



HERBICIDE

RIMSULFURON GROUP 2 HERBICIDE

# SENTYX SG™

Water Soluble Granule

For Weed Control in \*Field Corn, Citrus Fruit Group 10-10, Stone Fruit Group 12-12, Tree Nuts Group 14-12, Pome Fruit Group 11-10, Grapes, Blueberry (High and Low Bush), Caneberry (Raspberry, Blackberry), Potatoes, Potatoes Grown for Seed, Field-Grown Tomatoes, \*Pre-plant Weed Control in Cotton and Soybeans, Rangeland Restoration, Non-Crop Sites including Industrial Sites, Roadsides, Highway Medians, Utility Substations, Non-Cropland Wildlife Habitats.

\*NOT FOR USE ON FIELD CORN, PRE-PLANT BURNDOWN IN COTTON AND SOYBEAN IN THE STATE OF CALIFORNIA.

**ACTIVE INGREDIENT:**

Rimsulfuron

N-[(4,6-dimethoxypyrimidin-2-yl)aminocarbonyl]-3-(ethylsulfonyl)-2-pyridinesulfonamide

OTHER INGREDIENTS:

(% by weight)

.....25.0%

.....75.0%

TOTAL

100.0%

## KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

See inside label booklet for Precautionary Statements and Directions for Use.

FOR A MEDICAL EMERGENCY OR HELP WITH ANY SPILL, LEAK, FIRE OR EXPOSURE INVOLVING THIS MATERIAL, CALL DAY OR NIGHT, CHEMTREC 1-800-424-9300.

EPA REG. NO. 34704-1144  
EPA EST. NO. 5905-CA-1

MANUFACTURED FOR: LOVELAND PRODUCTS, INC.®, P.O. BOX 1286, GREELEY, COLORADO 80632-1286

NET WEIGHT: 20 OZ.

L100622-072225



<b>FIRST AID</b>	
<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 a person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything to an unconscious person.</li> </ul>
<b>If on skin:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact <b>CHEMTREC at 1-800-424-9300</b> for emergency medical treatment information.	

**PRECAUTIONARY STATEMENTS  
HAZARD TO HUMANS AND DOMESTIC ANIMALS  
KEEP OUT OF REACH OF CHILDREN**

**CAUTION:** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- long-sleeved shirt and long pants
- shoes plus socks
- waterproof gloves

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove and wash contaminated clothing before reuse.
- 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.

**ENGINEERING CONTROL STATEMENTS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR, Part 170, Section 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**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 or rinsate.

**Groundwater Advisory**

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisory**

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

**BIOLOGICAL ACTIVITY AND ENVIRONMENTAL CONDITIONS**

Sentyx SG is absorbed through the roots and foliage of plants, rapidly inhibiting the growth of susceptible weeds. For pre-emergence weed control, rainfall or sprinkler irrigation is needed to move Sentyx SG into the soil. Weeds will generally not emerge from pre-emergence applications. In some cases, susceptible weeds may germinate and emerge a few days after application, but growth then ceases and leaves become chlorotic (yellowish) three to five days after emergence. Death of leaf tissue and growing point will follow in some species, while others will remain green but stunted and noncompetitive.

One to three weeks after post-emergence application to weeds, leaves of susceptible plants appear chlorotic, and the growing point subsequently dies. In warm, moist conditions, the expression of herbicide symptoms is accelerated; in cold, dry conditions, expression of herbicide symptoms is delayed. Death of leaf tissue and growing point will follow in some species, while others will remain green but stunted and noncompetitive.

Sentyx SG provides the best control of weeds in vigorously growing crops that shade competitive weeds. Weed control in areas of thin crop stand or seeding skips may not be satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control.

The herbicidal action of Sentyx SG may be less effective on weeds stressed from adverse environmental conditions including abnormally hot or cold temperatures, abnormal soil conditions including extremely dry or water saturated soil, or hail or frost damage. Incomplete control may also result on plants injured from disruptive cultural practices, herbicide carryover from a previous crop, or injury from insects, diseases, or other pests. Additionally, weeds hardened-off by drought stress are less susceptible to Sentyx SG. It is best to delay applications until stress has been alleviated.

Post-emergence weed control may be reduced if rainfall occurs soon after application. Several hours of dry weather are needed to allow Sentyx SG to be sufficiently absorbed by weed foliage (generally Sentyx SG is rainfast in 4 hours).

**Non-target Organism Advisory**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

**Windblown Soil Particles Advisory**

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

**PHYSICAL OR CHEMICAL HAZARDS**

**DO NOT** mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with the terms of this label.

**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 in your State responsible for pesticide regulation.

## PRODUCT INFORMATION

Use Sentyx SG only in accordance with instructions on this label. To the extent consistent with applicable law, Loveland Products, Inc. will not be responsible for losses or damage resulting from the use of this product in any manner not specifically instructed by Loveland Products, Inc. Sentyx SG is a water-soluble granule formulation that selectively controls certain grass and broadleaf weeds in pome fruit group 11-10, citrus fruit group 10-10, tree nut group 14-12, stone fruit group 12-12, and grape crops that have been established for at least one full growing season, and in blueberries and caneberries. Sentyx SG selectively controls certain grass and broadleaf weeds in potatoes, potatoes grown for seed, field-grown tomatoes (direct-seeded and transplant), and field corn. Sentyx SG restores rangeland infested with invasive weed species and along roadsides and highway medians, at industrial plant sites, utility substations and non-cropland wildlife habitats. Apply Sentyx SG 30 days or more pre-plant to cotton or soybeans for winter vegetation management.

Sentyx SG has post-emergence and residual (pre-emergence to weeds) activity. Rainfall or sprinkler irrigation is needed within 2 weeks of application to activate Sentyx SG in the soil. For the most effective weed control, rainfall or sprinkler irrigation is needed within 5 to 7 days after application to move Sentyx SG into the soil.

Optimum post-emergence control is reached when Sentyx SG is applied to young, actively growing weeds.

The degree and duration of control depends on:

- weed spectrum and infestation intensity;
- weed size at application;
- environmental conditions at and following treatment.

Check with your state extension service or Department of Agriculture before use to be certain Sentyx SG is registered in your state.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and 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 4 hours.**

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

- Coveralls
- shoes plus socks
- chemical resistant gloves

## 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 Standards 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. Use on non-crop sites and turf (unimproved) are not within the scope of the Worker Protection Standard. **DO NOT** enter or allow worker entry into treated areas until sprays have dried.

## RUNOFF PREVENTION

To protect the environment, **DO NOT** allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.

Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

## WEED RESISTANCE MANAGEMENT

Sentyx SG is a Group 2 Herbicide. Any weed population may contain or develop plants naturally resistant to Sentyx SG and other Group 2 herbicides. Weed species with acquired resistance to Group 2 herbicides may eventually dominate the weed population if Group 2 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Sentyx SG or other Group 2 herbicides. Users should scout before and after application.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of Sentyx SG or other target site of action Group 2 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides)
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout fields after application to verify that the treatment was effective.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.
- Report any incidence of non-performance of this product against a particular weed species to your Loveland Products, Inc. representative or call 1-888-LPI-CUST (574-2878). If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

Naturally occurring weed biotypes that are resistant to triasulfuron, metsulfuron, chlorsulfuron, chlorsulfuron + metsulfuron, tribenuron-methyl, and thifensulfuron + tribenuron-methyl will also be resistant to Sentyx SG.

## INTEGRATED PEST MANAGEMENT

To better control pests, Loveland Products, Inc. recommends the use of Integrated Pest Management (IPM). Sentyx SG may be used as part of an Integrated Pest Management program, which can include biological, cultural, and genetic practices, aimed at preventing economic pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for treating specific pest/crop or site systems in your area.

## RESTRICTIONS

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

- **DO NOT** apply, drain, or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- **DO NOT** use on lawns, walks, driveways, tennis courts. Prevent drift of spray to desirable plants.
- **DO NOT** contaminate any body of water, including irrigation water that may be used on other crops.
- Carefully observe sprayer cleanup instructions, as spray tank residue may damage crops other than potatoes or tomatoes.
- **DO NOT** apply using Air Assisted (Air Blast) field-crop sprayers.

## MANDATORY SPRAY DRIFT

### Aerial Applications:

- When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use an Extremely Coarse droplet size (ASABE S572.1).
- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

### Ground Boom Applications:

- When using ground application equipment, apply with nozzle height no more than 2 feet above the ground or crop canopy.
- Applicators are required to use an Extremely Coarse droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## SPRAY DRIFT ADVISORIES

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

### IMPORTANCE OF DROPLET SIZE

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

#### Controlling Droplet Size – Ground Boom

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

#### Controlling Droplet Size – Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, parallel with the airflow in flight.

#### BOOM HEIGHT – Ground Boom

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

#### RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

#### SHIELDED SPRAYERS

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

#### TEMPERATURE AND HUMIDITY

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

#### TEMPERATURE INVERSIONS

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

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## TANK MIXTURES

To broaden the weed control spectrum and/or extend the residual effectiveness of Sentyx SG, tank mix Sentyx SG with other registered herbicides affecting a different site of action (mode of action) and/or adjuvants registered for use on the crops listed on Sentyx SG labeling. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. **DO NOT use Sentyx SG in a spray solution with additives that buffer the pH to below 4.0 or above 8.0 to avoid degradation of Sentyx SG.**

#### Tank Mix Compatibility Testing

Perform a jar test prior to tank mixing to ensure compatibility of Sentyx SG and other pesticides. Use a clear quart jar with lid 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, sludge, gel, oily film or layers, or other precipitates, **DO NOT** use it because it is not compatible.

