



#### U.S. ENVIRONMENTAL PROTECTION **AGENCY**

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

34704-1012

SEP 2 5 2008

Term of Issuance: NOTICE OF PESTICIDE:

Registration

x Reregistration (under FIFRA, as amended) Name of Pesticide Product:

Starane + Saber

Name and Address of Registrant (include ZIP Code):

Loveland Product Inc. P.O. Box 1286 Greeley, CO 80632

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration nur

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(g)(2)(C) provided you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
- 2. Per the acute toxicity review, "IF ON SKIN OR CLOTHING" statements specified below must be added to the First Aid statements currently on the label and be placed below the "IF SWALLOWED" statements:

"IF ON SKIN OR CLOTHING:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice."

3. Per the acute toxicity review, the text "Contains petroleum distillate" must be added to the Note to Physician.

Signature of Approving Official:

Joanne I. Miller Product Manager 23

nue J. Miller

Date:

SEP 25 2002

Herbicide Branch Registration Division (7505P)

#### Page 2 EPA Reg. No. 34704-1012

4. Per the acute toxicity review and the Label Review Manual (Page 10-7), the following revisions are needed to the PPE section:

The text "Protective Eyewear" should be revised to read "Goggles or face shield."

The text "Some materials that are chemical-resistant to this product are listed below" should be revised to read "Some materials that are chemical-resistant to this product are made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton."

5. The text in bold type must be added to the User Safety Recommendation text currently on the label:

"User should remove clothing/PPE immediately if pesticide gets inside."

6. The Environmental Hazard text on Page 12 of the label does not agree with the text required in the 2,4-D RED label table or with the Environmental Hazard text on Pages 2, 5, and 8 of the label. The text on Page 12 must be revised.

The text "except as noted on appropriate labels" on Pages 2, 5 and 8 should be deleted from the text "Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the high water mark except as noted on appropriate labels" appearing in the Environmental Hazard section.

- 7. The early entry glove text must be revised to read "chemical-resistant gloves made of any waterproof material."
- 8. Reference to chemigation must be deleted from the first paragraph of the Spray Drift Management section because the label states "Do not apply this product through any type of irrigation system."

Any text conflicting with the required spray drift text ("...use low pressure equipment capable of producing sprays of uniform droplet size with a minimum of fine spray droplets," "Application should be avoided below 2 mph due to variable wind direction and high potential for temperature inversion," and "Spray drift from aerial application can be minimized by applying a coarse spray at spray boom pressure no greater than 30 psi...") must be deleted from the label.

9. The following revisions are needed to the directions for use:

#### Wheat and Barley:

The text "Apply no more than 1.75 lbs ae per acre of 2,4-D per crop cycle in either postemergent or preharvest application timings" appears to conflict with the text "Do not make more than one application per season" appearing on the top of Page 20 of the label. It is unclear whether two applications are allowed for this product. This issue must be clarified. If preharvest use is also allowed, the label must be revised per the RED to read as specified below and any conflicting text must be deleted from the label:

Page 3 EPA Reg. No. 34704-1012

#### "Postemergence:

Do not make more than one postemergence application per crop cycle.

#### Preharvest:

Do not make more than one preharvest application per crop cycle. Do not apply more than 0.5 lbs ae per acre per application."

#### Fallow:

The text "Apply no more than two applications or more than 4 lbs ae per acre of 2,4-D containing products per fallow cycle in cumulative applications" must be revised to read "Apply no more than two applications <u>and</u> no more than 4 lbs ae per acre of 2,4-D containing products per fallow cycle in cumulative applications."

- 10. Assure that the required acid equivalents per acre (lbs ae/A) restrictions are expressed as product volume or product weight per unit area that are in the same units as the registered application rate already on the label. Assure that the maximum application restrictions are identical to the highest currently registered rate for each appropriate application site. Finally, ensure that the most restrictive of the required limitations for the active ingredient in this product are placed on the labeling.
- 11. Correct the Storage and Disposal sections, so they are consistent throughout the labeling.

