

ACCEPTED  
JUN 23 2006



**Sterling**<sup>®</sup>  
Herbicide

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

1381-190

HERBICIDE FOR WEED CONTROL IN CORN, COTTON, SORGHUM, SMALL  
GRAINS, PASTURE, HAY, RANGELANDS, GENERAL FARMSTEAD (NON CROP),  
FALLOW, SOYBEANS, SUGARCANE, ASPARAGUS, TURF, GRASS SEED CROPS,  
AND RIGHTS-OF-WAY

ACTIVE INGREDIENT:

*Dimethylamine salt of dicamba (3,6-dichloro-o-anisic acid).....	48.2%
OTHER INGREDIENTS:.....	51.8%
TOTAL.....	100.0%

\*Contains 40.0% 3,6-dichloroanisic acid (dicamba) equivalent to 4 pounds per gallon or 480 g/L.

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING** **AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

**FIRST AID**

<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. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF 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 a 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. You may also contact 1-800-424-9300 for emergency medical treatment information.

SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND USE DIRECTIONS.

EPA Reg. No. 1381-190

EPA Est. No.

Manufactured for:  
Agrilience, LLC  
P.O. Box 64089  
St. Paul, MN 55164-0089

NET CONTENTS  
Gals. (    Liters)  
0/C16/6

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animal**  
**WARNING AVISO**

Causes eye irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Avoid breathing spray mist. Wash thoroughly after handling. In case of contact with skin, wash with soap and water. For contact with eyes, flush with water for 15 minutes and get medical attention. Remove contaminated clothing and wash clothing before re-use.

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE  
**CALL CHEMTREC (800) 424-9300**

You may also contact: (Poison Control Centers) 800-222-1222  
 (ASPCA – animal health) 800-345-4735

**PERSONAL PROTECTIVE EQUIPMENT: (PPE)**

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistant gloves, shoes plus socks, and protective eyewear. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering controls statement:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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.

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**User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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 and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.  
 Use only as directed on this label.

**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 24 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, chemical-resistant gloves, shoes plus socks, and protective eyewear.*

**NON-AGRICULTURAL USE REQUIREMENTS**

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

Keep people and pets off treated areas until spray solution has dried.

### STORAGE AND DISPOSAL

**Prohibitions:** Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Open dumping is prohibited. This product may not be mixed, loaded or used within 50 feet of wells, including abandoned wells, drainage wells, and sinkholes.

**Pesticide Storage:** Store in original container in a well-ventilated area separate from fertilizer, food and feed. Spillage or leakage should be contained and absorbed with clay granules, sawdust or equivalent for disposal. The risk of groundwater contamination will be reduced by diking and flooring permanent liquid storage sites with impermeable material.

**Pesticide Disposal:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

**Container Disposal (plastic containers):** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Disposal (refillable containers):** Do not reuse this container except for refill in accordance with a valid Agrilience Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Bulk Tanks:** Triple rinse (or equivalent) and wash with appropriate cleaners before reusing. Rinsate that cannot be used according to label instructions must be disposed of according to local and Federal procedures compliant with Subtitle C of the Resource Conservation and Recovery Act (RCRA).

### GENERAL INFORMATION

The following directions apply to all uses of Sterling. Additional precautions and restrictions will appear in each specific use section.

Do not treat irrigation ditches or water used for crop irrigation or domestic purposes. Do not apply this product through any type of irrigation system.

### MIXING AND APPLICATION

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADINGS OF THIS LABEL, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF Sterling. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES, AND TIMINGS.

Sterling is a water soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is used, a compatibility test (see below) should be made prior to tank mixing.

Ground or aerial equipment which will provide good spray coverage of weed foliage should be used. DO NOT USE AERIAL APPLICATION EQUIPMENT IF SPRAY PARTICLES CAN BE CARRIED BY WIND INTO AREAS WHERE SENSITIVE CROPS

OR PLANTS ARE GROWING, OR WHEN TEMPERATURE INVERSION CONDITIONS EXIST.

Apply 3 to 50 gallons of spray dilution per acre when using ground application equipment. For aerial application, apply 1 to 10 gallons per acre for weed control or 2 to 20 gallons per acre for preharvest uses. Use the higher volumes when treating dense or tall vegetation.

Apply as a coarse spray. Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to weeds as practical for good coverage. To avoid uneven spray coverage, do not apply during periods of gusty winds, or when wind is in excess of 15 miles per hour.

Avoid disturbing (e.g. cultivating or mowing) sprayed areas for at least 7 days after application.

### **SPRAY DRIFT MANAGEMENT**

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

#### **Drift Reduction Advisory**

##### **Information on Droplet Size**

The most effective way to reduce 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 (See "Wind", "Temperature and Humidity", and "Temperature Inversions").

##### **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 flow rate nozzles instead of increasing pressure.
- *Number of nozzles* – Use the minimum number of nozzles that provide uniform coverage.

- Nozzle Orientation – Orienting nozzles so that the spray is released backwards, parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### **Boom Length**

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

### **Application Height**

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

### **Swath Adjustment**

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

### **Wind**

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### **Temperature and Humidity**

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

### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### Sensitive Areas

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

### BEST STEWARDSHIP PRACTICES

Sterling provides effective broadleaf weed and brush control when properly applied. Best stewardship practices in all mixing, loading, and application operations will not only maximize weed control, but also protect ground and surface water, and minimize off-target movement.

This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

### GROUND AND SURFACE WATERS PROTECTION

- 1) Point source contamination: To prevent point-source contamination, do not mix and load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams or rivers, or natural or impounded lakes or reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells, and does not apply to impervious pads or properly diked mixing/ loading areas as described below. Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% of that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment, or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/ loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment. Care must be taken with this product to prevent a) back-siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.
- 2) Movement by surface runoff or through soil: Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for groundwater contamination. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where groundwater depth is shallow (less than 8 feet in Arizona). To minimize the possibility of groundwater contamination, carefully follow application rate recommendations as affected by soil type in the "GENERAL INFORMATION" section of this label.
- 3) Movement by water erosion treated soil: Do not apply nor incorporate this product through any type of irrigation equipment, nor by flood or furrow irrigation. Ensure

treated areas have received at least ½ inch of rainfall or irrigation before using tailwater for subsequent irrigation of other fields.

### SENSITIVE CROP PRECAUTIONS

Sterling may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to Sterling during their development or growing stages.

#### FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING STERLING:

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of Sterling with the roots of desirable plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing, or where temperature inversions exist. Do not spray near sensitive plants if wind is gusty or greater than 5 miles per hour, and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles which are designed to produce minimal amounts of fine spray particles. Examples of nozzles designed to produce coarse sprays via ground application are Delavan Raindrops™, Spraying Systems XR™ flat fans, or large-capacity flood nozzles such as D10, TK10, or greater capacity tips. Keep the spray pressure at or below 20 PSI, and the spray volume at or above 20 gpa unless otherwise directed by the manufacturer of the nozzles. Consult your spray-nozzle supplier about the choice of drift reducing nozzles.
- Agriculturally-approved drift-reducing additives may be used.
- Do not apply Sterling adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85° F, since drift will be more likely to occur.
- To avoid injury to desirable plants, equipment used to apply Sterling should be thoroughly cleaned (See "PROCEDURE FOR CLEANING SPRAY EQUIPMENT") before re-using to apply any other chemicals.

All crop uses of Sterling are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crops has occurred. If this interval is shortened, such as in cover crops that will be plowed-under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind, or insects can display various injury symptoms that may be more pronounced if herbicides are applied.

Consult your local or State authorities for possible application restrictions and advice concerning these and other special local use situations. Tank mix recommendations are



for use only in those states where the tank mix product and application site are registered.

### BAND TREATMENTS

Sterling may be applied as a band treatment. Use the formula below to determine the appropriate volume and rate per acre.

$$\begin{array}{l} \text{Band width in inches} \\ \text{Row width in inches} \end{array} \times \begin{array}{l} \text{Broadcast Rate} \\ \text{per treated acre} \end{array} = \begin{array}{l} \text{Band Rate} \\ \text{per treated acre} \end{array}$$

$$\begin{array}{l} \text{Band width in inches} \\ \text{Row width in inches} \end{array} \times \begin{array}{l} \text{Broadcast Volume} \\ \text{per treated acre} \end{array} = \begin{array}{l} \text{Band Volume} \\ \text{per treated acre} \end{array}$$

### COMPATIBILITY TEST

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of herbicide to add to one pint of spray carrier assuming volume is 25 gal per acre		
HERBICIDE FORMULATION	RATE PER ACRE	AMOUNT TO ADD to 1 pint for test (TEASPOONS)
dry	1 lb	1 1/2
liquid	1 pint	1/2

If herbicides do not ball-up or form flakes, sludge, gel, oily films or layers, or other precipitates, then the tested mixture is compatible. Usually incompatibility in any of the above described forms will be seen within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Re-run the above compatibility test with a suitable compatibility agent (e.g. COMPLETE COMPATIBILITY<sup>®</sup>). (One quarter teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer.)

### PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following application of Sterling or tank mixes with Sterling with 2,4-D Amine.

- 1) Thoroughly hose down the inside and outside surfaces of the equipment while filling the spray tank 1/2 full with water. Activate the sprayer and spray until the rinse water is completely flushed out.
- 2) Fill the tank with water while adding 1 quart of household ammonia per 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes, and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out through the boom.
- 4) Remove nozzles and screens and flush through 2 tanks full of water.