See section: "ADDITIONAL USE INFORMATION – ALL CROPS AND USES" for additional information.

## USES

### FIELD CORN

#### BURNDOWN AND RESIDUAL CONTROL OF CERTAIN ANNUAL GRASS AND BROADLEAF WEEDS WHEN APPLIED PRE-EMERGENCE AND POST-EMERGENCE TO FIELD CORN\*

\*Not for use in California.

#### APPLICATION INFORMATION

Sentyx SG is a selective herbicide for burndown and residual control of certain annual grass and broadleaf weeds when applied pre-emergence and post-emergence to field corn. Apply Sentyx SG to "Roundup Ready" corn in tank mix combinations with glyphosate herbicides to add residual control for later emerging weeds. Residual weed control is dependent on rainfall or sprinkler irrigation for herbicide activation.

If cultivation is necessary because of soil crusting, soil compaction, or weed germination before rain or irrigation occurs, use shallow tillage including a rotary hoe to lightly incorporate Sentyx SG and make certain corn seeds are below the tilled area.

Use Sentyx SG in a planned sequential application herbicide program followed by an in-crop application of Sentyx SG and/or other post-emergence-applied corn herbicides. Refer to the label of the respective sequential partner for specific use directions.

Allow at least 4 weeks between pre-emergence applications of Sentyx SG and post-emergence applications of Sentyx SG. Make sequential applications after the corn has reached the 2-collar stage and before the corn exceeds the maximum application height listed on the respective product labels.

Apply Sentyx SG to field corn hybrids with a relative maturity (RM) of 77 days or more, including "food grade" (yellow dent, hard endosperm), waxy, and High-Oil corn. Not all field corn hybrids of less than 77 RM and not all white corn hybrids or Hi-Lysine hybrids have been tested for crop safety, nor does Loveland Products, Inc. have access to all seed company data. Consequently, injury arising from the use of Sentyx SG on

these types of corn is the responsibility of the user. Consult with your seed supplier before applying Sentyx SG to any of these corn types. Seed company publications indicate "Warning", "Crop Response Warning", or "Sensitive" notations for the use of some ALS herbicides on corn hybrids of 77 RM or higher. As noted in the seed company publications, use sulfonylurea herbicides, including Sentyx SG with caution on these hybrids.

#### Field Corn Restrictions

- **DO NOT** apply to field corn grown for seed or to popcorn or sweet corn.
- **DO NOT** apply pre-emergence to coarse-textured soils (sand, loamy sand or sandy loam) with less than 1% organic matter.
- **DO NOT** apply by air in the States of California and New York.
- **DO NOT** apply more than 2 ounces per acre (0.125 lbs. ai) on a broadcast application basis per year. This includes combinations of preemergence or postemergence applications of Sentyx SG, as well as rimsulfuron from application(s) of other products containing rimsulfuron.
- **DO NOT** apply more than 2 ounces per acre (0.125 lbs. ai) per application.
- **DO NOT** make more than 4 applications per year, this includes combinations of preemergence or postemergence applications, when using reduced application rates.
- Allow a minimum of 14 days between applications.

#### FALLOW (BURNDOWN)

##### Use Rates

Apply 1-2 (0.0625 – 0.125 lbs. ai) ounces per acre of Sentyx SG.

##### Application Timing

Apply Sentyx SG as a fallow treatment in the spring or fall when the majority of weeds have emerged and are actively growing. Field corn may be planted to this treated area at any time.

##### Tank Mixtures in Fallow

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Use Sentyx SG as a fallow treatment and tank mix with other herbicides that are registered for use in fallow.

#### PRE-EMERGENCE TO FIELD CORN RESTRICTIONS

- **DO NOT** apply more than 2 ounces per acre (0.125 lbs. ai) on a broadcast application basis per year from all sources.
- **DO NOT** apply more than 2 ounces per acre (0.125 lbs. ai) per application.
- **DO NOT** make more than 4 applications per year, when using reduced application rates.
- Allow a minimum of 14 days between applications.

##### Pre-Emergence Rates

Apply 0.5-2.0 oz. (0.03125 – 0.125 lbs. ai) product per acre Sentyx SG before corn emergence. Apply 1-1½ oz. (0.0625 – 0.09375 lbs. ai) per acre for most applications.

##### Application Timing

Apply Sentyx SG pre-emergence or pre-plant to corn. Applications of Sentyx SG made before weed emergence will provide residual control of labeled weeds. Control of emerged weeds require the addition of spray adjuvants as noted below.

#### POST-EMERGENCE TO FIELD CORN RESTRICTIONS

- **DO NOT** apply more than 2 ounces per acre (0.125 lbs. ai) on a broadcast application basis per year from all sources.
- **DO NOT** apply more than 2 ounces per acre (0.125 lbs. ai) per application.
- **DO NOT** make more than 4 applications per year, when using reduced application rates.
- Allow a minimum of 14 days between applications.

##### Post-Emergence Rates

Apply 0.5-2 oz. (0.03125 – 0.125 lbs. ai) per acre Sentyx SG as a post-emergence broadcast application. Apply 1 oz. (0.0625 lbs. ai) per acre for most applications.

##### Application Timing

To crop: Apply Sentyx SG to corn that is up to 12 inches tall. **DO NOT** apply to corn taller than 12 inches or exhibiting 6 or more leaf collars, whichever is more restrictive. Post-emergent applications of Sentyx SG will provide contact control of labeled weeds and limited residual control of later emergence.

To weeds: Apply tank mixtures of Sentyx SG with glyphosate or glufosinate herbicides after weeds emerge and before they reach the maximum size listed on the glyphosate and glufosinate herbicide labels.

##### SPRAY ADJUVANTS

Apply Sentyx SG to control emerged weeds with a nonionic surfactant and an ammonium nitrogen fertilizer. If applied in a tank mix combination with a glyphosate herbicide product or a glufosinate product that contains a built-in adjuvant system, **DO NOT** add surfactant. Use a crop oil concentrate in place of nonionic surfactant for burndown applications of Sentyx SG made before crop emerges. Products must contain only EPA-exempt ingredients (40 CFR 910 or 40 CFR 920).

##### Petroleum Crop Oil Concentrate (COC) or Modified Seed Oil (MSO)

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.
- Use MSO adjuvants 0.5% v/v (0.5 gallon per 100 gallons spray solution) if specifically noted on adjuvant product labeling.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

##### Nonionic Surfactant (NIS)

- Apply at 0.25% v/v (1 qt. per 100 gals. spray solution).
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

##### Ammonium Nitrogen Fertilizer

- Use 2 qts. per acre of a high-quality urea ammonium nitrate (UAN) including 28%N or 32%N, or 2 lbs. per acre of a spray-grade ammonium sulfate (AMS).
- **DO NOT** use liquid nitrogen fertilizer as the total carrier solution after crop emergence.

##### Special Adjuvant Types

- Use of combination adjuvant products at doses that provide the required amount of NIS and ammonium nitrogen fertilizer is allowed. Consult product labeling for use rates and restrictions.
- **DO NOT** use any other adjuvant rates or mixtures with Sentyx SG unless instructed to do so on Loveland Products, Inc. labeling.

**WEEDS CONTROLLED/SUPPRESSED IN FIELD CORN**

<b>Pre-Emergence Control</b>	
<b>Grass Weeds</b>	<b>Broadleaf Weeds</b>
Barnyardgrass	Carpetweed*
Bluegrass, annual*	Chamomile, false
Crabgrass, large*	Cocklebur*
Foxtail (bristly, giant, green, yellow)	Filaree, Redstem
Panicum, fall*	Henbit
Signalgrass, broadleaf*	Jimsonweed*
Wheat, Volunteer	Kochia (ALS-sensitive)
Wild Oat*	Lambsquarters, common
	Morningglory, ivyleaf*
	Mustard (birdsrape, black)
	Nightshade* (hairy, black)
	Palmer, amaranth*
	Pigweed (prostrate, redroot, smooth)
	Purslane, common
	Ragweed, common*
	Russian thistle, seedling*
	Smartweed, Pennsylvania*
	Velvetleaf*

<b>Post-Emergence Control</b>	
<b>Grass Weeds (1-2")</b>	<b>Broadleaf Weeds (1-3")</b>
Barley, volunteer	Alfalfa, volunteer <sup>a</sup>
Barnyardgrass	Canada, thistle*
Bluegrass, annual	Chickweed, common
Crabgrass, large (½")	Cocklebur*
Cupgrass, woolly (1")	Dandelion (6" diameter)
Foxtail (bristly, giant, green, yellow)	Henbit
Johnsongrass, seedling*	Kochia
Millet, wild-proso*	Lambsquarters, common*
Panicum, fall	Morningglory, ivyleaf*
Quackgrass*	Mustard (birdsrape, black, wild)
Ryegrass, Italian*	Nightshade, hairy*
Shattercane (4")	Pigweed, (prostrate, redroot, smooth)
Signalgrass, broadleaf*	Purslane, common*

Cont'd 6

<b>Post-Emergence Control</b>	
<b>Grass Weeds (1-2")</b>	<b>Broadleaf Weeds (1-3")</b>
Stinkgrass*	Ragweed, common*
Wheat, volunteer	Shepherd's purse
Wild oat*	Smartweed, Pennsylvania*
Yellow nutsedge*	Wild radish
	Velvetleaf*

\* Partial control/suppression.  
<sup>a</sup> Except in California.