A stamped copy of your labeling is enclosed for your records. Submit one copy of the revised final printed label for the record before you release the product for shipment. Please note that final product registration cannot be considered until after all active ingredients in this product are eligible for reregistration. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division (7505P)

Enclosure



### STARANE®+SABER® HERBICIDE

# ACCEPTED with COMMENTS in EPA Letter Dated:

SFP 2 5 2008

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

34704-1012

For selective postemergence control of annual and perennial broadleaf weeds and volunteer potatoes in small grains and fallow cropland, and for on-farm non-cropland applications.

ACTIVE INGREDIENT(S):

Contains petroleum distillates.

<sup>1</sup> Acid Equivalent: fluroxypyr: ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetic acid - 5.5% - 0.5 lb/gai

 2 Acid Equivalent: 2,4-D: 2,4-dichlorophenoxyacetic acid - 22.0% - 2.0 lb/gal Isomer specific by AOAC Method 978.05 15th Ed.

### DANGER—PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detaile. (If you do not understand the label, find someone to explain it to you in detail.)

#### FIRST AID

If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>	
,	Remove contact lenses, if present, after the first 5 minutes, then	
	continue rinsing.	
	Call a poison control center or doctor for treatment advice.	
If swallowed:	Immediately call a poison control center or doctor.	
	Do not induce vomiting unless told to do so by a poison control center	
ĺ	or doctor.	
	Do not give any liquid to the person.	
	Do not give anything by mouth to an unconscious person.	

Have the product container or label with you when calling a poison control center or doctor or onion for treatment

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.

Note to Physician: If in eyes, specialized ophthalmologic attention may be necessary. If swallowed, probable mucosal damage may contraindicate the use of gastric lavage. May pose aspiration pneumonia hazard. There is no specific antidote; treat symptomatically.

EPA REG. NO. 34704-1012 EPA EST. NO. 37507-MT-001 NET CONTENTS 2½ GALS. (9.46 L)

EXP 09/08

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive • Causes Irreversible Eye Damage • Harmful II Swallowed Do not get in eyes or on clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for categories C and F on an EPA chemical resistance category selections chart.

#### All mixers, loaders, applicators, flaggers and other handlers must wear:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves when applying with any handheld nozzle or equipment, mixing
  or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Shoes plus socks
- · Protective eyewear
- Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposd to the concentate.

See engineering controls for additional requirements.

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Controls**

When handlers use closed systems or enclosed cabs, in a manner that meets the requirements listed in the Worker Protections 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.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)].

#### **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 thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertical areas below the mean high water mark except as noted on appropriate labels. Drift or runoff from treated areas may be hazardous to aquatic organisms and non-target plants. When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

#### -PHYSICAL-OR CHEMICAL HAZARDS

COMBUSTIBLE. 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. Read all Directions for Use carefully before applying.

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 (WPS), 40 GFR 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 exception 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 48 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:

- Coveratis
- Chemical-resistant gloves
- Shoes plus socks
- Protective evewear

#### STARANE®+SABER® HERBICIDE EPA REG. NO. 34704-1012

#### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements of this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on tarms or nurseries: When this product is applied to non-cropland areas, keep unprotected persons out of treated areas until sprays have dried.

#### GENERAL INFORMATION

Starane®+Saber® herbicide is a selective postemergence product for control of annual and perennial broadleaf weeds and volunteer potatoes in wheat or barley not under seeded with a legume and fallow cropland, and for on-farm non-cropland uses such as fence rows, building perimeters, around equipment storage areas and roadways.

