytime
Small grain cereals including wheat, barley and rye	4 Months
Alfalfa Blueberry Cotton Currant Lingonberry Okra Peanuts Potato Rice Snap beans[1,2] Soybeans Sunflowers Tobacco	10 Months
Cucurbits Dry beans Red clover 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 Broadworks 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 Broadworks Herbicide at 3 fl oz/A (0.094 lb 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]Do not plant snap beans on sand, sandy loam or loamy sand soils in Minnesota or Wisconsin.

CROP USE DIRECTIONS

CITRUS FRUIT, STONE FRUIT AND TREE NUTS

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

Citrus fruit (citrus hybrids, grapefruit, lemon, lime, sour orange, sweet orange, tangelo, tangerine (Mandarin), cultivars, varieties and/or hybrids of these)

Stone fruit (nectarine, plum, cultivars, varieties and/or hybrids of these)

Tree nuts (almond, hazelnut (filbert), pecan, pistachio, black walnut, English walnut, cultivars, varieties and/or hybrids of these)

Precautions

1. 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 Broadworks Herbicide with the crop may result in bleaching injury that is typically temporary. Use trunk guards to protect plants until adequate bark has developed.
2. Specified rates are based on broadcast treatment. For band applications around trees in fruit or nut plantings, reduce the broadcast rate of Broadworks Herbicide and carrier per acre in proportion to the area actually sprayed. (See Banded Applications Section.)
3. Application of Broadworks 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.

Restrictions

1. Broadworks Herbicide can only be applied in stone fruit and nut trees that have been established for one full growing season and are in good health and vigor. Broadworks 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.
2. Do not apply in orchards that are stressed due to poor weather or other abiotic factors.
3. Do not exceed a total of 12 fl oz per acre (0.376 lb ai/A) of Broadworks Herbicide per year or in a 12-month period.
4. Do not exceed 6 fl oz per acre (0.19 lb ai/A) of Broadworks Herbicide for the first application.
5. Do not exceed 3 applications per year or in a 12-month period.

6. Allow at least 12 weeks between applications of Broadworks Herbicide at 6 fl oz/A and at least 6 weeks between applications of 6 fl oz/A and subsequent applications of 3 fl oz/A. (Applications must follow one of the three programs listed in Table 4 below.)
7. Do not harvest stone fruit or tree nuts within 30 days after application.
8. Do not harvest citrus fruit within 1 day after application.
9. Do not use on soils with greater than 20% gravel.
10. Do not apply Broadworks Herbicide through any type of irrigation system.
11. Do not apply Broadworks 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 Broadworks Herbicide, the following formula may be used to calculate the amount per acre:

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

Tank Mix Instructions

Broadworks 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 (Gramoxone® brands, glyphosate brands, Rely® 280 or GoalTender®) or residual (Princep®, Solicam®, Matrix®, Surflan®, GoalTender, Prowl® H2O, Karmex®, Hyvar®, Krovar® or Alion®) 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)

Broadworks 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 Broadworks Herbicide in late fall/early winter or spring and subsequent applications utilizing one of the programs noted in the Table 4.

Table 4. Broadworks Herbicide Application Programs, Rates and Intervals

Program	Application Rate (fl oz/A)			Application Interval (wk)
	1st Application	2nd Application	3rd Application	
1	6	6	-	12
2	6	3	-	6
3	6	3	3	6

For optimum postemergence weed control, apply Broadworks Herbicide to actively growing weeds in tank mixture with burndown herbicides such as: Gramoxone brands, glyphosate brands, Rely 280 or GoalTender before weeds exceed 5 inches in height.

For effective residual weed control, Broadworks Herbicide must be moved into the weed seed germination zone. For preemergence weed control, apply Broadworks Herbicide before rainfall or irrigation. For optimum residual control Broadworks Herbicide can be tank mixed with herbicides such as: Princep, Solicam, Matrix, GoalTender, Prowl, Karmex, Hyvar, Krovar or Alion, where approved for use.

Subsequent application(s) of Broadworks 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 Broadworks 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 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.

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 food-stuffs. 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 [Less Than or Equal to 5 Gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or 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.

Container Handling [Greater Than 5 Gallons]

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

Container Handling [Greater Than 5 Gallons]

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1131C-L1B 0318
4093908

MESOTRIONE | GROUP 27 | HERBICIDE

Broadworks®
Herbicide

For Control of Annual Broadleaf Weeds in Listed Crops

Active Ingredient:	
Mesotrione:	
(CAS No. 104206-82-8)	40.0%
Other Ingredients:	60.0%
Total:	100.0%

Broadworks® Herbicide is formulated as a suspension concentrate (SC) and contains 4 lb of active ingredient mesotrione per gallon.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1131
EPA Est. 100-NE-001

Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1131C-L1B 0318
4093908

1 gallon (128 fl oz)
Net Contents

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements, pesticide storage and disposal statements, and directions for use inside booklet.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

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

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: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or 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.

syngenta®

KEEP OUT OF REACH OF CHILDREN.

CAUTION

FIRST AID	
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.
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 mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
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 by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

HOTLINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal), or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident)
Call **1-800-888-8372**

(01) 0 07 02941 56728 3

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

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

Environmental Hazards

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

Surface Water Advisory

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

Physical and Chemical Hazards

Do not use or store near heat or open flame.

Manufactured for:
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SCP 1131C-L2A 0318
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