**TANK MIXTURES**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank mix Sentyx SG with full or reduced rates of other products registered for use in corn.

**Pre-Emergence to Corn**

**For Additional Control of Grass and Broadleaf Weeds**

Tank mix Sentyx SG with full or reduced rates of pre-emergence grass and broadleaf herbicides including atrazine, metolachlor, S-Metolachlor, acetochlor, dimethenamid, isoxaflutole, and S-Metolachlor + mesotrione + atrazine to provide added residual activity or burndown activity on emerged weeds. Consult tank mix partner labeling for rate and soil-type restrictions.

**Post-Emergence Application to Corn**

**Tank Mixtures with Glyphosate**

Tank mix Sentyx SG with glyphosate herbicides if applications are made to corn hybrids containing the "Roundup Ready" gene. Consult with your seed supplier to confirm the corn hybrid is "Roundup Ready" before making any herbicide application containing glyphosate herbicides.

When used in a tank mixture with glyphosate herbicides, 1 oz. (0.0625 lbs. ai) Sentyx SG will deliver improved burndown and/or residual activity on the following weeds, as compared to glyphosate used alone:

Alfalfa, volunteer*	Johnsongrass, seedling	Sandbur (field, longspine)
Barley, volunteer	Kochia	Shepherd's purse
Barnyardgrass	Lambsquarters, common	Signalgrass, broadleaf
Bluegrass, annual	Millet, wild-proso	Smartweed, Pennsylvania
Canada thistle	Morningglory, ivyleaf	Stinkgrass
Chamomile, false	Mustard (birdsrape, black, wild)	Velvetleaf
Chickweed, common	Nightshade, hairy	Wheat, volunteer
Cocklebur	Panicum, fall	Wild buckwheat
Crabgrass	Pigweed (prostrate, redroot, smooth)	Wild oat
Dandelion (6" diameter)	Purslane, common	Wild radish
Filaree, redstem	Quackgrass	Yellow nutsedge
Foxtail (bristly, giant, green, yellow)	Ragweed, common	
Henbit	Ryegrass, Italian	

\* Except in California.

#### Tank Mixtures with Glufosinate

Tank mix Sentyx SG with glufosinate herbicides if applications are made to corn hybrids containing the "Liberty Link" gene. Consult with your seed supplier to confirm the corn hybrid is "Liberty Link" before applying any herbicide containing glufosinate.

When used in tank mixtures with glufosinate herbicide, 0.75 oz. (0.0469 ai) Sentyx SG will deliver improved burndown and/or limited residual activity on the following weeds, as compared to glufosinate used alone:

Foxtail (giant, yellow)	Pigweed, redroot
Lambsquarters, common	Velvetleaf

#### For Additional Control of Kochia

Tank mix Sentyx SG with fluroxypyr at specified label rates for improved control of kochia. Use higher rates within the specified rate range if weed infestation is heavy. Refer to the specific fluroxypyr label for application timing and restrictions. Tank mix Sentyx SG with fluroxypyr and dicamba for broader spectrum weed control.

#### For Additional Control of Broadleaf Weeds

Tank mix Sentyx SG with S-Metolachlor + mesotrione + atrazine at specified label rates for improved burndown or residual control of several broadleaf weeds including common waterhemp, common ragweed, common lambsquarters, and velvetleaf. When applying mixtures of Sentyx SG plus S-Metolachlor + mesotrione + atrazine, use a nonionic surfactant. Refer to S-Metolachlor + mesotrione + atrazine labels for additional information regarding application timing, tank mixtures, adjuvants, and rotational crops.

#### For Additional Control of Broadleaf Weeds

Tank mix Sentyx SG with topramezone plus atrazine at specified label rates for improved burndown or residual control of several broadleaf weeds including common waterhemp, common ragweed, common lambsquarters, and velvetleaf. When applying mixtures of Sentyx SG plus topramezone use methylated seed oil. Refer to topramezone label for additional information regarding application timing, tank mixtures, adjuvants, and rotational crops.

#### BROADLEAF WEED PRECAUTIONS

- Sentyx SG can interact with certain insecticides previously applied to the crop. Crop response varies with field corn type, insecticide used, insecticide application methods, and soil type.
- Sentyx SG can be applied to corn previously treated with non-organophosphate soil insecticides regardless of soil type.
- Allow at least 60 days between a pre-emergence or pre-plant application of Sentyx SG and application of organophosphate insecticide.
- Crop injury may occur following an application of Sentyx SG if there is a prolonged period of cold weather and/or in conjunction with wet soils.

#### BROADLEAF WEED RESTRICTIONS

- **DO NOT** apply Sentyx SG within 45 days of crop emergence where an organophosphate insecticide was applied as in-furrow treatment.
- **DO NOT** tank mix Sentyx SG with foliar-applied organophosphate insecticides including chlorpyrifos, malathion, parathion, etc.
- **DO NOT** tank mix Sentyx SG with bentazon or severe crop injury may occur.
- **DO NOT** graze, feed forage, grain or fodder (stover) from treated areas to livestock within 30 days of Sentyx SG application.
- **DO NOT** irrigate Sentyx SG into coarse soils at planting time when soils are saturated.
- **DO NOT** apply Sentyx SG or drain or flush application equipment on or near desirable trees or other plants, or in areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.
- **DO NOT** use on lawns, walks, driveways, tennis courts.
- **DO NOT** allow spray mixture to drift or contact desirable plants.
- **DO NOT** contaminate any body of water.
- **DO NOT** use application equipment until it has been thoroughly cleaned.
- **DO NOT** treat frozen soil.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** use flood or furrow irrigation to apply Sentyx SG.

#### CHEMIGATION

**DO NOT** apply Sentyx SG through any type of irrigation system in field corn.

#### GROUND APPLICATION

Use a minimum of 15 gallons of water per acre (GPA) to ensure thorough coverage of weeds and the best performance.

Use a minimum of 10 GPA for light, scattered stands of weeds. Ensure that equipment is set up to avoid applying an excessive rate directly over the rows and into the corn plant whorl. Overlaps or starting, stopping, slowing, and turning while spraying may result in crop injury.

#### AERIAL APPLICATION

**Aerial application is prohibited in the States of California and New York.**

See "Additional Use Information" section of this label.

### COTTON/SOYBEAN – PRE-PLANT ONLY\*

\*Not for use in California.

#### APPLICATION INFORMATION

##### Rate

Apply 1.0 oz. (0.0625 lbs. ai) per acre Sentyx SG.

##### Timing to Crop

Apply Sentyx SG pre-plant after fall harvest through early spring 30 days or more prior to planting, whenever the ground is not frozen, to control emerged weeds and to provide limited residual control of early-emerging spring weeds.

##### Burndown Tank Mixtures

Use Sentyx SG as a pre-plant residual burndown treatment and tank mix with other herbicides that are registered for pre-plant in cotton/soybean, including glyphosate, paraquat, glufosinate, 2,4-D LVE, and dicamba. Read and follow all instructions on this label and the labels of any tank mix partner before using in mixtures with Sentyx SG. If the instructions on the tank mix label conflict with this Sentyx SG label, **DO NOT** use in a tank mixture with Sentyx SG. Always follow directions of the most restrictive label.

##### Sequential Application – Soybeans

Use Sentyx SG in a sequential herbicide program in soybean. Apply Sentyx SG for burndown and residual weed control 30 days or more prior to planting. Refer to the product labels for use restrictions, application information, rotational crop guidelines, and cautionary statements prior to application.

##### Additional Control of Grass and Broadleaf Weeds

Tank mix Sentyx SG with full or reduced rates of pre-plant herbicides registered for cotton and soybean.

##### SPRAY ADJUVANTS

To control of emerged weeds, apply Sentyx SG with an appropriate adjuvant. If applied in a tank mix combination with a glyphosate herbicide product or a glufosinate product that contains a built-in adjuvant system, no additional surfactant needs to be added. Product must contain only EPA-exempt ingredients.

##### Petroleum Crop Oil Concentrate (COC) or Modified Seed Oil (MSO)

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.
- Use MSO adjuvants at 0.5% v/v (0.5 gallon per 100 gallons spray solution) if specifically noted on adjuvant product labeling.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

##### Nonionic Surfactant (NIS)

- Apply at 0.25% v/v (1 qt. per 100 gallons spray solution).
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

#### Ammonium Nitrogen Fertilizer

In addition to a spray adjuvant, an ammonium nitrogen fertilizer may be used.

- Use 2 qts. per acre of a high-quality urea ammonium nitrate (UAN) including 28%N or 32%N, or 2 lbs. per acre of a spray-grade ammonium sulfate (AMS).