If Sterling is tank-mixed with wettable powders (WP) emulsifiable concentrates (EC) or other types of water-dispersible formulations, follow the cleaning steps below:

- 5) Complete step 1 above.
- 6) Fill tank with water while adding 2 pounds of detergent per 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes, and discharge a small amount through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

### GENERAL WEED LIST

The following is a general list of weeds controlled or suppressed by Sterling when used as directed in the following individual use sections of this label.

#### ANNUALS

amaranth, spiny (spiny pigweed)	lambsquarters, common	pusley, Florida
aster, slender	lambsquarters, triazine resistant	radish, wild
bedstraw	ladysthumb	ragweed, common
beggarweed, Florida	kochia	ragweed, giant (buffaloweed)
broomweed, common	lettuce, prickly	ragweed, lanceleaf
buckwheat, wild	mallow, common	rubberweed, bitter (bitterweed)
buffalobur	mallow, Venice	sesbania, hemp
burclover, California	mare's tail (horseweed)	sheperdspurse
burcucumber	mayweed	sicklepod
buttercup, roughseed	morningglory, ivyleaf	sida, prickly (teaweed)
carpetweed	morningglory, tall	smartweed, green
catchfly, nightflowering	mustard, tansy	smartweed, Pennsylvania
chamomile, corn	mustard, wild	sneezeweed, bitter
chickweed, common	mustard (yellowtops)	sowthistle, annual
clovers, annual	nightshade, black	sowthistle, spiny
cockle, corn	pennycress, field (fanweed,	spikeweed, common
cockle, cow	Frenchweed, stinkweed)	spurge, prostrate
cocklebur, common	pepperweed, Virginia (peppergrass)	spurry, corn
croton, tropic	pigweed, prostrate	starbur, bristly
croton, wooly	pigweed, redroot (carelessweed)	sumpweed, rough
daisy, English	pigweed, rough	sunflower, common wild
evening primrose, cutleaf	pigweed, smooth	sunflower, volunteer
fleabane, annual	pigweed, triazine-resistant	thistle, Russian
goosefoot, nettleleaf	pigweed, trumble	velvetleaf
henbit	poorjoe	waterhemp
jimsonweed	puncturevine	water primrose, winged
knotweed	purslane, common	wormwood, annual

#### BIENNIALS

burdock, common	knapweed, diffuse	sweet clover
carrot, wild (Queen Anne's lace)	knapweed, spotted	teasel
cockle, white	mallow, dwarf	thistle, bull
evening primrose, common	plantain, bracted	thistle, milk
geranium, Carolina	ragwort, tansy	thistle, musk
gromwell	starthistle, yellow	thistle, plumeless

**PERENNIALS**

alfalfa*	garlic, wild (cypressweed)	redvine
artichoke, Jerusalem	goldenrod, Canada	sericea (lespedeza)
aster, spiny	goldenrod, Missouri	smartweed, swamp
aster, whiteheath	goldenweed, common	snakeweed, broom
bedstraw, smooth	hawkweed	sorrel, red* (sheep sorrel)
bindweed, field	henbane, black	sowthistle
bindweed, hedge	horsenettle, Carolina	sowthistle, perennial
blueweed, Texas	ironweed	spurge, leafy
bursage* (bur ragweed, lakeweed, povertyweed)	knapweed, black	sundrop, halfshrub
bursage, woolyleaf (lakeweed)	knapweed, Russian	thistle, Canada
buttercup, tall,	milkweed, climbing	toadflax, Dalmatian
campion, bladder	milkweed, common	tropical soda apple
chickweed, field	milkweed, honeyvine	trumpet creeper (buckvine)
chickweed, mouseear (Canada)	milkweed, western whorled	vetch
chicory	nettle, stinging	waterhemlock
clover, hop*	nightshade, silverleaf (white horsenettle)	waterprimrose, creeping
dandelion, common*	onion, wild	woodsorrel, creeping* (common yellow)
dock, broadleaf* (bitterdock)	plantain, broadleaf*	wormwood, common
dock, curly*	plantain, buckhorn*	wormwood, Louisiana
dogbane, hemp	pokeweed	yankeeweed*
dogfennel*	ragweed, western	yarrow, common
fern, bracken		

\* Noted perennials may be controlled using Sterling or Sterling plus 2,4-D at rates lower than those recommended for other listed perennial weeds. See application rates and timing sections of this label.

**WOODY**

alder	hemlock	poplar
ash	hickory	rabbitbrush
aspen	honeylocust	redcedar, eastern*
basswood	honeysuckle	rose, McCartney*
beech	hornbeam	rose, multiflora*
birch	huckleberry	sagebrush, fringed
blackberry*	huisache	sassafras
blackgum*	ivy, poison	serviceberry (Saskatoon)
cedar*	kudzu	spicebush
cherry	locust black	spruce
chinquapin	maple	sumac
cottonwood	mesquite	sweetgum*
creosote bush*	oak	sycamore
cucumbertree	oak, poison	tarbush
dewberry*	olive, Russian	willow
dogwood*	persimmon, eastern	witch hazel
elm	pine	yaupon*
grape	plum, sand* (wild)	yucca*
hawthorn* (thornapple)		

\* suppression only

**CORN (FIELD, SEED, POPCORN, SILAGE)**

NOT FOR USE ON SEED CORN AND POPCORN IN CALIFORNIA.

SOME SENSITIVE VARIETIES OF SEED CORN AND POPCORN MAY BE INJURED BY TREATMENT WITH STERLING OR OTHER BRANDS OF DICAMBA. VERIFY WITH YOUR SEED SUPPLIER THE DICAMBA SELECTIVITY VARIETY OF SEED CORN OR POPCORN BEFORE APPLICATION. STERLING IS NOT REGISTERED FOR USE ON SWEET CORN.

Observe precautions, mixing, and application instructions on this label, plus the following:

- Direct contact of Sterling with corn seed must be avoided. If corn seeds are less than 1 1/2 inches below the surface, delay application until corn has emerged.
- Up to 2 applications of Sterling may be made during a growing season. Do not exceed a total of 1 1/2 pints of Sterling (including equivalent amount of other dicamba products) per treated acre per crop year. Allow 2 weeks or more between applications of Sterling.
- Applications of Sterling to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect again within 3 to 7 days. Cultivation should be delayed until corn is growing normally to avoid breakage.
- Agriculturally approved surfactants or sprayable fluid fertilizers (1/2 to 1 gallon per acre of 28%, 30%, or 32% urea ammonium nitrate, or 2.5 pounds per acre spray-grade ammonium sulfate) may be added to the spray mixture to improve post-emergence weed control, particularly in dry conditions.
- Do not use adjuvants containing penetrants such as petroleum-based oils after crop emergence, since crop injury may result.
- Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage, or later

Some synthetic pyrethroid insecticides may be tank mixed with Sterling. Refer to the labels of the insecticide products for specific directions.

#### **Weeds Controlled**

Sterling will control many annual broadleaf weeds, and suppress growth of many perennial weeds in corn (see general weed list).

For best performance, apply when weeds have emerged and are actively growing. Pre-emergence control of cocklebur, velvetleaf, and jimsonweed may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

#### **No-Tillage Corn**

Applications of Sterling may be made before, during, or after planting to emerged and actively growing weeds. Apply 1 pint of Sterling per acre on medium or fine-textured soils containing 2% or greater organic matter. Use 1/2 pint per acre on coarse textured soils such as sand, sandy loam, or loamy sand, or on medium textured soils with less than 2% organic matter. When planting into a legume sod such as alfalfa or clover, apply Sterling after 4 to 6 inches of regrowth has occurred.

#### **Conventional or Reduced-Tillage Corn**

Sterling may be applied after planting and prior to emergence of corn. In fine or medium-textured soils which contain 2% or more organic matter, use 1 pint per acre. DO NOT APPLY to coarse-textured soils (sand, sandy loam, loamy sand) until after crop emergence – see "CORN, EARLY POSY-EMERGENCE" below. Pre-emergence

application of Sterling does not require mechanical incorporation to be active. A shallow mechanical incorporation is recommended if the application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g. drags or harrows) which concentrate treated soil over furrows.

**Corn, Early Post-Emergence  
(Spike through 8 inches tall)**

Sterling may be applied at a rate of 1 pint per acre during the period from corn emergence through 5-leaf stage, or 8 inches tall, whichever comes first. Reduce the rate to 1/2 pint per acre if corn is growing in coarse textured soils (sand, sandy loam, loamy sand). If the 6th true leaf is emerging from the whorl, or if the corn is greater than 8 inches tall, see "CORN, LATE POST-EMERGENCE" directions below.

**Corn, Late Post-Emergence  
(8 to 36 inches tall)**

Sterling may be applied at a rate of 1/2 pint per acre when corn is between 8 and 36 inches tall, or 15 days before tassel emergence, whichever comes first. For best results, apply when weeds are less than 3 inches tall.

A directed spray application should be made if 1) corn leaves prevent adequate spray coverage, 2) sensitive crops are growing nearby, or 3) Sterling is tank-mixed with 2,4-D. DO NOT APPLY Sterling when soybeans are growing nearby if any of the following conditions exist: 1) Corn is more than 24 inches tall, 2) soybeans are more than 10 inches tall, or 3) soybeans have begun to bloom.