#### **Application Precautions and Restrictions**

- Do not apply this product directly to, or otherwise permit it to come in direct contact
  with, susceptible crops or broadleaf plants including affalfa, cotton, lettuce, edible beans,
  lentils, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tomatoes, tobacco,
  grapes, legumes, fruit trees, canola, tame mustard, other vegetables or ornamentals.
   Vapors from this product may injure susceptible plants in the immediate vicinity.
- Avoid applications where proximity of susceptible crops or other susceptible broadleaf plants is likely to result in exposure to spray or spray drift.
- . Do not contaminate irrigation ditches or water used for domestic purposes.
- . Do not apply in greenhouses.
- Maximum Application Rate: Do not apply more than 4 pints of Starane+Saber (4.0 oz of fluroxypyr acid equivalent) per acre per growing season.
- Plant-back Restriction: Plant only those crops listed on this label or Federally approved supplemental labeling for Starane+Saber within 120 days following application.
- . Chemigation: Do not apply this product through any type of irrigation system.

Management of Kochia Biotypes: Research has suggested that many biotypes of kochia can occur within a single field. While kochia biotypes can vary in their susceptibility to Starane+Saber herbicide, all will be suppressed or controlled by the 2 pint labeled rate. Application of Starane+Saber herbicide at rates below the 2 pint per acre rate can result in a shift to more tolerant biotypes within a field.

Best Resistance Management Practice: Extensive populations of dicamba tolerant kochia have been identified in certain small grain and corn production regions (such as Chouteau, Fergus, Liberty, Toole, and Treasure counties in the state of Montana). In these areas, Starane+Saber herbicide is recommended at a minimum rate of 2 pints per acre for optimal control of dicamba tolerant kochia. In addition, Starane+Saber herbicide should be rotated with products that do not contain dicamba to minimize selection pressure. Use of these practices will preserve the utility of Starane+Saber herbicide for control of dicamba tolerant kochia biotypes.

#### Precautions for Avoiding Spray Drift

Spray drift, even very small quantities of the spray that may not be visible, may severely injure susceptible crops whether dormant or actively growing. When applying Starane+Saber herbicide, use low pressure equipment capable of producing sprays of uniform droplet size with a minimum of fine spray droplets: Under adverse weather conditions; fine spray droplets that do not settle rapidly onto target vegetation may be carried a considerable distance from the treatment area. A drift control or spray thickening agent may be used with this product to improve spray deposition and minimize the potential for spray drift. If used, follow all use recommendations and precautions on the product label.

Ground Applications: To minimize spray drift, apply Starane+Saber herbicide in a total spray volume of 8 or more gallons per acre using spray equipment designed to produce large-droplet, low pressure sprays. Refer to the spray equipment manufacturer's recommendions for detailed information on nozzle types, arrangement, spacing and operating height and pressure. Spot treatments should be applied only with a calibrated boom to prevent over application. Operate equipment at spray pressures no greater than is necessary to produce a uniform spray pattern. Operate the spray boom no higher than is necessary to produce a uniformly overlapping pattern between spray nozzles. Do not apply with hollow cone-type insecticide nozzles or other nozzles that produce a fine-droplet spray. (See Application Directions.)

Aerial Application: To minimize spray drift, apply Starane+Saber herbicide in a total spray volume of 3 or more gallons per acre. 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 potential for temperature inversion. Spray drift from aerial application can be minimized by applying a coarse spray at spray boom pressure no greater than 30 psi; by using straight-stream nozzles directed straight back; and by using a spray boom no longer than ½ the wing span of the aircraft. Spray pattern and droplet size distribution can be evaluated by applying sprays containing a water-soluble dye marker or appropriate drift control agents over a paper tape (adding machine tape). Mechanical flagging devices, such as Automatic Flagman, may also be used. (See Application Directions.)

Do not apply under conditions of a low level air temperature inversion. A temperature inversion is characterized by little or no wind and lower air temperature near the ground than at higher levels. The behavior of smoke generated by an aircraft mounted device or continuous smoke column released at or near site of application will indicate the direction and velocity of air movement. A temperature inversion is indicated by layering of smoke at some level above the ground and little or no lateral movement.

#### 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 drift 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 ¾ the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

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

Importance of 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 no prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversion section of this label).

#### Controlling Droplet Size:

Volume-Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows product larger droplets.