#### Special Adjuvant Types

- Combination adjuvant products can be used at doses that provide the required amount of NIS and ammonium nitrogen fertilizer. Consult product labeling for use rates and restrictions.
- **DO NOT** use any other adjuvant rates or mixtures with Sentyx SG unless instructed to do so on Loveland Products, Inc. labeling.

#### Mixing Instructions

##### Fertilizer Carrier Instructions

Mix Sentyx SG with water or pre-dissolve in water and add to liquid fertilizer for pre-emergence application.

When using liquid fertilizer as the carrier, always pre-slurry Sentyx SG in water before adding fertilizer solutions. Add the Sentyx SG slurry to the final complete liquid fertilizer mixture – **DO NOT** add Sentyx SG during the fertilizer mixing process.

Always maintain good agitation while adding the Sentyx SG slurry to liquid fertilizers and maintain good agitation until sprayed. When using liquid fertilizer as the carrier, conduct a compatibility test with all components prior to mixing.

**DO NOT** use with spray additives or liquid fertilizer carriers that alter the pH of the spray solution below pH 5.0 or above pH 9.0 as rapid product degradation can occur. Spray solutions of pH 6.0 – 8.0 allow for optimum stability of Sentyx SG.

#### Ground Application

Use a minimum of 15 gallons of water per acre (GPA) to ensure thorough coverage of the weeds and the best performance. Use a minimum of 10 GPA for light, scattered stands of weeds.

#### Aerial Application

Use nozzle types and arrangements that will provide optimum spray distribution and maximum coverage at a minimum of 5 GPA.

#### Cotton/Soybean Precautions

- Allow at least 3 weeks between pre-emergence applications of Sentyx SG and post-emergence applications of rimsulfuron containing products.
- Sentyx SG may interact with certain insecticides applied to soybean, cotton, or corn. Crop response varies with field crop, insecticide used, insecticide application method, and soil type.
- Sentyx SG may be applied to crops previously treated with fipronil, tebufipiriphos + cyfluthrin, or tefluthrin insecticides or other non-organophosphate (OP) soil insecticides regardless of soil type.
- Pre-plant/Pre-emergence applications of Sentyx SG where an application of chlorpyrifos or phorate is planned may cause unacceptable crop injury, especially on soils of less than 4% organic matter.
- Thoroughly clean application equipment immediately after use. (See "Sprayer Cleanup" section of this label for instructions.)
- Crop injury may occur following an application of Sentyx SG if there is a prolonged period of cold weather and/or in conjunction with wet soils.

#### Cotton/Soybean Restrictions

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai) rimsulfuron per acre per year from all sources.
- **DO NOT** apply more than 1 oz. (0.0625 lbs. ai)/A in a single application.
- **DO NOT** make more than 4 applications per year.
- Allow a minimum of 14 days between applications.
- **DO NOT** plant cotton or soybean fewer than 30 days following an application of Sentyx SG.
- **DO NOT** apply pre-emergence to crops planted into coarse-textured soils (sand, loamy sand, or sandy loam) with less than 1% organic matter.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** graze, feed forage, grain, or fodder (stover) from treated areas to livestock within 30 days of Sentyx SG application.
- **DO NOT** tank mix Sentyx SG with bentazon.
- **DO NOT** apply to frozen soil.

- **DO NOT** contaminate any body of water.
- **DO NOT** apply Sentyx SG or drain or flush application equipment on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- **DO NOT** allow spray to drift or contact desirable plants (See "Spray Drift" section of this label for instructions).
- **DO NOT** use on lawns, walks, driveways, tennis courts.

#### ROTATIONAL CROP GUIDELINES (COTTON, FIELD CORN, SOYBEAN)

The following rotational intervals must be observed when using Sentyx SG:

1 OZ. (0.0625 lb. ai) MAXIMUM USE RATE	
Rotation Crop	Interval (Months)
Field Corn, Potatoes	Anytime
Cotton, Soybeans, Tomato	1
Cereals, Winter (wheat)	3
Cereals, Spring (wheat, oats, barley)	9
Alfalfa <sup>†</sup> , Beans (dry and snap), Canola <sup>‡</sup> , Corn (pop or sweet), Cucumber, Flax, Peas, Rice <sup>**</sup> , Red Clover <sup>†</sup> , Sorghum <sup>†</sup> , Sunflower, Sugarbeets <sup>†</sup>	10
Crops Not Listed	18

<sup>†</sup> On sprinkler irrigated fields in Idaho, Utah, and Northern Nevada it is best to use deep fall tillage including plowing prior to planting alfalfa. Product degradation may be less on furrow-irrigated soils and may result in some crop injury.  
<sup>‡</sup> 18 months in the Red River Valley region of ND and MN. In all other areas, the rotation intervals must be extended to 18 months if drought conditions prevail after application and before the rotational crop is planted, unless sprinkler irrigation has been applied and totals greater than 15" during the growing season.  
<sup>\*\*</sup> For soils with pH less than 6.5.

2 OZ. (0.125 lb. ai) MAXIMUM USE RATE	
Rotation Crop	Interval (Months)
Corn (field), Potatoes, Optimum GAT Soybeans	Anytime
Tomato	1
STS Soybeans <sup>***</sup> , Cereals, Winter (wheat)	4
Cereals, Spring (wheat, oats, barley)	9
Beans (dry and snap), Corn (pop or sweet), Cotton <sup>†</sup> , Cucumber, Flax, Soybeans, Sunflower	10
Crops Not Listed	18

<sup>†</sup> The rotation interval must be extended to 18 months if drought conditions prevail after application and before the rotation crop is planted, unless sprinkler irrigation has been applied and totals greater than 15" during the growing season.  
<sup>\*\*\*</sup> STS Soybean.

**NOTE: DO NOT** use Sentyx SG in a tank-mix or sequential application program with other soil residual ALS-inhibiting herbicides as the combined effects of these herbicides on the planting of subsequent crops have not been thoroughly investigated and injury to the following rotation crop may occur.

#### ROTATIONAL CROP GUIDELINES FOR SPECIFIC COUNTIES OF OREGON AND WASHINGTON

Field corn grown under sprinkler irrigation with a minimum of 18" of water per year. This rotation interval is for sand, loamy sand, and sandy loam soils having not more than 1.5% organic matter where a minimum of 18" of sprinkler irrigation is used on the previous corn crop. Injury to the rotated crop may occur if less than 18" of irrigation is used on the previous field corn crop. For tank mixtures, follow the most restrictive rotational crop guideline.

The following rotational intervals must be observed when using Sentyx SG on field corn in Oregon and Washington:

Rotation Crop	Interval (Months)
Alfalfa, Grass, pasture, hay, seed, mint	4
Carrots, Cucumber, Onions	10
Peas	8

**For Rotation to Alfalfa:**

Sentyx SG in field corn not to exceed 1 ounce (0.0625 lb. ai) per acre per year in the following Washington counties: Adams, Grant, Douglas and Lincoln.

Sentyx SG in field corn not to exceed 1.5 ounces (0.09375 lb. ai) per acre per year in the following Washington counties: Benton, Franklin, Klickitat, Walla Walla and Yakima.

Sentyx SG in field corn not to exceed 1.5 ounces (0.09375 lb. ai) per acre per year in the following Oregon counties: Morrow and Umatilla.

**For Rotation to Onions and Carrots:**

Sentyx SG in field corn not to exceed 1.5 (0.09375 lb. ai) ounces per acre per year in the following Washington counties: Adams, Grant, Douglas and Lincoln.

Sentyx SG in field corn not to exceed 2.0 ounces (0.125 lb. ai) per acre per year in the following Washington counties: Benton, Franklin, Klickitat, Walla Walla and Yakima.

Sentyx SG in field corn not to exceed 2.0 ounces (0.125 lb. ai) per acre per year in the following Oregon counties: Morrow and Umatilla.

**For Rotation to Grass Crops Grown for Seed, Hay or Pasture:**

Sentyx SG in field corn not to exceed 1.5 ounces (0.09375 lb. ai) per acre per year in the following Washington counties: Adams, Grant, Douglas and Lincoln.

Sentyx SG in field corn not to exceed 2.0 ounces (0.125 lb. ai) per acre per year in the following Washington counties: Benton, Franklin, Klickitat, Walla Walla and Yakima.

Sentyx SG in field corn not to exceed 2.0 ounces (0.125 lb. ai) per acre per year in the following Oregon counties: Morrow and Umatilla.

**For Rotation to Peas and Mints:**

Sentyx SG in field corn not to exceed 1.5 ounces (0.09375 lb. ai) per acre per year in all areas.

**CITRUS FRUIT GROUP 10-10, TREE NUTS GROUP 14-12, POME FRUIT GROUP 11-10, STONE FRUIT GROUP 12-12, GRAPES**

**APPLICATION INFORMATION**

Apply Sentyx SG as a uniform broadcast application to the orchard or vineyard floor or as a uniform band application directed at the base of the trunk or vine.

For broadcast applications, make a single application of 4 ounces (0.25 lb. ai) per acre per year of Sentyx SG. For improved weed management, apply Sentyx SG in tank mixture with other registered pre-emergence herbicides.