**Sequential Treatments**

Sterling may be applied to ground previously treated with one or more of the following herbicides registered for use in corn:

acetochlor (Surpass™, Harness®)  
alachlor (Lasso®, Lasso MT)  
atrazine  
Bicep®  
Bullet®  
butylate (Sutan®)  
Clarity®  
dimethenamid (Frontier™)  
EPTC (Eradicane™)

glyphosate (Cornerstone®)  
Guardsman  
halosulfuron (Permit®)  
Lariat®  
Marksman®  
metolachlor (Dual®II, Dual II Magnum®)  
paraquat (Gramoxone®Max)  
pendimethalin (Prowl®)  
simazine

Apply Sterling at a rate of 1/2 pint per acre to ground previously treated with full rates of Clarity or Marksman herbicides. Allow at least 2 weeks between applications. READ AND FOLLOW ALL LABEL DIRECTIONS FOR THE LISTED PRODUCTS.

**Tank Mix Treatments For Corn**

Sterling may be tank-mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. READ AND FOLLOW ALL LABEL DIRECTIONS FOR THE LISTED TANK MIX PRODUCTS.

Tank mix product	Preplant/ pre-emergence (no tillage corn)	Pre-emergence (Conventional or reduced tillage corn)	Early post-emergence (all tillage systems)	Late post-emergence (all tillage systems)	Additional instructions
Accent® (nicosulfuron)	-	-	1/2 to 1 oz ai / acre	1/2 to 1 oz. ai / acre	To improve spray coverage of weeds and reduce risk of injury to corn, use drop-pipes to direct spray beneath corn leaves when corn is greater than 8 in. tall. Application may be made to emerged weeds before corn is greater than 24 inches tall. Use a non-ionic surfactant at 0.25% v/v.
atrazine	1 1/4 to 2 lb ai / acre	1 1/4 to 2 lb ai / acre	1 1/4 to 2 lb ai / acre + crop oil concentrate if corn is 5 in. in height or less	1 1/4 to 2 lb ai / acre Do not apply if corn is greater than 12 inches high.	Application may be made before grasses are 1 1/2 inches tall. Follow all State and Federal restrictions pertaining to atrazine applications.
Beacon® (primisulfuron)	-	-	0.31 to 0.62 oz ai /acre	0.31 to 0.62 oz ai /acre	To improve spray coverage of weeds and reduce risk of injury to corn, use drop-pipes to direct spray beneath corn leaves when corn is 4 to 24 in. tall. Application may be made to emerged weeds before corn is greater than 24 inches tall. Use a non-ionic surfactant at 0.25% v/v.
Dual II (metolachlor)	1 1/2 to 3 lb ai / acre	1 1/2 to 3 lb ai / acre use only on fine- or medium-textured soils with $\geq$ 2.5% organic matter	1 1/2 to 3 lb ai / acre	-	Application may be made before grasses reach the 2-leaf stage and before corn is > 3 inches tall.
Frontier 6.0	16 to 32 fl. Oz / acre	16 to 32 fl. Oz / acre use only on fine- or medium-textured soils	-	-	Application may be made on corn up to 8 inches tall. This treatment must be combined with a herbicide that

		with $\geq 2.5\%$ organic matter			provides post-emergence control of grass weeds if they are greater than 1 inch tall at the time of application
Gramoxone Max (paraquat)	1/4 to 1 lb ai / acre	1/4 to 1 lb ai / acre	-	-	Application may be made to emerged weeds, but before emergence of corn
Harness, Surpass (acetochlor)	1 1/2 to 3 lb ai / acre	1 1/2 to 3 lb ai / acre use only on fine- or medium-textured soils with $\geq 2.5\%$ organic matter	-	-	Application should be made prior to corn emergence
Lasso (alachlor)	1 1/2 to 4 lb ai / acre	1 1/2 to 4 lb ai / acre use only on fine- or medium-textured soils with $\geq 2.5\%$ organic matter	1 1/2 to 4 lb ai / acre	-	Application may be made before grasses reach the 2-leaf stage and before corn is $> 3$ inches tall. If a microencapsulated form of acetochlor is used, (Lasso MT, Partner) application must be made before grass emergence
Princep <sup>®</sup> (simazine)	2 to 3 lb ai / acre	2 to 3 lb ai / acre	-	-	Application may be made prior to corn or weed emergence
Prowl (pendimethalin)	-	3/4 to 1 1/2 lb ai / acre use only on fine- or medium-textured soils with $\geq 2.5\%$ organic matter	3/4 to 1 1/2 lb ai / acre	-	Application may be made immediately after planting, but prior to weed emergence. Corn should not be beyond the 2-leaf stage.
glyphosate (Cornerstone)	1 to 3 lb ai / acre	1 to 3 lb ai / acre	-	-	Application may be made to emerged weeds, but before corn has emerged.
clopyralid (Stinger <sup>®</sup> )	-	-	0.035 to 0.07 lb ai / acre	0.035 to 0.07 lb ai / acre	Application may be made any time after corn emergence, through 24 inches tall corn. Use drop nozzles to direct spray after corn reaches 8 inches tall. Apply when the majority of thistle plants have emerged and are at least 4 inches tall.

					but before bud stage. Use the higher rates listed for stand reduction of larger thistle plants or heavier infestations. Lower rates may provide seasonal thistle suppression only.
Tough® 5EC (pyridate)	-	-	0.47 lb ai / acre	0.47 to 0.94 lb ai / acre	Application may be made to emerged, actively-growing weeds. Directed applications are recommended when corn is large enough to prevent spray coverage.
2,4-D	1/4 to 1/2 lb ai / acre	1/4 to 1/2 lb ai / acre	-	1/8 lb ai / acre	Use drop pipes when corn is 8 inches high or greater. Keeping spray off corn leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weeds.

**COTTON**

**Preplant Application**

Observe all precautions. Read and follow mixing and application instructions. Refer to the GENERAL WEED LIST section of this label for a list of weeds controlled or suppressed.

**Rates and Timings**

Apply STERLING as a broadcast or spot treatment to emerged and actively growing weeds at a rate of up to 8 fl. oz./acre prior to planting cotton. Most effective control of weeds occurs if application is made when weeds are in the 2-4 leaf stage and rosettes are less than 2" across.

**Cropping Restrictions**

Do not plant cotton for at least 21 days after application and after allowing for a minimum accumulation of 1" of rainfall or overhead irrigation. Do not apply west of the Rockies or to geographic areas with average annual rainfall less than 25".

**Tank Mix Treatments**

For control of grasses or additional broadleaf weeds, STERLING may be tank mixed with Caparol<sup>®</sup>, Gramoxone<sup>®</sup> Extra, and Roundup Ultra<sup>®</sup> RT herbicides.



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### **SORGHUM (MILO)**

Observe precautions, mixing, and application instructions on this label, plus the following:

- Applications of Sterling to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown in 10 to 14 days.
- Do not graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to the PASTURE, HAY, RANGELAND AND FARMSTEAD section of this label.
- Make no more than 1 application per growing season.

#### **Weeds Controlled**

Sterling applied at the recommended rate for grain sorghum will control many actively growing annual broadleaf weeds and will reduce competition from established perennial broadleaf weeds as well as control their seedlings. (see GENERAL WEED LIST)

#### **Rates And Timings**

Sterling may be applied to emerged and actively growing weeds at least 15 days prior to planting. Post-emergence application of Sterling must be made after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 inches tall. For best performance, make applications when sorghum is in the 3 to 5 leaf stage and weeds are small (less than 3 inches tall.) Use drop nozzles if sorghum taller than 8 inches. Keeping the spray off the sorghum leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of the weeds.

#### **Broadcast Rate Per Treated Area**

Use 1/2 pint (1/4 lb ai) per acre.

#### **Tank Mixes For Sorghum**

Sterling + atrazine:

For improved control of emerged, actively growing broadleaf weeds including triazine-resistant varieties, and for added suppression of perennial broadleaf weeds, tank-mix 1/2 pint of Sterling with 1/2 to 1 1/4 lb ai atrazine per acre. For control of grasses less than 1 1/2 inches tall tank mix 1/2 pint of Sterling with 2 lb ai atrazine per acre. For best performance and minimum crop injury make the application when the sorghum is 3 to 8 inches tall and when broadleaf weeds are less than 6 inches tall. Application of atrazine must be made before sorghum is greater than 12 inches tall. The rate of atrazine will depend on soil texture and length of residual control desired. Follow all State and Federal restrictions pertaining to atrazine application.

Sterling plus Moxy™ (bromoxynil):

For improved control of broadleaf weeds, tank mix 1/2 pint Sterling with 1 to 1 1/2 pint bromoxynil (e.g. Moxy) per treated acre. Make application at the 4 leaf to 15 inch tall sorghum stages. Use drop nozzles to direct spray beneath sorghum leaves when sorghum is greater than 8 inches tall.

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### Sequential Treatments

Sterling may be applied to ground previously treated with one or more of the following herbicides:

HERBICIDE	MAXIMUM RATE (lb ai per acre)
alachlor (Lasso) (Screen® treated seed)	4
atrazine*	2 1/2
metolachlor (Dual II) (Concep® treated seed)	2 1/2

\* Maximum use rate for atrazine is determined by soil type, tillage practices used, surface residue, and State or local restrictions. Follow the most restrictive requirements when determining maximum use rate.

### Preharvest Uses

#### FOR USE ONLY IN TEXAS AND OKLAHOMA

Sterling may be applied for weed suppression any time after sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications, use at least 2 gallons of water-based carrier per acre. Delay harvest until 30 days after treatment.