Pressure-Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. 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 will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

Nozzie Type-Use a nozzie type that is designed for the intended application. With most nozzie types, narrower spray angles produce larger droplets. Consider using low-drift nozzies. Solid stream nozzles oriented straight back produce larger droplets than other nozzie types. Boom Length-For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

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

Swath Adjustment: When applications are made with a cross-wind, 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 2-10 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 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 connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards 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).

#### MIXING INSTRUCTIONS

#### Starane+Saber herbicide

Fill the spray tank approximately ½ to ¾ full with water. Add the required amount of Starane+Saber herbicide, then finish filling the spray tank. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

#### Tank Mixing

Starane+Saber herbicide may be applied in tank mix combination with labeled rates of other herbicides provided (1) the tank mix product is labeled for the use site (timing and method of application is the same as Starane+Saber herbicide); and (2) tank mixing with Starane+Saber herbicide is not prohibited by the label of the tank mix product.

#### STARANE®+SABER® HERBICIDE EPA REG. NO. 34704-1012

#### Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates. If products containing the same active ingredient are tank mixed, do not exceed the maximum allowable active ingredient use rates.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned.
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Starane+Saber herbicide and other pesticides, fértilizers, or carriers. Use a clear glass jar with iid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately ½ hour. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

#### Tank Mixing Instructions

Fill the spray tank to approximately ¼ to ½ of the total spray volume required. Start agitation. Add different formulation types in the order indicated, allowing time for complete mixing and dispersion after addition of each.

- Add dry flowables; wettable powders; aqueous suspensions, flowables or water-based formulations including Starane+Saber herbicide.
- Maintain agitation and fill spray tank to ¾ of total spray volume and then add emulsifiable concentrates.

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

#### **APPLICATION DIRECTIONS**

Application Timing: Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Only weeds that are emerged at the time of application will be affected. Foliage that is wet at the time of application may decrease control.

Starane+Saber herbicide applications are rain-fast within 1 hour after application.

Application Rates: Generally, application rates at the lower end of the recommended rate range will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds) the higher rates within the rate range will be needed. Weeds growing in the absence of crop competition generally require higher rates to obtain satisfactory control or suppression.

Effect of Temperature on Herbicidal Activity: Herbicidal activity of Starane+Saber herbicide is influenced by weather conditions. Optimum activity requires active crop and weed growth. The temperature range for optimum herbicidal activity is 55° F to 75° F. Reduced activity will occur when temperatures are below 45° F or above 85° F. Frost before application (3 days) or shortly after (3 days) may reduce weed control and crop tolerance.

Coverage: Apply in 3 or more gallons per acre by air or 8 or more gallons per acre by ground equipment. Do not exceed 40 gallons per acre total spray volume. Use sufficient spray volume to provide thorough coverage and a uniform spray pattern. Inadequate spray volume and coverage may result in decreased weed control. As crop canopy and weed density increase, spray volume should be increased to obtain equivalent weed control. Use larger nozzle tips or decrease spraying speed to increase spray volume rather than increasing boom pressure. Refer to manufacturer's recommendations for information on relationships between spray volume, and nozzle size and arrangement.

Adjuvants: Use of a high quality adjuvant labeled for use on growing crops is recommended for improved weed control. Adjuvants are especially beneficial when applications are made (a) at lower carrier volumes, (b) under conditions of cool temperature, low relative humidity or drought, or (c) to small, heavily pubescent kochia.

**Spot Treatments:** To prevent misapplication, spot treatments should be applied with a calibrated boom or with hand sprayers according to directions provided below.

**Hand-Held Sprayers**: Hand-held or backpack sprayers may be used for spot applications of Starane+Saber herbicide if care is taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on an area of 1,000 sq the Mix the amount of Starane+Saber herbicide (fl oz or ml) corresponding to the desired broadcast rate in one or more gallons of spray. To calculate the amount of product required for larger areas, multiply the table value (fl oz or ml) by the area to be treated in "thousands" of square feet, e.g., if the area to be treated is 3,500 sq ft, multiply the table value by 3.5 (calc. 3,500  $\pm$  1,000  $\pm$  3.5). An area of 1000 sq ft is approximately 10.5 X 10.5 yards (strides) in size.