When applied as a banded treatment (50% band or less), make two applications of Sentyx SG in a year. However, **DO NOT apply more than 4 ounces (0.25 lb. ai) per acre on a broadcast application basis per year.** Unless otherwise specified on this label, allow a minimum of 30 days between applications.

To help ensure uniform coverage, use a minimum of 10 gallons of spray solution per acre. Nozzle selection must meet manufacturer's spray volume and pressure instructions for pre-emergence or post-emergence herbicide applications.

Apply only to crops that have been established for one full growing season and are in good health and vigor.

For optimum results, apply when the soil is moist at the time of application, and ½ inch of rainfall or sprinkler irrigation occurs within 2 weeks after application. Time the application(s) to take advantage of normal rainfall patterns and cool temperatures. Moisture for activation must occur within 2-3 weeks after application.

Avoid direct or indirect spray contact with crop foliage or fruit, except undesirable suckers.

**RESTRICTIONS**

- Apply with ground application equipment only. **DO NOT** apply Sentyx SG by air.
- Sentyx SG can be applied by certain chemigation methods, including micro-sprinkler. However, **DO NOT** apply by overhead, flood, or drip irrigation.
- **DO NOT** use Sentyx SG in a spray solution with a pH of below 4.0 or above 8.0 with spray additives that buffer the pH to below 4.0 or above 8.0, since degradation of Sentyx SG may occur.

**PRE-HARVEST INTERVAL (PHI)**

CROP GROUP	PRE-HARVEST INTERVAL (PHI)
<b>Citrus Fruit Group 10-10:</b> Calamondin; Citrus citron; Citrus hybrids (includes chironja, tangelo, tangor); Grapefruit; Kumquat; Lemon; Lime; Mandarin (tangerine); Orange (sweet and sour); Pummelo; Satsuma mandarin	3 days
<b>Pome Fruit Group 11-10:</b> Apple; Azarole; Crabapple; Loquat; Mayhaw; Hook & Arn; Medlar; Pear; Asian pear; Quince; Chinese Quince; Japanese Quince; Tejocote; Cultivars, varieties and/or hybrids of these.	7 days
<b>Tree Nuts Group 14-12:</b> African nut-tree; Almond; Beech nut; Brazil nut; Brazilian pine; Bunya; Bur oak; Butternut; Cajou nut; Candelnut; Cashew; Chestnut; Chinquapin; Coconut; Coquito nut; Dika nut; Ginkgo; Guiana chestnut; Hazelnut (Filbert); Heartnut; Hickory nut; Japanese horse-chestnut; Macadamia nut; Mongongo nut; Monkey-pot; Monkey puzzle nut; Okari nut; Pachira nut; Peach palm nut; Pecan; Pequi; Pili nut; Pine nut; Pistachio; Sapucaia nut; Tropical almond; Walnut (black and English); Yellowhorn; Cultivars, varieties, and/or hybrids of these.	14 days
<b>Stone Fruit Group 12-12:</b> Apricot; Cherry (sweet and tart); Nectarine; Peach; Plum; Plum (Chickasaw); Plum (Damson); Plum (Japanese); Plumcot; Prune (fresh)	14 days
<b>Grapes</b>	14 days

**WEEDS CONTROLLED**

Susceptible weeds are controlled for 60 to 90 days after application of Sentyx SG. Rainfall or irrigation is needed for herbicide activation. Length of control is a function of moisture for activation, soil temperature, soil texture, and amount of moisture after application.

When weeds are present at application, include a labeled burndown herbicide, including glyphosate, paraquat, or glufosinate, with an appropriate adjuvant. Sentyx SG will help provide post-emergence control of the weeds listed in this label. For best results, make post-emergence applications to young, actively growing weeds and include a spray adjuvant.

Residual weed control is reduced when Sentyx SG is applied where heavy crop trash and/or weed residue exists.

Weed control is reduced when applications of Sentyx SG are made to weeds under stress from drought, excessive water, temperature extremes, disease, or low humidity.

PRE-EMERGENCE WEED CONTROL	
Grass Weeds	Broadleaf Weeds
Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Chamomile, false ( <i>Matricaria maritima</i> )
Crabgrass, large ( <i>Digitaria sanguinalis</i> )	Dandelion, common (seedling) ( <i>Taraxacum officinale</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Filaree, redstem ( <i>Erodium cicutarium</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Fleabane, hairy ( <i>Conyza bonariensis</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Groundsel, common ( <i>Senecio vulgaris</i> )
Quackgrass ( <i>Elymus repens</i> )	Henbit ( <i>Lamium amplexicaule</i> )
Wheat, volunteer ( <i>Triticum aestivum</i> )	Kochia ( <i>Kochia scoparia</i> )
	Mallow, common ( <i>Malva neglecta</i> )
	Marestail/horseweed ( <i>Conyza canadensis</i> )
	Mustard, birdsrape ( <i>Brassica rapa</i> )
	Mustard, black ( <i>Brassica nigra</i> )
	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
	Puncturevine ( <i>Tribulus terrestris</i> )
	Purslane, common ( <i>Portulaca oleracea</i> )
	Spurge, prostrate ( <i>Chamaesyce prostrata</i> )
	Spurge, spotted ( <i>Chamaesyce maculata</i> )

PRE-EMERGENCE PARTIAL WEED CONTROL <sup>‡</sup>	
Grass Weeds	Broadleaf Weeds/Sedges
Wild Oat ( <i>Avena fatua</i> )	Cocklebur ( <i>Xanthium</i> spp.)
	Dandelion, common (established) ( <i>Taraxacum officinale</i> )
	Lambsquarters, common ( <i>Chenopodium album</i> )
	Nightshade, black ( <i>Solanum nigrum</i> )
	Nightshade, hairy ( <i>Solanum sarrachoides</i> )
	Nutsedge, yellow ( <i>Cyperus esculentus</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
	Velvetleaf ( <i>Abutilon theophrasti</i> )

<sup>‡</sup> Weed partial control is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area.

POST-EMERGENCE WEED CONTROL	
Grass Weeds (1-2 inches)	Broadleaf Weeds (1-3 inches)
Barley, volunteer ( <i>Hordeum vulgare</i> )	Chamomile, false ( <i>Matricaria maritima</i> )
Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Chickweed, common ( <i>Stellaria media</i> )
Bluegrass, annual ( <i>Poa annua</i> )	Henbit ( <i>Lamium amplexicaule</i> )
Crabgrass, large (½ inch) ( <i>Digitaria sanguinalis</i> )	Kochia ( <i>Kochia scoparia</i> )
Foxtail, bristly ( <i>Setaria verticillata</i> )	Mustard, black ( <i>Brassica nigra</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Mustard, wild ( <i>Sinapsis arvensis</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
Panicum, fall ( <i>Panicum dichotomiflorum</i> )	Puncturevine ( <i>Tribulus terrestris</i> )
Wheat, volunteer ( <i>Triticum aestivum</i> )	Purslane, common ( <i>Portulaca oleracea</i> )
	Shepherd's purse ( <i>Capsella bursa-pastoris</i> )
	Wild Radish ( <i>Raphanus raphanistrum</i> )

POST-EMERGENCE PARTIAL WEED CONTROL <sup>‡</sup>	
Grass Weeds	Broadleaf Weeds
Johnsongrass, seedling ( <i>Sorghum halepense</i> )	Cocklebur ( <i>Xanthium</i> spp.)
Millet, wild-proso ( <i>Panicum millaceum</i> )	Dandelion, common (>6 inches in diameter) ( <i>Taraxacum officinale</i> )
Oat, wild ( <i>Avena fatua</i> )	Lambsquarters, common ( <i>Chenopodium album</i> )
Quackgrass ( <i>Elymus repens</i> )	Mallow, common ( <i>Malva neglecta</i> )
Stinkgrass ( <i>Eragrostis ciliaris</i> )	Nightshade, hairy ( <i>Solanum sarrachoides</i> )
	Nutsedge, yellow ( <i>Cyperus esculentus</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
	Smartweed, Pennsylvania ( <i>Polygonum pennsylvanicum</i> )
	Thistle, Canada ( <i>Cirsium arvense</i> )
	Velvetleaf ( <i>Abutilon theophrasti</i> )

<sup>‡</sup> Weed partial control is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of partial control varies with the rate used, the size of weeds, and the environmental conditions following treatment.

#### SPECIFIC WEED PROBLEMS

**COMMON DANDELION AND MALLOW:** Sentyx SG provides excellent pre-emergence control of common dandelion and mallow germinating from seed. Make a second application in high rainfall areas or where sprinkler irrigation is used to extend residual control throughout the growing season. If application is made post-emergence to these weeds, add a suitable burndown herbicide including glyphosate or paraquat. Small and medium-sized plants (up to 6 inches in diameter) are controlled by post-emergence applications of Sentyx SG plus a burndown herbicide; however, plants that are larger than 6 inches in diameter may only be suppressed and may require a second application 4 to 6 weeks later.

**MARESTAIL/HORSEWEED AND FLEABANE:** Where marestail (horseweed) and fleabane are the target weeds, apply pre-emergence for best results. This may require a fall application to help prevent fall-germinating seedlings from becoming established during the winter. A foliar active herbicide with activity on fleabane and marestail/horseweed (including paraquat, glyphosate, and glufosinate) must be tank mixed with Sentyx SG

for best control and resistance management. After fall application, a second application in the spring may be required to provide extended weed control in the summer. If Sentyx SG is applied to control marehail/horseweed and fleabane, include another soil-residual herbicide as a tank mix or rotational partner to aid in resistance management.