**Broadcast rate per acre:** 1/2 pint (1/4 lb ai).

### SMALL GRAINS (WHEAT, BARLEY, OATS) (Not Underseeded To Legumes)

Observe precautions, mixing, and application instructions on this label, plus the following:

- If small grains are used for pasture or hay
- Animals may not be removed from treated areas for slaughter prior to 30 days after last application
- There is no waiting period between treatment and grazing for non-lactating dairy animals
- Treated areas may not be grazed by lactating dairy animals before 7 days after treatment
- Do not harvest hay from treated areas before 37 days after treatment.

### Weeds Controlled

Sterling alone or in combination with tank mix partners as listed will control or suppress the broadleaf weeds listed below in small grains. For improved control of listed weeds, Sterling should be applied in tank mixture with other herbicides. Refer to specific crop instructions for tank mix options.

alkanet<sup>1</sup>  
bedstraw, catchweed<sup>1</sup>  
bindweed, field<sup>2</sup>  
buckwheat, tartary  
buckwheat, wild  
carpetweed<sup>1</sup>  
chamomile, corn  
chervil, bur<sup>1</sup>  
chickweed, common<sup>1</sup>  
cockle, corn

knawel (German moss)  
knotweed, prostrate  
kochia  
ladysthumb  
lambsquarters, common  
lettuce, miner's<sup>1</sup>  
lettuce, prickly  
mallow, common  
mayweed, chamomile  
(dogfennel)

pigweed, rough  
pineappleweed<sup>1</sup>  
plantain, broadleaf<sup>2</sup>  
poppy, red horned<sup>1</sup>  
puncturevine<sup>1</sup>  
purslane, common  
radish, wild<sup>1</sup>  
ragweed, common  
ragweed, giant<sup>1</sup>  
(buffaloweed)

cockle, cow  
 cocklebur, common,  
 cornflower<sup>1</sup> (bachelorbutton)  
 dandelion, common<sup>2</sup>  
 dock, curly<sup>2</sup>  
 dragonhead, American<sup>1</sup>  
 evening primrose, cutleaf<sup>1</sup>  
 falseflax, smallseeded<sup>1</sup>  
 fiddleneck<sup>1</sup> (tarweed)  
 flixweed<sup>1</sup>  
 fumitory<sup>1</sup>  
 gromwell, corn<sup>1</sup>  
 groundsel, common<sup>1</sup>  
 hempnettle<sup>1</sup>  
 henbit  
 Jacob's ladder<sup>1</sup>

mustard, blue<sup>1</sup> (purple)  
 mustard, tansy  
 mustard, treacle<sup>1</sup>  
 mustard, tumble<sup>1</sup> (Jim Hill)  
 mustard, wild<sup>1</sup>  
 nightshade, black  
 nightshade, cutleaf<sup>1</sup>  
 nightshade, silverleaf<sup>2</sup>  
 (white horsenettle)  
 pennycress, field  
 (fanweed, Frenchweed,  
 stinkweed)  
 pepperweed<sup>1</sup> (peppergrass)  
 pigweed, redroot  
 (carelessweed)  
 pigweed, tumble

rocket, London<sup>1</sup>  
 rocket, yellow<sup>1</sup>  
 salsify (goatsbeard)  
 shepherdspurse<sup>1</sup>  
 smartweed, green  
 smartweed, Pennsylvania  
 sorrel, red<sup>1</sup> (sheep sorrel)  
 sowthistle, annual  
 starthistle, yellow<sup>1</sup>  
 sunflower, common (wild)  
 thistle<sup>1</sup>, Canada  
 thistle, Russian  
 velvetleaf  
 vetch<sup>1</sup>  
 yarrow, common<sup>2</sup>

<sup>1</sup> Controlled with tank mixtures with Sterling

<sup>2</sup> Tank mixtures with Sterling will control seedlings and suppress established weeds

### Rates And Timing

Application of Sterling may be made before, after, or during planting of small grains. For best performance, make applications when weeds are in the 2 to 3 leaf stage, and rosettes are less than 2 inches wide. Application of Sterling to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not affect crop yields.

Use Sterling at a rate of 4 fl. oz. per treated acre in wheat, fall-seeded barley, and oats, and at a rate of 2 to 3 fl. oz. per acre in spring-seeded barley. Use the higher rates when treating difficult-to-control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce, or if dense vegetative growth is present.

### Fall And Spring Seeded Wheat

STERLING MUST BE APPLIED TO FALL-SEEDED WHEAT PRIOR TO THE JOINTING STAGE. APPLICATIONS TO SPRING-SEEDED WHEAT MUST BE MADE BEFORE WHEAT REACHES THE 6-LEAF STAGE.

### Tank Mix Treatments

Sterling used in a tank-mix with other herbicides provides the best spectrum of weed control and herbicide-tolerant or -resistant weed management.

For applications prior to the emergence of weeds, or when sulfonylurea - resistant weeds are present or suspected, use a minimum of 3 fluid ounces per acre of Sterling with a tank-mix herbicide. Non-sulfonylurea herbicides such as 2,4-D or MCPA tank-mixed with Sterling will offer more consistent control of sulfonylurea-resistant weeds.

When tank mixing with sulfonylurea herbicides such as Amber®, Ally®, Express®, Finesse®, Glean®, or Harmony® Extra, use an agriculturally-approved surfactant of at least 80% active ingredient at a rate of 1 to 4 pints / 100 gal. of spray mixture, or not more than 0.25 to 0.5% v/v. Use the highest rate of surfactant when using the lowest rate of the tank mix and / or when treating more mature or difficult-to-control weeds, or dense vegetative growth.

Sterling or combinations with listed tank mix partners will control or suppress the annual broadleaf weeds indicated in the GENERAL WEEDS LIST and those listed below for specific tank mixtures. Read and follow the most restrictive use directions on the label of each tank mix partner listed.

**Broadcast rate per acre:** Apply Sterling at a rate of 2 to 4 fl. oz. / acre<sup>3</sup> plus the following

Product*	Rate*
2,4-D amine or ester (4 lb/ gal)	8 to 12 fl. oz. (.25 to .375 lb ai) per acre
MCPA amine or ester (4 lb/ gal)	8 to 12 fl. oz. (.25 to .375 lb ai) per acre <sup>1</sup>
Ally (metsulfuron methyl) 60% DF	1/10 oz per acre
Amber (triasulfuron) 75% DF	0.28 oz per acre
Express (thifensulfuron+metsulfuron-methyl) 75%DF	1/6 oz per acre
Finesse (chlorsulfuron + metsulfuron-methyl) 75%DF	1/3 oz per acre
Glean (chlorsulfuron) 75%DF	1/6 oz per acre
Harmony Extra (thifensulfuron+ tribenuron-methyl) 75%DF	1/3 oz. per acre
Moxy (bromoxynil, Buctril®) 2 lb/ gal	1 to 1 1/2 pints/ acre
Bison™ (bromoxynil+MCPA, Bronate®) 4 lb/ gal	1 to 2 pints per acre
Curtail™ (clopyralid+ 2,4-D) 2.38 lb/gal	2 to 2 2/3 gal per acre
Stinger (clopyralid) 3 lb/ gal	1/4 to 1/3 gal per acre
Diuron 80DF or 4L	1/2 to 1 1/2 lb 80DF or 1 gal. 4L per acre
Sencor® (metribuzin) 75% DF	1 to 10 oz. per acre
Tiller <sup>2 3</sup> (fenoxaprop-ethyl + MCPA amine + 2,4-D) 2.7 lb / gal)	1 to 1.7 pt. per acre

NOTES: \* Herbicides with the same active ingredient or different formulation may be used. Rate should be adjusted to provide the same weight of ai per acre.

1) Early-developing wheat varieties such as TAM 107 or Wakefield must receive application between early tillering and the jointing stage. Take care in staging these varieties to be certain the application takes place before jointing.

2) For fall-seeded wheat only

3) Use only the 2 fl. oz per acre rate of Sterling. Do not use if wild oats are the target weeds. Do not use Sterling as a tank mix treatment with Dakota or Tiller on Durum wheat.

### Special Use Tank Mixes For Spring And Fall Seeded Wheat

**Broadcast rate per acre:** Apply Sterling<sup>1</sup> at a rate of 2 to 4 fl. oz. / acre plus the following:

Product*	Rate*
2,4-D or MCPA amine 4 lb/ gal <sup>3</sup>	1 to 2 pt. (1/2 to 1 lb ai) per acre
2,4-D or MCPA ester 4 lb/ gal <sup>3</sup>	1 to 1 1/2 pt (1/2 to 3/4 lb ai) per acre
Ally (metsulfuron methyl) 60% DF	1/20 to 1/10 oz. per acre
Amber (triasulfuron) 75% DF	0.14 to 0.28 oz. per acre
Express (thifensulfuron+metsulfuron-methyl) 75%DF	1/12 to 1/6 oz. per acre
Finesse (chlorsulfuron + metsulfuron-methyl) 75%DF	1/6 to 1/3 oz. per acre
Glean (chlorsulfuron) 75%DF	1/6 oz. per acre
Harmony Extra (thifensulfuron+ tribenuron-methyl) 75%DF	1/6 to 1/3 oz. per acre
Ally (metsulfuron-methyl) 60DF + 2,4-D amine or ester 4lb/ gal <sup>4</sup>	1/20 to 1/10 oz Ally + 8 fl. oz. 2,4-D per acre
Amber (triasulfuron) 75%DF + 2,4-D amine or ester 4 lb/ gal <sup>4</sup>	0.14 to 0.28 oz Amber + 8 fl. oz 2,4-D per acre
Express (thifensulfuron + tribenuron methyl) 75%DF + 2,4-D amine or ester 4 lb per gal <sup>4</sup>	1/12 to 1/16 oz Express + 8 fl. oz. 2,4-D per acre
Glean (chlorsulfuron) 75%DF + 2,4-D amine or ester 4 lb/ gal <sup>4</sup>	1/6 oz. Glean + 8 fl. oz. 2,4-D per acre
Harmony Extra (thifensulfuron + tribenuron-methyl) 75% DF + 2,4-D amine or ester 4 lb/ gal <sup>4</sup>	1/6 to 1/3 oz. Harmony Extra + 8 fl. oz. 2,4-D per acre
Cornerstone (glyphosate) 4 lb/ gal	12 - 16 fl. oz. per acre

NOTES: \* Herbicides with the same active ingredient or different formulation may be used. Rate should be adjusted to provide the same weight of ai per acre.

