

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%

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-L1A 0515

4055658

**1 gallon**

Net Contents

TM

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by the poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOTLINE NUMBER</b> For 24-Hour Medical Emergency Assistance (Human or Animal), or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call <b>1-800-888-8372</b>	

## **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 Control Statements**

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

### **User Safety Recommendations**

**Users should:**

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

### **Environmental Hazards**

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

### **Surface Water Advisory**

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff 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 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. 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 is not effective for the control of most grass weeds. Preemergence grass herbicides or postemergence grass herbicides can be tank mixed with Broadworks to provide broad spectrum weed control (see appropriate section of label for this information).

## **RESISTANCE MANAGEMENT**

Broadworks is a **Group 27 Herbicide** (contains the active ingredient mesotrione).

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 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, 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 must be applied at full label rates to help prevent selection for, or population shifts toward, marginally tolerant weed species and/or species biotypes.

## **INTEGRATED PEST (WEED) MANAGEMENT**

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

## **USE RESTRICTIONS**

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

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

**Do not** use aerial application to apply Broadworks.

## **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 is made following label directions when weeds are actively growing.

## **SPRAY DRIFT DIRECTIONS**

Avoid drift onto adjacent crops and other nontarget areas.

Do not apply when weather conditions may cause drift to nontarget areas. Drift may result in injury to adjacent crops and vegetation. To avoid spray drift, **DO NOT** apply when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet sizes will also reduce spray drift.

**AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.**

The interaction of equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making a decision.

### **Information on Droplet Size**

The most effective way to reduce spray drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size**

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher rate nozzles instead of increasing pressure.
- Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage.

### **Sensitive Areas**

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

## **APPLICATION INFORMATION**

### **PREEMERGENCE GROUND APPLICATION**

Apply Broadworks 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 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 recommended 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 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.

Follow the mixing instructions for adding Broadworks 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. 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 slowly and agitate until completely dissolved. Wait at least 1 minute after the last of the Broadworks has been added to the tank to allow for complete dispersion. A longer agitation period may be required to disperse Broadworks 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 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 to actively growing weeds. Dry weather following preemergence application of Broadworks 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 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**

Weed Common Name	Weed Scientific Name	Broadworks Apply to Weeds <5 Inches Tall <sup>1</sup>
Amaranth, palmer	<i>Amaranthus palmeri</i>	PC <sup>2</sup>
Amaranth, powell	<i>Amaranthus powellii</i>	C
Amaranth, spiny	<i>Amaranthus spinosus</i>	C
Atriplex	<i>Chenopodium orach</i>	C
Broadleaf signalgrass	<i>Urochloa platyphylla</i>	C <sup>2</sup>
Buckwheat, wild	<i>Polygonum convolvulus</i>	PC
Buffalobur	<i>Solanum rostratum</i>	C
Burcucumber	<i>Sicyos angulatus</i>	PC

<b>Weed Common Name</b>	<b>Weed Scientific Name</b>	<b>Broadworks Apply to Weeds &lt;5 Inches Tall<sup>1</sup></b>
Carpetweed	<i>Mollugo verticillata</i>	C
Carrot, wild	<i>Daucus carota</i>	PC
Chickweed, common	<i>Stellaria media</i>	C
Cocklebur, common	<i>Xanthium strumarium</i>	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	C <sup>2</sup>
Dandelion	<i>Taraxacum officinale</i>	NC
Dock, curly	<i>Rumex crispus</i>	PC
Galinsoga	<i>Galinsoga parviflora</i>	C
Hemp	<i>Cannabis sativa</i>	C
Horsenettle	<i>Solanum carolinense</i>	PC
Jimsonweed	<i>Datura stramonium</i>	C
Horseweed (maretail)	<i>Conyza canadensis</i>	PC
Knotweed, prostrate	<i>Polygonum aviculare</i>	PC
Kochia	<i>Kochia scoparia</i>	PC <sup>2</sup>
Lambsquarters, common	<i>Chenopodium album</i>	C
Mallow, Venice	<i>Hibiscus trionum</i>	NC
Morningglory, entireleaf	<i>Ipomoea hederacea</i>	PC
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	PC
Morningglory, pitted	<i>Ipomoea lacunosa</i>	PC
Mustard, wild	<i>Brassica kaber</i>	C
Nightshade, black	<i>Solanum nigrum</i>	C
Nightshade, Eastern black	<i>Solanum ptycanthum</i>	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C
Nutsedge, yellow	<i>Cyperus esculentus</i>	PC
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C
Pigweed, tumble	<i>Amaranthus albus</i>	C

continued...