**PUNCTUREVINE:** Apply early in the spring when you can expect rainfall or overhead irrigation to move Sentyx SG into the weed root zone before puncturevine germinates. Puncturevine emerges over a long period of time and late-season germinations may not be controlled.

**YELLOW NUTSEDGE:** Sentyx SG suppresses yellow nutsedge. For optimum results, use the highest rate within the specified rate range based on width of your spray band and make two applications. For applications made post-emergence to nutsedge, always add the appropriate rate of glyphosate and an effective adjuvant if required. On soils with high organic matter (6% or higher) always apply post-emergence to weeds since preemergence applications are not as effective on these soils.

#### Application Timing – Yellow Nutsedge

**Pre-emergence plus Early Post-emergence:** Make the pre-emergence application when rainfall or overhead irrigation will move Sentyx SG into the nutsedge root zone prior to nutsedge emergence. Make a second application when emerging nutsedge is 2-4 inches tall.

**Post-Emergence plus Post-Emergence:** Make first application when emerging nutsedge is 2-4 inches tall. Repeat application 14 days later. **Note:** If yellow nutsedge is greater than 6 inches tall at the first application, weed control is greatly reduced.

**ANNUAL SUMMER GRASS Weeds (including Barnyardgrass, Green Foxtail, and Crabgrass):** If sprinkler irrigation is used, a fall or early spring application of Sentyx SG will not provide season-long control of summer grasses like foxtail, barnyardgrass, and crabgrass. For optimum results, use Sentyx SG with a suitable tank mix herbicide including oryzalin or pendimethalin. Make a second application to provide extended control of summer grasses.

#### USE PRECAUTIONS

- Direct sprays to minimize spray contact with fruit or foliage.
- Draining or flushing equipment on or near desirable trees or other plants, or in areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots may injure these plants.
- Trees or desirable plants whose roots extend into a treated crop use area may be injured.
- For best results, maintain spray tank solution at pH 5 to 7.
- If the selected companion herbicide has a ground or surface water advisory, consider the advisory when using the companion herbicide.
- Crop injury may occur from applications made to poorly drained soils.

#### USE RESTRICTIONS

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 2 applications per year when applied as a banded treatment (50% band or less).
- **DO NOT** make more than 1 application per year when applied as a broadcast treatment.
- Allow a minimum of 30 days between applications.
- For Citrus Fruit Group 10-10, **DO NOT** apply within 3 days of first harvest (3-day PHI).
- For Pome Fruit Group 11-10, **DO NOT** apply within 7 days of first harvest (7-day PHI).
- For Tree Nuts Group 14-12, Stone Fruit Group 12-12, and Grapes, **DO NOT** apply within 14 days of first harvest (14-day PHI).
- **DO NOT** spray adjacent crops or desirable plants as injury may occur.
- **DO NOT** apply to frozen or snow-covered soil.

**Diuron-Containing Products (Washington and Oregon):** On coarse-textured soils where crops are grown under sprinkler irrigation, **DO NOT** use diuron-containing products as a tank-mix partner with Sentyx SG between June 1st and September 30th. Tank mix Sentyx SG with diuron products can be used in the fall (after September 30th) or early spring when temperatures are cool to moderate.

**CROP ROTATION – (Citrus Fruit Group 10-10, Pome Fruit Group 11-10, Tree Nuts Group 14-12, Stone Fruit Group 12-12, and Vine Crops (Amur river grape; Gooseberry; Grape; Kiwifruit, hardy; Maypop; schisandra berry; Cultivars varieties, and/or hybrids of these.))**

Prior to planting, fields to be rotated to the above crops must have a thorough soil mixing – for example, two diskings, or a plowing and a disking. To help ensure rotational crop safety, complete a field bioassay prior to planting any other desired crops. The results of this bioassay may require the crop rotation interval to be extended. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production. The test strip must cross the entire field including knolls and low areas.

#### RESTRICTION

**DO NOT** plant any crops, except field corn, tomatoes, potatoes, and those listed on this label in the PRODUCT INFORMATION section, within one year of the last Sentyx SG application.

**MICRO-SPRINKLER CHEMIGATION – (Citrus Fruit Group 10-10, Pome Fruit Group 11-10, Tree Nuts Group 14-12, Stone Fruit Group 12-12, and Vine Crops (Amur river grape; Gooseberry; Grape; Kiwifruit, hardy; Maypop; schisandra berry; Cultivars varieties, and/or hybrids of these.))**

Sentyx SG can be applied via micro-sprinkler chemigation. The chemigation system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must also contain a functional (normally closed) solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticide(s) and capable of being fitted with a system interlock. **DO NOT apply Sentyx SG through any other chemigation equipment.**

**USE PRECAUTIONS FOR CHEMIGATION – (Citrus Fruit Group 10-10, Pome Fruit Group 11-10, Tree Nuts Group 14-12, Stone Fruit Group 12-12, and Vine Crops)**

- Distributing treated water in an uneven manner results in crop injury, lack of effectiveness, or over-tolerance pesticide residues in the crop. Therefore, to ensure that the mixture is applied evenly at the labeled rate, use sufficient water, apply the mixture for the proper length of time and ensure sprinkler produces a uniform water pattern.
- Continuous agitation in the mix tank is needed to keep the product from settling. If settling does occur, thoroughly re-agitate the tank mixture before using.

**USE RESTRICTIONS FOR CHEMIGATION – (Citrus Fruit Group 10-10, Pome Fruit Group 11-10, Tree Nuts Group 14-12, Stone Fruit Group 12-12, and Vine Crops)**

- **DO NOT** connect an irrigation system used for Sentyx SG application to a public water system.
- **DO NOT** permit run-off during chemigation.

## POTATOES

#### APPLICATION INFORMATION

##### PRE-EMERGENCE APPLICATIONS

Apply 1-1½ ounces (0.0625 - 0.09375 lbs. ai) of Sentyx SG per acre immediately after hilling, drag-off, or reservoir tillage (dam/dike operation) to a clean, newly prepared seedbed.

To activate Sentyx SG in the soil, supply moisture by a single rainfall event or apply sprinkler irrigation of 1/3 - 1 inch (sandy soils apply at least 1/5 inch, sandy loams apply at least 1/4 inch, silt soils apply at least 3/4 inch, clay soils apply at least 1 inch), within 5 days after application to move Sentyx SG 3 inches deep into the soil profile. Activation is required regardless of the soil moisture level at planting or the cumulative precipitation that occurs over the next 5 days (unless rainfall occurs in a single event and equals the activation moisture requirement). If rainfall or sprinkler activation cannot be managed, wait for weeds to emerge and apply Sentyx SG post-emergence for better weed control.

If a clean, newly prepared seedbed free of emerged or germinating weeds does not occur, and weeds are present at the application, add a spray adjuvant to the spray mix. Control may not be adequate for weeds that have an established root system before activation of Sentyx SG.

#### RESTRICTIONS

- **DO NOT** apply Sentyx SG within 30 days of potato harvest.
- **DO NOT** exceed 2.5 oz. (0.156 lbs. ai) of Sentyx SG on a broadcast application per acre per year.
- **DO NOT** apply more than 2.5 ounces per acre (0.156 lbs. ai) per application.
- **DO NOT** make more than 2 applications per year, when using reduced rates.
- Allow a minimum of 14 days between applications.

#### TANK MIXTURES – PRE-EMERGENCE APPLICATIONS

Tank mix Sentyx SG with herbicides labeled for use on potatoes (including eptam, pendimethalin, linuron, S-Metolachlor, or glyphosate products registered for potatoes) in accordance with the most restrictive label limitations and precautions. If tank mixing Sentyx SG with another potato herbicide(s), read and follow all use directions, restrictions, and precautions of both Sentyx SG and the tank mix partner(s). Sentyx SG can be used in three-way tank mix combinations with the above herbicide(s). If these instructions conflict with this Sentyx SG label, **DO NOT** use as a tank mix with Sentyx SG.

##### Sentyx SG plus Metribuzin

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG and metribuzin at specified label rates in a tank mix combination for better control of kochia, Russian thistle, and common lambsquarters. For optimum results, apply after hilling or drag-off to a clean, newly prepared seedbed before potatoes emerge and weeds germinate. Read and follow the metribuzin label for your area.

##### Sentyx SG plus Eptam

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG in a tank mix with eptam at specified label rates for better control of hairy nightshade and crabgrass. For optimum results, apply after hilling or drag-off to a clean, newly prepared seedbed before potatoes emerge and weeds germinate. Since the rates and incorporation methods of eptam vary by region, follow the instructions for your region. The procedure is to incorporate a tank mix of eptam + Sentyx SG using irrigation, and not equipment, to prevent poor weed control from deep incorporation of the Sentyx SG.

If your area does not allow incorporation using irrigation, then apply eptam and Sentyx SG in a split application. Read and follow both product labels for your area.