1) Use Sterling only at the 6 fl. oz. per acre rate for spring application on fall seeded wheat in western Oregon. In CO, KS, NM, OK, and TX, up to 8 fl. oz. per acre may be applied on fall-seeded wheat after it

exceeds the 3 leaf stage for suppression of perennial weeds such as field bindweed. Applications may be made in the fall after a frost but before a killing freeze. Sterling may be tank mixed with 2,4-D amine at 8 fl. oz. per acre after wheat begins to tiller. Periods of extended stress such as cold and wet weather may increase the likelihood of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

- 2) Do not use the lower rates of sulfonylurea herbicides on more mature weeds or on dense vegetative growth.
- 3) For fall-seeded wheat only. Do not use unless potential crop injury is acceptable.
- 4) Use for improved control of Russian thistle, flixweed, gromwell, mayweed, and fiddleneck.
- 5) Sterling may be applied at 2 fl oz per acre with any glyphosate formulation registered for use as a preplant application to small grains with no waiting period prior to planting. Read and follow glyphosate label directions for adjuvant use recommendations

### Fall-Seeded Barley

STERLING MUST BE APPLIED TO FALL-SEEDED BARLEY PRIOR TO THE JOINTING STAGE.

Note: For spring-seeded barley varieties that are seeded during the winter months or later, follow the rates and timings for "SPRING SEEDED BARLEY"

### Tank Mix Treatments For Fall-Seeded Barley

Sterling may be tank-mixed with one or more of the following herbicides, or others not listed (read and follow directions and restrictions of individual labels of tank mix herbicides).

#### Broadcast rates per treated acre:

Apply 2 to 4 fl. oz. Sterling with the following:

Product*	Rate*
2,4-D amine or ester, 4 lb/ gal	8 fl. oz. (0.25 lb ai) per acre
MCPA amine or ester, 4 lb/ gal	8 to 12 fl. oz. (0.25 to 0.375 lb ai) per acre
<sup>1</sup> Ally (metsulfuron-methyl) 60% DF	1/20 to 1/10 oz per acre
<sup>1</sup> Amber (triasulfuron) 75% DF	0.14 to 0.28 oz. per acre
<sup>1</sup> Express (thifensulfuron + tribenuron-methyl) 75% DF	1/12 to 1/6 oz per acre
<sup>1</sup> Finesse (chlorsulfuron + metsulfuron-methyl) 75% DF	1/6 to 1/3 oz. per acre
<sup>1</sup> Glean (chlorsulfuron) 75% DF	1/6 oz per acre
<sup>1</sup> Harmony Extra (thifensulfuron + tribenuron-methyl) 75% DF	1/6 to 1/3 oz per acre
Sencor (metribuzin) 75% DF	1 to 10 oz per acre
Moxy (bromoxynil) 2 lb/ gal	1 to 1 1/2 pints per acre
Bison (bromoxynil + MCPA) 4 lb/ gal	3/4 to 1 1/2 pints per acre

NOTES: \* Herbicides with the same active ingredient and different formulation may be used. Rate should be adjusted to provide the same weight of ai per acre.

<sup>1</sup> Do not use the lower rates of sulfonylurea herbicides on more mature weeds or on dense vegetative growth.

### Spring-Seeded Barley

STERLING MUST BE APPLIED BEFORE SPRING-SEEDED BARLEY EXCEEDS THE 4-LEAF STAGE.

### Tank Mix Treatments For Spring-Seeded Barley

Sterling may be tank-mixed with one or more of the following herbicides (read and follow directions and restrictions of individual labels of tank mix herbicides).

#### Broadcast rates per treated acre:

Apply 2 to 3 fl. oz. Sterling with the following:

Product*	Rate*
MCPA amine or ester, 4 lb/ gal	8 to 12 fl. oz. (1/4 to 3/8 lb ai) per acre
<sup>1</sup> Ally (metsulfuron-methyl) 60% DF	1/20 to 1/10 oz per acre
<sup>1</sup> Amber (triasulfuron) 75% DF	0.14 to 0.28 oz. per acre
<sup>1</sup> Express (thifensulfuron + tribenuron-methyl) 75% DF	1/12 to 1/6 oz per acre
<sup>1</sup> Finesse (chlorsulfuron + metsulfuron-methyl) 75% DF	1/6 to 1/3 oz. per acre
<sup>1</sup> Glean (chlorsulfuron) 75% DF	1/6 oz per acre
<sup>1</sup> Harmony Extra (thifensulfuron + tribenuron-methyl) 75% DF	1/6 to 1/3 oz per acre
Sencor (metribuzin) 75% DF	1 to 10 oz per acre
Moxy (bromoxynil) 2 lb/ gal	1 to 1 1/2 pints per acre
Bison (bromoxynil + MCPA) 4 lb/ gal	3/4 to 1 1/2 pints per acre

NOTES: \* Herbicides with the same active ingredient or different formulation may be used. Rate should be adjusted to provide the same weight of ai per acre.

<sup>1</sup> Do not use the lower rates of sulfonylurea herbicides on more mature weeds or on dense vegetative growth.

**Fall And Spring Seeded Oats**

STERLING MUST BE APPLIED BEFORE SPRING-SEEDED OATS EXCEED THE 5-LEAF STAGE. APPLICATION TO FALL-SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE.

**Tank Mix Treatments For Oats**

Sterling may be tank-mixed with one or more of the following herbicides (read and follow directions and restrictions of individual labels of tank mix herbicides).

**Broadcast rates per treated acre:**

Apply 2 to 4 fl. oz. Sterling with the following:

Product*	Rate*
MCPA amine or ester, 4 lb/ gal	8 to 12 fl. oz. (1/4 to 3/8 lb ai) per acre

NOTES: \* Herbicides with the same active ingredient or different formulation may be used. Rate should be adjusted to provide the same weight of ai per acre.

**SUGARCANE**

Observe precautions, mixing, and application instructions on this label, plus the following:

- Consult your local or State authorities for possible application restrictions, especially concerning aerial applications, and for advice concerning special local need situations.
- Application over the top of actively growing sugarcane may result in crop injury. When possible, direct the spray beneath the sugarcane canopy to minimize this possibility. The use of directed sprays will also maximize spray coverage of the weeds.
- Retreatments may be made as needed, but do not exceed a total of 4 pints (2 lb ai) per acre in any one growing season.

**Weeds Controlled**

Sterling applied at the recommended rates for sugarcane will control many actively growing annual, biennial, and perennial broadleaf weeds. (see GENERAL WEED LIST).

**Rates And Timings**

Sterling may be applied to emerged and actively before the close-in stage of sugarcane. Application rates and timing of applications is shown below. Use the higher rates when treating dense vegetative growth.

Weed type and stage	Rate per acre
annual	
- small, actively growing	1/2 to 1 pint (1/4 to 1/2 lb ai)
- established weed growth	1 to 1 1/2 pints (1/2 to 3/4 lb ai)
biennial	1 to 2 pints (1/2 to 1 lb ai)
perennial	2 to 4 pints (1 to 2 lb ai)

**Tank Mix Treatments for Sugarcane**

Sterling may be tank-mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product for precautions, directions for use, rates and timings, weeds controlled, and any other restrictions.

Herbicide	Rate
ametryne (Evik®)	2/5 to 8 lb ai per acre
Asulam 3.3	2 to 3 1/3 lb ai per acre
atrazine	2/5 to 4 lb ai per acre
2,4-D*	1/2 to 3 lb ai per acre

\* Application of Sterling plus 2,4-D at the higher rate ranges may result in crop injury.

**PASTURE, HAY, RANGELAND AND GENERAL FARMSTEAD (Non-cropland)**

Sterling may be used for control of broadleaf and woody weeds (see GENERAL WEED LIST) in pasture, hay, rangeland, and general farmstead (non-crop) such as fencerows and non-irrigation ditchbanks. Pasture uses include small grains such as wheat, barley, forage sorghum, oats, rye, or sudangrass grown only as pasture. Sterling may also be applied in non-cropland areas for control of broadleaf weeds in Noxious Weed Control Programs, Districts, or Areas including broadcast or spot treatment of roadsides and highways, utilities, railroads, or pipeline rights-of-way. Noxious weeds must be recognized by the State, but programs may be administered at State, County, or other level.