#### Amount of Starane+Saber herbicide to Equal Specified Broadcast Rate

Mix with 1 Gallo	(Mix with 1 Gallon or More of Water and Apply to 1, uuu sq π)		
2 pl/acre	3 pt/acre	4 pt/acre	
0.75 fl oz	(22 ml)	1.1 fl oz	
(33 ml)	1.5 fl oz	(44 ml)	

1 fl oz = 29.6 (30) ml

#### WEEDS CONTROLLED OR SUPPRESSED

(Numbers in parentheses (-) in weeds list refer to footnotes below.)

Weeds Controlled		
bedstraw (cleavers)	hemp, wild	prickly lettuce (2)
bindweed, hedge	horseweed	primrose, evening
bittercress	ironweed	puncturevine
burdock, common	Jacob's ladder	purslane, common
burhead	Jerusalem artichoke	quickweed
buttercup	jimsonweed	radish, wild
canola, volunteer	klamathweed	ragweed (common, giant)
carpetweed	kochia (1)	rough fleabane
catnip	lambsquarters, common	Russian-thistle
chickweed	lettuce, wild	shepherdspurse
chicory	mallow, common	sicklepod
cinquefoil	mallow, Venice	smallseeded falseflax
cocklebur	marestail marshelder	sneezeweed, bitter
coffeeweed	milk vetch	sowthistle (annual, spiny)
copperleaf, Virginia	morningglory, annual	Spanishneedles
cornflower	mousetail	speedwell
dock, curly	mustard, tansy	stinkweed
fanweed	mustards (except blue) (2)	sunflower
figwort	nettle, bull	sweetclover
flax, volunteer	nightshade species	tansymustard
flixweed	parsnip, wild	velvetleaf
four o'clock	pennycress, field	vetches
geranium, Carolina	pepperweeds (annual)	yellow rocket
goatsbeard	pigweed	yellow starthistle
healall	plantains	

- 1. Includes herbicide tolerant biotypes.
- 2. Apply prior to bolting.

hemp dogbane

#### Weeds Suppressed (1)

alfalfa aster, many-flowered beggarticks bindweed, field buckwheat, wild carrot, wild clover, red dandelion	garlic, wild goldenrod ground ivy hawkweed henbit hoarycress knotweed ladysthumb	onion, wild peppergrass redstem filaree potato, volunteer smartweed tansy ragwort thistle, bull thistle, Canada
fiddleneck	nettles	thistle, musk

Suppression is expressed as a reduction in weed competition (reduction population or
vigor) as compared to untreated areas. The degree of weed control and duration of
effect may vary with weed size, density, application rate, coverage, and growing
conditions before, during and after treatment.

#### APPLICATION SITES

#### Crop Uses

#### Wheat (Including Durum) and Barley

Apply as a broadcast postemergence treatment to actively growing wheat (including durum) and barley, from the 4-leaf crop growth stage up to flag leaf emergence (Zadoks scale 36) for control of broadleaf weeds. Apply when weeds are actively growing, but before weeds are 8 inches tall or vining. For control of volunleer potatoes, apply before potato plants are 8 inches tall. Only weeds emerged at the time of treatment will be controlled. Extreme growing conditions such as drought or near freezing temperatures prior to, at and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Do not use if cereal crop is underseeded with a legume.

**Spot Application:** Spot applications may be made, however, to prevent over-application spot treatments should be applied at rates and spray volumes equivalent to broadcast application. See instructions for "Spot Application" in "Application Directions" section.

#### **Broadcast Application Rates:**

(Numbers in parentheses (-) refer to footnotes following table.)