##### Sentyx SG plus pendimethalin

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG as a tank mix combination with pendimethalin at specified label rates for better control of kochia, crabgrass, and common lambsquarters. For optimum results, apply after hilling or drag-off to a clean, newly prepared seedbed before potatoes emerge and weeds germinate. Read and follow the pendimethalin label for your area.

##### Sentyx SG plus Linuron

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG in a tank mix combination with linuron at specified label rates for better control of common lambsquarters and common ragweed. For optimum results, apply after hilling or drag-off to a clean, newly prepared seedbed, before potatoes emerge and weeds germinate. Read and follow the linuron label for your area.

##### Sentyx SG plus S-Metolachlor

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG in a tank mix combination with S-Metolachlor at specified label rates for better control of yellow nutsedge and black nightshade. For optimum results, apply after hilling or drag-off to a clean, newly prepared seedbed before potatoes emerge and weeds germinate. Read and follow both product labels for your area.

#### POST-EMERGENCE APPLICATIONS – POTATOES

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG to young, actively growing weeds after crop emergence. Typically, small weeds (less than 1 inch in height or diameter) that are actively growing at application are most easily controlled. Under growing conditions that promote crop stress (including drought, frost, cold temperatures, high temperatures, or extreme temperature variations), temporary chlorosis (lime green color) may occur after application of Sentyx SG. Symptoms usually disappear within 5-15 days.

For optimum results with Sentyx SG post-emergence, rainfall or sprinkler irrigation of ½-1 inch (sandy soils apply at least ⅓ inch, sandy loams

apply at least ½ inch, silt soils apply at least ¾ inch, clay soils apply at least 1 inch), no sooner than 4 hours, but not more than 5 days after application, will activate Sentyx SG in the soil and help provide control of subsequent flushes of annual weeds.

#### TANK MIXTURES (POTATOES) – POST-EMERGENCE APPLICATIONS

Tank mix Sentyx SG with pesticide products labeled for use on potatoes (including eptam and metribuzin) in accordance with the most restrictive of label limitations and precautions. If tank mixing Sentyx SG with another potato pesticide(s), read and follow all use directions, restrictions, and precautions of both Sentyx SG and the tank mix partner(s).

Sentyx SG can be used in three-way tank mix combinations with the above pesticide(s). If these instructions conflict with this Sentyx SG label, **DO NOT** use as a tank mix with Sentyx SG.

##### Sentyx SG plus Foliar Fungicides

Tank mix Sentyx SG with other suitable registered fungicides on potatoes (including mancozeb and chlorothalonil).

Read and follow all manufacturers' label instructions for the companion fungicide. If these instructions conflict with this Sentyx SG label, **DO NOT** use as a tank mix with Sentyx SG.

##### Sentyx SG plus Metribuzin

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG in a tank mix combination with metribuzin at specified label rates for improved weed control of Russian thistle, common lambsquarters and triazine-resistant weeds. Use a nonionic surfactant (NIS) at 0.125% v/v (1 pint/100 gals. of water). The addition of adjuvants to post-emergence metribuzin applications reduces crop safety. Use adjuvants with caution.

When possible, avoid post-emergence applications on metribuzin-sensitive varieties or if the crop is under stress. Read and follow both product labels for your area.

**Note: DO NOT** use crop oil concentrate (COC) or methylated seed oil (MSO) for tank mix combinations with Sentyx SG plus metribuzin.

##### Sentyx SG plus Eptam

Apply 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre Sentyx SG in tank mix with eptam at specified label rates. Include 1% volume/volume (1 gal./100 gals. spray solution) of either a modified seed oil adjuvant (MSO) or 0.5% volume/volume (0.5 gal./100 gals. spray solution) of an organo-silicon/modified seed oil blend (OS/MSO). Include a 2 lbs./acre of a spray-grade ammonium sulfate (AMS).

For optimum results, rainfall or sprinkler irrigation of ½-1 inch (sandy soils apply at least ⅓ inch, sandy loams apply at least ½ inch, silt soils apply at least ¾ inch, clay soils apply at least 1 inch), no sooner than 4 hours after application, but not more than 1 day after application.

Additional eptam can be added during the water in process if desired (read and follow all use directions, restrictions, and precautions on the eptam label before use. If these instructions conflict with this Sentyx SG label, **DO NOT** use as a tank mix with Sentyx SG).

**PRECAUTION:** Crop injury can occur (leaf burn and temporary yellowing) when applications are made under high temperatures. Addition of fungicides may increase the level of crop injury. In warm, moist conditions, the expression of herbicide symptoms is accelerated; in cold, dry conditions, expression of herbicide symptoms is delayed and may be more variable in weed control.

#### SEQUENTIAL APPLICATIONS – POTATOES

Depending upon rainfall or other environmental conditions, and the density of the top growth of the potato variety (those with poor top growth including Norkotah), annual weeds may have a second flush of germinating seedlings, and treated perennials may produce new growth from underground roots or stems. To maximize control, apply Sentyx SG a second time 14-28 days after the first application (typically, make applications to small weeds that are less than 1 inch in height or diameter that are actively growing). The combined rate of the applications must not exceed 2.5 oz. (0.156 lbs. ai) Sentyx SG per acre during the same year.

#### POTATOES GROWN FOR SEED

Use Sentyx SG on potatoes grown for seed that use field-grown tubers as the planted seed piece and are at least the progeny of the first field

planting. (First field planting utilizes laboratory-tested stocks, which may be tissue cultured plantlets, greenhouse-produced micro-tubers, mini-tubers, stem cuttings, or line selections.)

Apply Sentyx SG by any of the following methods:

- Pre-emergence: 1½ oz. (0.09375 lbs. ai) per acre;
- Post-emergence: 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre;
- Sequential application pre-emergence: 1-1½ oz. (0.0625 - 0.09375 lbs. ai) per acre, followed by post-emergence at 1 oz. (0.0625 lbs. ai) per acre;
- Post-emergence: 1 oz. (0.0625 lbs. ai) per acre followed by post-emergence at 1 oz. (0.0625 lbs. ai) per acre.

To activate Sentyx SG pre-emergence, supply moisture by a single rainfall event, or apply sprinkler irrigation of 1/3-1 inch (sandy soils apply at least 1/3 inch, sandy loams apply at least 1/2 inch, silt soils apply at least 3/4 inch, clay soils apply at least 1 inch) within 5 days after application to move Sentyx SG 2 to 3 inches deep into the soil profile.

#### POTATOES GROWN FOR SEED PRECAUTIONS

- Consider informing your state seed certification agency or inspector that Sentyx SG has been applied. Under growing conditions that promote crop stress (including drought, frost, cold temperatures, high temperatures, or extreme temperature variations), temporary chlorosis (lime green color) may occur after application. These symptoms may appear similar to virus-like symptoms (including chlorosis, leaf crinkling, pinching of terminal leaflet) but will usually disappear within 5 to 15 days of application.
- The rotational crop interval for Spring Barley is extended to 18 months due to the generally shorter growing seasons and different cultural practices in seed production in the states of California, Idaho, Oregon, Montana, South Dakota, Washington, Colorado, and parts of North Dakota (all counties in North Dakota except Pembina, Towner, Walsh, Grand Forks, Trail, and Cass).

#### POTATOES GROWN FOR SEED RESTRICTIONS

- **DO NOT** exceed 2.5 oz. (0.156 lbs. ai) per acre of Sentyx SG per year.
- **DO NOT** make more than one preemergence at greater than 1.5 ounces (0.09375 lbs. ai) and one postemergence no greater than 1 ounce (0.0625 lbs. ai).
- **DO NOT** make more than 2 applications per year.
- Allow a minimum of 14 days between applications.
- **DO NOT** apply to plants suffering stress from lack of moisture, cold, herbicide injury, and insect or disease injury.
- **DO NOT** use on potatoes grown for seed if these are grown from micro-tubers or transplants. Depending on geography, these may be referred to as Generation 1, Nuclear, Elite 1, or Pre-Elite.
- The rotational crop interval listed in the Sentyx SG label may need to be extended to 18 months if seed potato production practices decrease water and/or time for Sentyx SG breakdown. Practices that may shorten the breakdown are late planting or less frequent irrigations as compared to commercial production practices. Potatoes can be planted at any time.

#### WEEDS CONTROLLED - POTATO

PRE-EMERGENCE WEED CONTROL	
Grass Weeds	Broadleaf Weeds
Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Chamomile, false ( <i>Matricaria maritima</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Filaree, redstem ( <i>Erodium cicutarium</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Henbit ( <i>Lamium amplexicaule</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Kochia ( <i>Kochia scoparia</i> )
Wheat, volunteer ( <i>Triticum aestivum</i> )	Mustard, birdsrape ( <i>Brassica rapa</i> )
	Mustard, black ( <i>Brassica nigra</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
	Purslane, common ( <i>Portulaca oleracea</i> )
	Spurge, prostrate ( <i>Chamaesyce prostrata</i> )*
	Spurge, spotted ( <i>Chamaesyce maculata</i> )*

\* Not for use in California.