Observe precautions, mixing, and application instructions on this label, plus the following:

- Newly seeded areas, including small grains grown for pasture, may be severely injured if rates of Sterling greater than 1 pint per acre are applied.
- Established grass crops growing under stress conditions may exhibit various symptoms of injury, that may be more pronounced if herbicides are applied.
- Bentgrass, carpetgrass, buffalograss, and St. Augustine grass may be injured at rates exceeding 1 pint (1/2 lb ai) per acre of Sterling. Colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most sensitive. Treatments will kill or injure alfalfa, clover, lespedeza, wild winter peas, vetch, and other legumes.

- DO NOT REMOVE ANIMALS FOR SLAUGHTER FROM TREATED AREAS PRIOR TO AT LEAST 30 DAYS AFTER THE LAST APPLICATION OF STERLING. SEE RESTRICTIONS BELOW FOR LACTATING DAIRY ANIMALS FOLLOWING TREATMENT.

Rate of Sterling per acre	Days before grazing	Days before hay harvest
up to 1 pint (1/2 lb ai)	7 days	37 days
up to 1 quart (1 lb ai)	21 days	51 days
up to 2 quarts (2 lb ai)	40 days	70 days

There is no waiting period between treatment and grazing for non-lactating animals.

### Mixing and Application

Sterling may be applied using water, oil-in-water emulsions including an invert system, or sprayable fluid fertilizer as a carrier. A compatibility test (see **COMPATIBILITY TEST** section above) should be done prior to mixing.

To prepare an oil-in-water emulsion, half-fill the spray tank with water, then add an appropriate emulsifier. While continuously agitating, slowly add the herbicide, then the oil, or a premix of oil and plus emulsifier to the tank. Complete filling of the tank with water. Maintain vigorous agitation during the spraying operation to prevent separation into layers.

Sterling may be broadcast using ground or aerial equipment. When using ground equipment, apply 3 to 600 gallons of spray mixture per acre. Volume applied will depend on the height, density, and type of weeds or brush being treated, and on the equipment used. When using aerial equipment, apply 2 to 40 gallons of spray mixture per acre in a water-based carrier.

Sterling may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar equipment. Apply in a dilute spray to allow complete wetting (up to run-off) of foliage and stems.

Adjuvants (emulsifiers, surfactants, wetting agents, drift control agents, penetrants) may be used to enhance performance or control drift. Spray additives must be agriculturally approved when used in pasture. Follow all directions on the adjuvant label.

### Weeds Controlled

Sterling applied at the recommended rates will control many actively growing annual, biennial, and perennial broadleaf weeds, and many woody brush and vine weeds commonly found in pasture, hay, rangeland, and general farmstead (non-crop) areas (see GENERAL WEED LIST).

### Rates and Timing

Application rates are given in the table below. Use the higher rate range when treating tall or dense vegetative growth. DO NOT BROADCAST APPLY MORE THAN 1 LB AI (2 PINTS) PER ACRE. RATES HIGHER THAN 1 LB. AI (2 PINTS) PER ACRE ARE FOR SPOT TREATMENT ONLY. Re-treatments may be made as needed, but DO NOT APPLY MORE THAN 4 PINTS (2 LB AI) PER ACRE PER GROWING SEASON.



Weed type and stage	Rate per acre
annual: small, actively growing	1/2 to 1 pint (1/2 to 1/2 lb ai)
established weed growth	1 to 1 1/2 pints (1/2 to 3/4 lb ai)
biennial <sup>1</sup> : rosette diameter less than 3 inches	1/2 to 1 pint (1/4 to 1/2 lb ai)
rosette diameter 3 inches or more	1 to 2 pints (1/2 to 1 lb ai)
bolting	2 to 3 pints (1 to 1 1/2 lb ai)
perennial: suppression or top growth control	1 to 2 pints (1/2 to 1 lb ai)
noted (*) perennials	2 to 4* pints (1 to 2* lb ai)
other perennials	4* pints (2* lb ai)
woody brush and vines: top growth suppression	1 to pints (1/2 to 1 lb ai)
top growth control <sup>2</sup>	2 to 4* pints (1 to 2* lb ai)
stems and stem suppression	4* pints (2* lb ai)
* Spot treatment only	
1. For best performance, make application to biennial weeds at the rosette stage	
2. Species noted in the GENERAL WEED LIST as "suppression only" will require tank mix treatments for adequate control.	

### Tank Mix Treatments for Pasture, Hay, Rangeland and General Farmstead

Sterling may be tank-mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product for precautions, directions for use, rates and timings, weeds controlled, and any other restrictions. Due to variations which may occur in formulated products and other ingredients (e.g. water supply) a compatibility test (see appropriate section of this label) is recommended prior to actual tank mixing.

Herbicide	Rate per acre
Cornerstone (glyphosate)	1 1/2 to 7 1/2 pints (3/4 to 3 3/4 lb ai)
Ally (metsulfuron-methyl 60%DF)	1/10 to 3/10 ounce
Gramoxone Max (paraquat 3 lb/gal)	1 to 2 pints
Tordon™ (picloram 2 lb/gal)	1 to 24 pints
Garlon™ (triclopyr 4 lb/gal)	1 1/2 to 18 pints
2,4-D	1/4 to 6 lb ai

### CUT SURFACE TREE TREATMENTS

Sterling may be applied as a cut-surface treatment for control of unwanted trees and prevention of sprouts of cut trees. Use a mixture of 1 part Sterling with 1 to 3 parts water. Use the higher concentration when treating difficult-to-control species. For more rapid effects, 2,4-D may be added to the mixture.

**FRILL OR GIRDLE TREATMENT:** Make a continuous cut or a series of overlapping cuts using an axe to girdle the tree trunk. Spray or paint the cut surface with the Sterling/ water mixture.

### STUMP TREATMENTS:

Spray or paint the freshly-cut surface with the Sterling/ water mixture. The area adjacent to the bark must be thoroughly wet.

### DORMANT APPLICATION FOR MULTIFLORA ROSE

Sterling may be applied when plants are dormant as an undiluted spot-concentrate directly to the soil or as a lo-oil basal bark treatment using an oil-water emulsion solution. Spot-concentrate applications of Sterling should be made directly to the soil as close as possible to the root crown (at least within 6 - 8 inches of the crown). On sloping terrain, apply on the uphill side of the crown. Do not make the application when snow or water prevents applying directly to soil. The rate is dependent on the canopy diameter. The following table may be used as an example. DO NOT EXCEED A TOTAL OF 2 QUARTS PER ACRE PER GROWING SEASON.

Canopy diameter	Rate
5 feet	1/4 fl. oz.
10 feet	1 fl. oz.
15 feet	2 1/4 fl. oz.

### Lo-oil basal bark applications

To prepare an oil-in-water emulsion, half-fill the spray tank with water, then add an appropriate emulsifier. While continuously agitating, slowly add the herbicide, then the oil, or a premix of oil and plus emulsifier to the tank. A recommended mixture per gallon of spray dilution is 1/2 pint Sterling plus 1/2 ounce emulsifier plus 1 1/4 ounces No. 2 Diesel fuel in water to make 1 gallon total. Maintain vigorous agitation during the spraying operation to prevent separation into layers.

For best results, apply when plants are dormant. Do not apply after bud break or when plants are showing signs of active growth. Do not apply when snow or water prevent application to the ground line. Apply to the basal stem region from the ground line up to a height of 12 to 18 inches. Spray until runoff, being sure to thoroughly cover the root crown.

Do not exceed 4 pints of Sterling (2 lb. ai) per acre per growing season.

### CONSERVATION RESERVE PROGRAM (CRP) ACRES

Sterling is recommended for use on both newly-seeded and established grasses grown in conservation reserve (CRP) or Federal set-aside acres.

Observe precautions, mixing, and application instructions on this label, plus the following:

- Sterling treatment will injure and may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.
- Agriculturally-approved surfactants may be added to the spray mixture to improve post-emergence weed control, particularly in dry growing conditions. Do not use adjuvants containing penetrants such as petroleum-based oils after grass emergence on newly seeded grasses.

### Newly-seeded Areas

Sterling may be applied either as a pre-plant or postemergence treatment to newly-seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3-leaf stage. Rates of Sterling greater than 1 pint per acre may severely injure newly seeded grasses. Pre-plant application may injure new seedlings if the interval between application and grass planting is less than 45 days per pint of Sterling applied per acre west of the Mississippi River, or 20 days per pint per acre east of the Mississippi River.

### Established Grass Stands

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Application at rate greater than 1 pint per acre may injure the following grass varieties: bentgrass, carpetgrass, smooth brome, buffalograss, St. Augustine grass.

### Weeds Controlled

Sterling applied at the recommended rates below will control many annual, and biennial weeds, and provide control or suppression of perennial weeds (see GENERAL WEED LIST).

### Rates and Timing

Application rates and timing of Sterling treatments for CRP and set-aside acres are given below. Use the higher rates range when vegetation is dense or tall, or when weeds are growing under stress conditions such as drought or cold.

Weed Stage and Type	Rate per acre
Annuals	
small actively growing	1/4 to 1 pint (1/8 to 1/2 lb ai)
established	1 pint (1/2 lb ai)
Biennials	
rosette diameter less than 3 inches	1/2 to 1 pint (1/4 to 1/2 lb ai)
rosette diameter 3 inches or more	1 to 2 pints (1/2 to 1 lb ai)
bolting	2 to 3 pints (1 to 1 1/2 lb ai)
Perennials	
suppression/ control	2 to 4 pints (1 to 2 lb ai)
For best results, treat biennial weeds at the rosette stage. Biennial and perennial weeds will generally require sequential (follow-up) treatment for seedling control and escapes. Retreatments may be made as needed, but do not exceed a total of 2 quarts (2 lb ai) of Sterling per acre per growing season.	