Weed Size or Species (1) (pint/acre)	Application Rate	
Susceptible broadleaf weed seedlings less than 4 inches tall (2)	1 ½	
Susceptible broadleaf weed seedlings less, than 8 inches tall or vining	2	
Volunteer potatoes	2 - 4 (3)	

 See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

## 7/1

#### STARANE®+SABER® HERBICIDE EPA REG. NO. 34704-1012

- 2. The 1 ½ pint/acre rate will generally provide satisfactory control of kochia seedlings less than 4 inches tall (including ALS resistant biotypes). However, when conditions for control are less favorable, such as under drought or cool temperatures, the 2 pint/acre rate will provide more consistent control of kochia seedlings 1 to 4 inches tall. Control of small kochia with reduced rates will be more consistent if kochia is at least 1 inch tall. The 2 pint/acre rate should be used for optimal control of dicamba tolerant kochia populations (see "Management of Kochia Biotypes" in the General Information section of this label)
- 3. Crop injury may occur at rates higher than 2 pint/acre.

#### Restrictions

- Do not allow livestock to graze treated areas or harvest treated forage within 14 days of application
- . Do not make more than one application per season.
- Preharvest Interval: Do not apply closer than 14 days before cutting of hay or 40 days before harvesting of grain and straw.

#### **Fallow Cropland**

For best results, apply as a single broadcast treatment by ground or aerial equipment to control susceptible broadleaf weeds. Apply when weeds are actively growing, but before kochia is 8 inches tall and before wild buckwheat is vining. Starane+Saber herbicide may be applied alone or in tank-mix combination with other herbicides (See tank mixing precautions in "Mixing Instructions" section.)

Broadcast	Anolica	ition	Rates:

Discussion regularity regularity	
Weed Size or Species †	Application Rate (pint/acre)
Susceptible broadleaf weed seedlings less	
than 8 inches tall or vining	
Volunteer potatoes ~	2 - 4

† See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

#### On-Farm Non-Cropland

For best results, apply as a single broadcast treatment or spot treatment to control susceptible broadleaf weeds in on-farm non-cropland areas such as fence rows, building perimers, around equipment storage areas and on-farm private roadways. Apply at the rate of 2 to 4 pints per acre when weeds are small and actively growing, but before weeds are 8 inches tall or vining. Spot treatments should be applied at rates and spray volumes equivalent to broadcast application. See instructions for "Spot Application" in "Application Directions" section. See "Weeds Controlled or Suppressed" section for a complete listing of weeds controlled or suppressed.

#### **CRP Acres**

Do not use on CRP stands that are underseeded with desirable legumes, clovers, or other sensitive broadleaf plants.

Starane+Saber herbicide may be applied to Conservation Reserve Program (CRP) acres. For best results, apply as a single broadcast treatment by ground or aerial equipment to control susceptible broadleaf weeds. Apply at the rate of 2 to 4 pints per acre when weeds are small actively growing, but before weeds are 8 inches tall or vining. Spot treatments should be applied at rates and spray volumes equivalent to broadcast application. See instructions for "Spot Application" in "Application Directions" section. See "Weeds Controlled or Suppressed section for a complete listing of weeds controlled or suppressed.

Restriction: Grazing or having of treated CRP acres is prohibited.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, feed or fertilizer by storage or disposal. **PESTICIDE STORAGE**: Store above 10°F or warm and agitate before use.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL Nonrefiliable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. If recycling is not available, 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.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents

For packages up to 5 galloms: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Storage and Disposal cont'd.:

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 56 gallons: To clean the 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.

For refillable containers: 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 refiller. To clean the 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.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY-OF-THIS-PRODUCT-FOR-ANY-PARTICULAR TRADE-USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH STREET, GREELEY, CO 80634.

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT ALLOWED BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Saber® is a registered trademark of Loveland Products, Inc. Starane is a registred trademark of Dow AgroSciences LLC

FORMULATED FOR



P.O. BOX 1286, GREELEY, COLORADO 80632-1286