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

Weed Common Name	Weed Scientific Name	Broadworks Apply to Weeds <5 Inches Tall <sup>1</sup>
Pokeweed, common	<i>Phytolacca americana</i>	PC
Potatoes, volunteer	<i>Solanum</i> spp.	C
Pusley, Florida	<i>Richardia scabra</i>	C <sup>2</sup>
Ragweed, common	<i>Ambrosia artemisiifolia</i>	PC
Ragweed, giant	<i>Ambrosia trifida</i>	C <sup>2</sup>
Sesbania, hemp	<i>Sesbania exaltata</i>	C
Sida, prickly (teaweed)	<i>Sida spinosa</i>	NC
Smartweed, ladythumb	<i>Polygonum persicaria</i>	C <sup>2</sup>
Smartweed, pale	<i>Polygonum lapathifolium</i>	C <sup>2</sup>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C <sup>2</sup>
Sunflower, common	<i>Helianthus annuus</i>	C
Thistle, Canada	<i>Cirsium arvense</i>	NC
Velvetleaf	<i>Abutilon theophrasti</i>	C
Waterhemp, common	<i>Amaranthus rudis</i>	C <sup>2</sup>
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C <sup>2</sup>

<sup>1</sup>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.

<sup>2</sup>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**

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

continued...

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

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

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

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

C = Control PC = Partial Control

## ROTATIONAL CROPS

When Broadworks is applied as directed on this label, follow the crop rotation intervals in Table 3. If Broadworks is tank mixed with other products, follow the most restrictive product's crop rotation interval.

**Table 3. Time Interval Between Broadworks 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 <sup>1,2</sup> Soybeans Sunflowers Tobacco	10 Months
Cucurbits Dry beans Red clover All other rotational crops	18 Months

<sup>1</sup>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 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 at 3 fl oz/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.
- <sup>2</sup>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 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 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 and carrier per acre in proportion to the area actually sprayed. (See Banded Applications Section.)

#### Restrictions

1. Broadworks can only be applied in stone fruit and nut trees that have been established for a minimum of 12 months. Broadworks can be applied in citrus trees or 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 per year or in a 12-month period.
4. Do not exceed 6 fl oz per acre (0.188 lb ai/A) of Broadworks for the first application.
5. Do not exceed 3 applications per year or in a 12-month period.



6. Allow at least 5 months between applications of Broadworks 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 through any type of irrigation system.
11. Do not apply Broadworks 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, 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 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® SL 2.0, Touchdown Total®, Touchdown HiTech®, 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

## Weed Control (Table 1 and 2)

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

**Table 4. Broadworks Application Programs, Rates and Intervals**

Program	Application Rate (fl oz/A)			Application Interval (wk)
	1st Application	2nd Application	3rd Application	
1	6	6	-	20
2	6	3	-	6
3	6	3	3	6

For optimum postemergence weed control, apply Broadworks to actively growing weeds in tank mixture with burndown herbicides such as: Gramoxone SL 2.0, and glyphosate products such as: Touchdown Total or Touchdown HiTech, Rely 280 or GoalTender before weeds exceed 5 inches in height.

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

Subsequent application(s) of Broadworks 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 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.

## **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  $\frac{1}{4}$  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]**

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.

### **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  $\frac{1}{4}$  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.

### **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.

---

Broadworks™, Gramoxone® SL 2.0, Princep®, Solicam®, Touchdown HiTech®, Touchdown Total®, the ALLIANCE FRAME  the Syngenta Logo and the PURPOSE ICON  are Trademarks of a Syngenta Group Company

Hyvar®, Krovar®, and Matrix®, are trademarks of E. I. du Pont de Nemours and Company

Surflan® is a trademark of United Phosphorous, Inc.

Alion® and Rely® 280 are trademarks of Bayer CropScience

Prowl® is a trademark of BASF Corporation

GoalTender® is a trademark of Dow AgroSciences

Karmex® is a trademark of Makhteshim Agan of North America, Inc.

©2015 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-L1A 0515**  
**4055658**

**GROUP 27 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%

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

Broadworks™ and the SYNGENTA Logo are trademarks of a Syngenta Group Company

©2015 Syngenta

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

**SCP 1131C-L1A 0515  
4055658**

**1 gallon**  
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.



**KEEP OUT OF REACH OF CHILDREN.**  
**CAUTION**



<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to by the poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOTLINE NUMBER</b> For 24-Hour Medical Emergency Assistance (Human or Animal), or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call <b>1-800-888-8372</b>	

**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.

©2015 Syngenta

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

**SCP 1131C-L2 0515**  
**4053893**