### Tank-mix treatments for CRP/ Set-aside Acres

To control grasses and additional broadleaf weeds, Sterling may be tank-mixed with other herbicides registered for use in CRP (Conservation Reserve Program) or Federal set-aside programs, including 2,4-D, glyphosate (Cornerstone), paraquat (Gramoxone Max), metsulfuron (Ally), and others. Read and follow all directions and precautions on the labels of tank mix partners.

### ASPARAGUS

(FOR USE ONLY IN CALIFORNIA, OREGON, AND WASHINGTON)

Observe precautions, mixing, and application instructions on this label, plus the following:

- If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.
- Do not harvest prior to 24 hours after treatment.
- Do not use in the Coachella Valley of California
- Multiple applications may be made, but do not exceed a total of 1 pint (1/2 lb ai) per acre per growing season.

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### Rates and Timing

Apply Sterling at rates below to emerged and actively growing weeds in 40 to 60 gallons of spray dilution per acre immediately after cutting the field, and at least 24 hours before the next cutting.

Weeds	Rate per acre
mustard, black pigweed, redroot (carelessweed) sowthistle, annual thistle <sup>1</sup> , Canada thistle (Russian)	1/2 to 1 pint (1/4 to 1/2 lb ai)
bindweed <sup>1</sup> , field chickweed, common goosefoot, nettleleaf radish, wild thistle, milk	1 pint (1/2 lb ai)

<sup>1</sup> Sterling may be applied in a tank mixture with either 2,4-D or glyphosate (Cornerstone) for improved control of Canada thistle or field bindweed. Read and follow all directions and precautions on the labels of tank mix partners.

### TURF AND LAWNS

Sterling may be applied in general farmstead (non-crop) and in sod farms. Observe precautions, mixing, and application instructions on this label, plus the following:

- To avoid injury to newly seeded grasses, delay application until after the second mowing. Rates greater than 1 pint (1 lb ai) per acre may cause noticeable stunting or discoloration of some sensitive grass varieties such as bentgrass, carpetgrass, buffalograss, and St. Augustine grass.
- In areas where roots of sensitive plants extend, do not apply at a rate greater than 1/4 pint (1/8 lb ai) per acre on coarse-textured (sandy) soils, or in excess of 1/2 pint (1/4 lb ai) on fine-textured (clay) soils. Do not re-apply until at least 30 days after the prior application, and not until a prior application has been activated in the soil by rain or irrigation.

### Weeds Controlled

When applied at the rates recommended below, Sterling will control many annual, biennial, and noted (\*) perennial broadleaf weeds in turf. Sterling will also suppress many other listed broadleaf perennial and woody brush and vine species (see GENERAL WEED LIST).

### Mixing and Application

Apply 30 to 200 gallons of diluted spray per acre (3 quarts to 4 1/4 gallons per 1000 square feet) depending on density or height of weeds, and the type of equipment used.

### Rates and Timings

Use the higher rate range in the table below when treating dense vegetative growth.

Weed Stage and Type	Rate per acre	Rate per 1000 sq. ft.
Annual		
small, actively growing	1/2 to 1 pint (1/4 to 1/2 lb ai)	1 to 2 1/4 teaspoons
established weed growth	1/2 to 3/4 pint (2 1/4 to 3 1/4 lb ai)	2 1/4 to 3 1/4 teaspoons
Biennial		
rosette diameter less than 3 in.	1/2 to 1 pint (1/4 to 1/2 lb ai)	1 to 2 1/2 teaspoons
rosette diameter 3 inches or more	1 to 2 pints (1/2 to 1 lb ai)	2 1/4 to 2 1/2 teaspoons

Perennials and woody brush and vines	1 to 2 pints (1/2 to 1 lb ai)	2 1/4 to 2 1/2 teaspoons
For best performance apply when weeds are emerged and actively growing. Retreatments may be made as needed, but do not exceed a total of 2 pints per acre per growing season.		

### Tank-mix Treatments for Turf

Sterling may be tank-mixed with 2,4-D, MCPA, MCPP, or bromoxynil (Moxy) for control of additional weeds listed on the labels of the tank mix partners. Use the higher rates listed when treating established weeds. Repeat treatments may be made as needed but do not exceed a total of 2 pints (1 lb ai) of Sterling per acre per growing season.

### GRASS SEED CROPS

Sterling may be applied to grasses grown for seed including Bermudagrass, bluegrass, fescues, and ryegrasses. Observe precautions, mixing, and application instructions on this label, plus the following:

- Do not use on bentgrasses unless possible crop injury can be tolerated.
- Refer to the **PASTURE, HAY, RANGELAND AND GENERAL FARMSTEAD (Non-cropland)** section of this label for grazing and feeding restrictions.

### Weeds Controlled

When applied as directed to grasses for seed, Sterling will control or suppress the annual broadleaf weeds listed below. For improved control of listed weeds, plus additional weeds, Sterling may be tank mixed with other herbicides as described below.

alfalfa*	clover	ladysthumb
bedstraw, catchweed	cockle, white	lambsquarters, common
bindweed, field	dock, broadleaf	lettuce, prickly
buttercup, corn	dock, curly	mayweed (dogfennel)
buttercup, creeping	hemlock, poison	ragwort, tansy
buttercup, western field	knapweed*, Russian	sorrel, red (sheep sorrel)
catchfly, nightflowering	knawel	sowthistle, annual
chamomile, corn	kochia	starwort, little
chickweed, common	knotweed, prostrate	thistle*, Canada
chickweed, mouseear		

\* topgrowth control only

### Rates and Timing

Apply 1/2 to 1 pint Sterling per acre on seedling grass after the crop reaches the 3 to 5 leaf stage. Apply up to 2 pints Sterling per acre on established perennial grass crops. **DO NOT APPLY AFTER THE GRASS SEED CROP BEGINS TO JOINT.** For best performance, apply when weeds are at the 2 to 4 leaf stage, and rosettes are less than 2 inches in diameter. Use the higher rates listed when weeds are more mature, or for dense vegetative growth.

### Tank-mix Treatments

For control of grasses or additional broadleaf weeds, Sterling may be tank-mixed with other herbicides registered for use in grass seed production. Read and follow all use directions, restrictions, and precautions on the labels of tank mix partners.

Apply 1/2 to 2 pints Sterling plus:

Product	Rate per acre
2,4-D amine or ester (4 lb/ gal)	1 to 4 pints (1/2 to 2 lb ai)
MCPA amine (4 lb/ gal)	1 to 2 pints (1/2 to 1 lb ai)
Moxy (bromoxynil, 2 lb/ gal)	1 to 2 pints (1/4 to 1/2 lb ai)
Curtail (clopyralid + 2,4-D 2.38 lb/ gal)	1 3/4 to 4 pints

Diuron (4L or 80DF) Stinger (clopyralid 3 lb/ gal)	2 to 4 lb 80DF or 3.2 to 6.4 pints 4L (1.6 to 3.2 lb ai) 1/4 pint
Herbicides with the same active ingredient and different formulation may be used. Rate should be adjusted to provide the same weight of ai per acre.	

### Annual Grass Control

For suppression of annual grass weeds in grass seed crops, such as downy brome (cheatgrass), ripgut brome, rattail fescue, and windgrass, apply up to 4 pints per acre Sterling, in fall or late summer after harvest and burning of established seed crops. Apply immediately after the first irrigation when the soil is moist and before weeds have more than 2 leaves.

### PREPLANT APPLICATION BEFORE WHEAT, CORN, SORGHUM, SOYBEANS (Post-harvest/ Fallow/ Crop Stubble/ Set-aside)

Sterling may be applied alone for control of some broadleaf weeds, or in tank mixture with the herbicides as directed below. Sterling may be applied post-harvest in the fall, in spring or summer during fallow period, or to crop stubble or set-aside acres. For weeds controlled or suppressed, see the "Weeds Controlled" section under "SMALL GRAINS (WHEAT, BARLEY, OATS) (Not Underseeded To Legumes)". In addition, Sterling will control or suppress the following weeds:

alfalfa <sup>1</sup>	dogbane, hemp	spurge, leafy
artichoke, Jerusalem	garlic, wild <sup>2</sup>	thistle, Canada <sup>2</sup>
bindweed, field	horsenettle, Carolina	thistle, bull
bindweed, hedge	knapweed, diffuse	thistle, milk
blueweed Texas	knapweed, spotted	thistle, musk
bursage (bur ragweed, povertyweed, lakeweed)	nightshade, silverleaf	thistle, plumeless
dandelion, common <sup>1</sup>	redvine	thistle, Scotch
dock, curly <sup>1</sup>	smartweed, swamp	trumpet creeper (buckvine)
	sowthistle, perennial <sup>1</sup>	

<sup>1</sup>(regardless of weeds table in SMALL GRAINS section, these perennials will be controlled at rates lower than those listed for other perennial weeds.

<sup>2</sup>See the "SPECIAL TANK MIX TREATMENTS" section below for control of these weeds.

### Rates and Timing

Apply Sterling as a spot or broadcast treatment to emerged and actively-growing weeds after crop harvest and before a killing frost, or in fallow cropland or crop stubble the following spring or summer. Agriculturally-approved spray additives such as surfactants or oils may be used to enhance spray coverage penetration of weed foliage. See "Cropping Restrictions" below for recommended interval between application and planting to prevent crop injury.

For best performance, apply when annual weeds are less than 6 inches tall, when biennial weeds are in the rosette stage, and to perennial weed regrowth in the summer or fall after mowing or tillage. The most effective control of upright perennial weeds such as Canada thistle and Jerusalem artichoke occurs if application is made when the majority of weeds such as field and hedge bindweed are in or beyond the bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground parts such as rhizomes or bulbets after the effective period for Sterling. For seedling control, a follow-up treatment or other cultural practice may be required.

## Application rates, Sterling alone:

Weed Type	Rate per Acre
annual	1/2 to 1 pint
biennial	1/2 to 2 pints
perennial	1 to 4 pints
perennial suppression	1 to 2 pints
perennials noted <sup>(1)</sup> (see GENERAL WEED LIST)	2 to 4 pints
Other perennials	4 pints

Retreatments may be made as necessary, but do not exceed a total of 4 pints of Sterling per acre during one fallow period.

## Tank Mix Treatments

(SEE ALSO "SPECIAL TANK MIX TREATMENTS" FURTHER BELOW)

Sterling may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow all use directions, restrictions, and precautions on the labels of tank mix partners.

## Annual weed control: Apply 1/4 to 1 pint per acre Sterling with:

Product	Rate per Acre
Atrazine 4L <sup>1</sup> (atrazine 4 lb/ gal)	1/2 to 6 pints (1/4 to 3 lb ai)
Atrazine 90DF <sup>1</sup> (atrazine 90% DF)	1/2 to 3.3. lb (1/2 to 3 lb ai)
Amber <sup>2</sup> (triasulfuron 75% DF)	.28 to .35 ounces
Ally <sup>2</sup> (metsulfuron-methyl 75% DF)	0.1 ounce
Cyclone <sup>®</sup> Max, Gramoxone Max (paraquat 3 lb/gal)	2/3 to 1 1/3 pints
Fallow Master <sup>®</sup> (glyphosate + dicamba, 2 lb/ gal)	1 1/10 to 2 1/5 pints
Fallow Star <sup>®</sup> (glyphosate + dicamba, 1.6 lb/ gal)	1 3/8 to 2 3/4 pints
Finesse <sup>2</sup> (chlorsulfuron + metsulfuron methyl 75% DF)	.2 ounce
Kerb <sup>®</sup> <sup>1</sup> (pronamide 50% WP)	1/2 to 1 lb
Landmaster <sup>®</sup> (glyphosate + 2,4-D, 2.4 lb/ gal)	1 5/8 to 3 1/4 pints
Cornerstone (glyphosate 3 lb/ gal)	1/2 to 3 pints (1/10 to 5/8 lb ai)
Sencor DF <sup>1</sup> (metribuzin 75% DF)	1/2 to 1 lb
Sencor 4L <sup>1</sup> (metribuzin 4 lb/ gal)	3/4 to 1 1/2 pints
2,4-D (4 lb/gal)	1 to 2 pints (1/2 to 1 lb ai)

NOTES: Formulations other than those listed for some products may be used, but the rate should be adjusted to provide the same lb ai per acre.

1 Special restrictions may apply to these products. Read and follow the most restrictive label directions on the tank mix products.

2 Follow directions and restrictions on the sulfonylurea label. Use a surfactant of at least 80% active ingredient at a rate of 1-2 quarts per 100 gal spray mixture. Use the higher rate of surfactant when using the lower rate range of the herbicide and when treating more mature weeds or dense vegetative growth. Sulfonylurea-resistant weeds may not be controlled by Sterling / sulfonylurea tank mixtures.

## Biennial and Perennial Weed Control:

Apply 1 to 4 pints per acre Sterling with:

Product	Rate per Acre
Curtail (clopyralid + 2,4-D 2.38 lb/ gal)	2 to 4 pints (3/10 to 3/5 lb ai)
2,4-D (4lb / gal)	2 to 6 pints (1 to 3 lb ai)
Landmaster BW (glyphosate + 2,4-D, 2.4 lb/gal)	3 3/8 pints
Cornerstone (glyphosate 3 lb/ gal)	2 to 10 pints (3/4 to 3 3/4 lb ai)
Tordon 22K (picloram 2 lb/ gal)	1/2 to 1 pint

If using a formulation other than that listed, adjust rate to the equivalent lb ai per acre.

## Special Tank-mix Treatments

For suppression of perennial weeds, apply 1/2 to 1 pint Sterling with 1/2 to 1 pint Cornerstone (glyphosate 3 lb/ gal) per acre.

For wild garlic control, apply 1 pint Sterling with 3 pints 2,4-D LV Ester (4 lb/ gal) per acre. Apply when garlic is 4 to 8 inches tall.

For control of Canada thistle, use Sterling alone or with Curtail or Cornerstone as described above.

For control of volunteer barley, bulbous bluegrass, downy brome, jointed goatgrass, common rye and volunteer wheat, apply 1 pint Sterling plus 1/2 to 1 lb Kerb 50W per acre during fallow periods when weeds are actively growing. For best results, apply between mid-October and mid-December before soil freeze-up. Fall-seeded wheat may be planted 9 months or more following application.

For improved control of kochia, wild buckwheat, prickly lettuce, field bindweed, and Canada thistle during fallow periods, apply 1/8 to 1/4 pint Sterling plus 1 3/8 to 3 3/8 pints per acre Landmaster BW or Fallowmaster or Fallow Star for annual weed control. A rate of 1/4 to 1/2 pint Sterling plus 1/3/8 to 3 3/8 pints per acre Landmaster BW or Fallowmaster or Fallow Star will provide suppression of perennial weeds.

**Cropping Restrictions**

The following restrictions are based on a rate of Sterling of up to 4 pints per acre:

- CORN, SORGHUM, AND SOYBEANS may be planted in the spring following applications made during the previous year. If less than one inch of rainfall occurs between application and the first killing frost, cultivate treated areas to allow the herbicide to come into contact with moist soil. Cultivation may take place before or immediately after ground thaw. Soybean injury may occur if the interval between application and planting is less than specified. In areas with more than 30 inches per year of rainfall, delay planting for 30 days per pint of Sterling per acre. In areas with less than 30 inches of rainfall, delay planting for 45 days per pint of Sterling per acre. Do not count days when soil is frozen.
- WHEAT may be planted in the fall or spring following applications. Spot applications may be made at any time prior to crop emergence if crop injury can be tolerated in treated areas. Wheat injury may occur if the interval between application and planting is less than specified.

East of the Mississippi River, the interval is 20 days per pint of Sterling per acre. Moisture is essential for degradation of dicamba- do not count days when ground is frozen.

Following harvest of wheat, barley or oats, any rotational crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed-under, do not follow with the planting of a sensitive crop.

**SPOT-APPLICATION CONTROL OF PERENNIAL WEEDS IN CROPLAND  
FOR USE ONLY IN THE STATES OF IDAHO, MONTANA, NEVADA, OREGON, UTAH,  
AND WASHINGTON**

Observe precautions, mixing, and application instructions on this label, plus the following:

- Do not treat subirrigated cropland or areas where the soil remains saturate with water throughout the year.



- Make only one application of Sterling per year.

### **Weeds Controlled**

Sterling applied as directed will control many weeds including the following:

bindweed, field	knapweed, Russian
dock, broadleaf (bitterdock)	ragwort, tansy
dock, curly	spurge, leafy
knapweed, black	thistle, Canada

### **Rates and Timing**

Sterling may be applied at any time following crop harvest to stubble, fallow, or other cropland. Apply when weeds are actively growing and before a killing frost. Apply 2 quarts (2 lb ai) Sterling per acre. Application may be made at least 1 month prior to planting of wheat.

**DO NOT USE UNLESS INJURY TO WHEAT OR ROTATED BARLEY WILL BE ACCEPTABLE.**

Barley, oats, corn, sorghum (milo), annual or perennial grass crops may be planted into treated areas 1 year after application. Crops grown for seed (other than perennial grass seed) should not be planted back into treated areas until 3 years after application. Do not plant broadleaf crops such as alfalfa, beans, peas, potatoes, or sugar beets into treated areas until after 2 years after application.

In most cases, treatment will not kill perennial weed seedlings which germinate from seed one or 2 years after treatment. Once the effect of Sterling has past, a follow-up program for seedling control will be required.

### **WIPER APPLICATION USES**

Sterling may be applied by wiper equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a mixture of 1 part Sterling to 1 part water. Observe precautions, mixing, and application instructions on this label, plus the following:

- Do not contact desirable vegetation with herbicide mixture.
- Wiper application may be made to crops, including pasture listed on this label with the exception of grain sorghum (milo), as well as non-cropland areas.

### **RIGHTS-OF-WAY, UTILITY, and INDUSTRIAL AREAS**

Sterling may be used in non-cropland areas such as rights-of-way (including roadways; rest areas; utility, railroad, pipeline, and highway rights-of-way that run through pasture and rangeland); utility facilities such as substations, pipelines, tank farms, pumping stations, parking and storage areas, fencerows, and non-irrigation ditchbanks.)

If applied to rights-of-way that run through pasture or rangeland, observe grazing restrictions (see **PASTURE, HAY, RANGELAND AND GENERAL FARMSTEAD (Non-cropland)** section.) Use controlled application techniques to minimize the risk of off-target movement.

If used on parking or storage areas, read and follow the **GROUND AND SURFACE WATERS PROTECTION** section of this label.

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**CONDITIONS OF SALE AND WARRANTY**

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