PRE-EMERGENCE PARTIAL WEED CONTROL <sup>‡</sup>	
Grass Weeds	Broadleaf Weeds
Crabgrass ( <i>Digitaria</i> spp.)	Cocklebur ( <i>Xanthium</i> spp.)
Oat, wild ( <i>Avena fatua</i> )	Lambsquarters, common ( <i>Chenopodium album</i> )
	Nightshade <sup>†</sup> , black ( <i>Solanum nigrum</i> )
	Nightshade, hairy ( <i>Solanum sarrachoides</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
	Velvetleaf ( <i>Abutilon theophrasti</i> )

<sup>‡</sup> Weed partial control is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area.  
<sup>†</sup> Eastern Black Nightshade (*Solanum ptycanthum*) is NOT controlled or suppressed.

POST-EMERGENCE WEED CONTROL	
Grass Weeds	Broadleaf Weeds
Barley, volunteer ( <i>Hordeum vulgare</i> )	Chamomile, false ( <i>Matricaria maritima</i> L.)
Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Chickweed, common ( <i>Stellaria media</i> )
Bluegrass, annual ( <i>Poa annua</i> )	Henbit ( <i>Lamium amplexicaule</i> )
Crabgrass, large ( <i>Digitaria sanguinalis</i> )	Kochia ( <i>Kochia scoparia</i> )
Foxtail, bristly ( <i>Setaria verticillata</i> )	Mustard, birdsrape ( <i>Brassica rapa</i> L.)
Foxtail, giant ( <i>Setaria faberi</i> )	Mustard, black ( <i>Brassica nigra</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Mustard, wild ( <i>Sinapsis arvensis</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
Panicum, fall ( <i>Panicum dichotomiflorum</i> )	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
Wheat, volunteer ( <i>Triticum aestivum</i> )	Purslane, common ( <i>Portulaca oleracea</i> )
	Shepherd's purse ( <i>Capsella bursa-pastoris</i> )
	Wild Radish ( <i>Raphanus raphanistrum</i> )

POST-EMERGENCE PARTIAL WEED CONTROL <sup>1</sup>	
Grass Weeds	Broadleaf Weeds
Johnsongrass, seedling ( <i>Sorghum halepense</i> )	Thistle, Canada† ( <i>Cirsium arvense</i> )
Millet, wild-proso ( <i>Panicum miliaceum</i> )	Cocklebur ( <i>Xanthium</i> spp.)
Oat, wild ( <i>Avena fatua</i> )	Lambsquarters, common ( <i>Chenopodium album</i> )
Stinkgrass ( <i>Eragrostis ciliaris</i> )	Morningglory, ivyleaf ( <i>Ipomoea hederacea</i> )
Yellow nutsedge ( <i>Cyperus esculentus</i> )	Nightshade, hairy ( <i>Solanum sarracoides</i> )
	Nightshade*, black† ( <i>Solanum nigrum</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Quackgrass* ( <i>Elymus repens</i> )
	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
	Smartweed, Pennsylvania ( <i>Polygonum pensylvanicum</i> )
	Velvetleaf ( <i>Abutilon theophrasti</i> )
	Volunteer Alfalfa** ( <i>Medicago sativa</i> )

<sup>1</sup> Eastern black nightshade (*Solanum ptycanthum*) is NOT controlled or suppressed.  
<sup>\*</sup> Except in California.  
<sup>†</sup> Weed partial control is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of partial control varies with the rate used, the size of weeds, and the environmental conditions following treatment.  
<sup>‡</sup> See "Specific Weed Problems".

**AERIAL APPLICATION PRECAUTIONS (See also SPRAY DRIFT):**

- Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage at a minimum of 5 GPA. In California use a minimum of 10 GPA.

**AERIAL APPLICATION RESTRICTIONS (See also SPRAY DRIFT):**

- **DO NOT** apply by air in the state of California, except in Modoc or Siskiyou counties.

- **DO NOT** apply by air in the state of New York.

**CHEMIGATION – POTATOES**

Apply Sentyx SG using center-pivot, lateral-move, solid-set, or hand-move irrigation systems in potatoes. **DO NOT** apply Sentyx SG using any other type of irrigation system. Check irrigation systems to ensure uniform application of water to all areas. Failure to apply Sentyx SG uniformly may result in crop injury and/or poor weed control.

For optimum results, use the highest labeled rate within the specified rate range and apply pre-emergence to early post-emergence to the weeds (weeds less than 1 inch tall). If weeds are present at application, add a nonionic surfactant containing at least 80% active ingredient to the spray mix at 16-32 ounces/acre.

Sentyx SG may be mixed in a supply tank with water, fertilizer, or other appropriate agricultural chemicals. Maintain continuous agitation in the injection nurse tanks during application.

For solid set and hand move irrigation systems, apply Sentyx SG at the beginning of the set and then apply 1/5-1 inch of water for activation (sandy soils apply at least 1/2 inch, sandy loams apply at least 1/2 inch, silt soils apply at least 3/4 inch, and clay soils apply at least 1 inch).

If you have questions about calibrating chemigation equipment, contact State Extension Service specialists, equipment manufacturers, or other experts. If the chemigation equipment needs adjustment, only the custodian responsible for its operation or someone under the supervision of that custodian must make the necessary adjustments.

**IRRIGATION SYSTEM REQUIREMENTS**

The irrigation system must contain the following:

- A functional check valve;
- Vacuum relief valve;
- A low-pressure drain (to prevent water source contamination from backflow; must be located on the irrigation pipeline);
- Functional interlocking controls (to automatically shut off the pesticide injection pump when the water pump motor stops);
- A metering pump, including positive-displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

The pesticide injection pipeline must contain the following:

- A functional, automatic, quick-closing check valve (to prevent the flow of fluid back toward the injection pump);
- A functional, solenoid-operated valve (normally closed) located on the intake side of the injection pump (needs to be connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is shut down either automatically or manually).

The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when pesticide distribution is adversely affected by a decrease in water pressure.

**CHEMIGATION PRECAUTIONS**

Distributing treated water in an uneven manner can result in crop injury, lack of effectiveness, and pesticide residues in the crop that may be above tolerance limits. Therefore, to ensure that the mixture is applied evenly at the labeled rate, use sufficient water and apply the mixture for the proper length of time.

**CHEMIGATION RESTRICTIONS**

- **DO NOT** permit run-off during chemigation.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- **DO NOT** connect an irrigation system (including greenhouse systems) used for Sentyx SG application to a public water system.

**SENTYX SG ROTATIONAL CROP GUIDELINES – POTATO**

For crops listed below, planting prior to the interval shown can result in crop injury when using this product. Rotation intervals may need to be extended to 18 months if drought conditions prevail after application and before the rotational crop is planted unless supplemental sprinkler

irrigation has been applied and totals greater than 15" during the growing season. For tank mixtures, follow the most restrictive rotational crop guideline.

Rotation Crop Interval (Months)	Interval (Months)
Corn (Field), Potatoes, Tomato	Anytime
Alfalfa**, Carrots (Kern County, CA)**, Cover Crops (erosion control), Grass, pasture, hay, seed**, Mint**, Soybeans, Winter Wheat	4
Garlic	6
Peas**	8
Barley (Spring*), Oats (Spring), Wheat (Spring)	9
Beans (Dry), Carrots**, Corn (Popcorn/Sweet), Cotton, Cucumber, Onions**, Sunflowers	10
Crops Not Listed	18

\* Idaho – 18 months for Teton County, Caribou County, Madison County East of Hwy. 20, and Fremont County East of Hwy. 20. Colorado – Alamosa, Conejos, Costilla, Rio Grande and Saguache Counties: 1.5 oz. (0.09375 lbs. ai ai) or less Sentyx SG per acre per year – 9 months; greater than 1½ oz. (0.09375 lbs. ai ai) of Sentyx SG per acre per year – 18 months

\*\* Potatoes grown in the counties listed below in OR and WA under sprinkler irrigation with a minimum of 18 inches of water per year. All other areas may be rotated to alfalfa at 18 months after application. This rotation interval is for sand, loamy sand, and sandy loam soils having not more than 1½% organic matter where a minimum of 18 inches of sprinkler irrigation is used on the previous potato crop. Injury to the rotated crop may occur if less than 18 inches of irrigation is used on the previous potato crop. For tank mixtures, follow the most restrictive rotational crop guideline.

\*\* **Specific Rotation for Crops marked \*\*:**

**For Rotation to Alfalfa:** Sentyx SG in potatoes not to exceed 1 ounce (0.0625 lb. ai) per year in the following Washington counties: Adams, Grant, Douglas, and Lincoln.

**For Rotation to Alfalfa:** Sentyx SG in potatoes not to exceed 1½ ounces (0.09375 lb. ai) per acre per year in the following Washington counties: Benton, Franklin, Klickitat, Walla Walla, and Yakima.

**For Rotation to Alfalfa:** Sentyx SG in potatoes not to exceed 1½ ounces (0.09375 lb. ai) per acre per year in the following Oregon counties: Morrow and Umatilla.

**For Rotation to Onions and Carrots:** Sentyx SG in potatoes not to exceed 1½ ounces (0.09375 lb. ai) per acre per year in the following Washington counties: Adams, Grant, Douglas, and Lincoln Counties of Washington

**For Rotation to Onions and Carrots:** Sentyx SG in potatoes not to exceed 2½ ounces (0.15625 lb. ai) per acre per year in the following Washington counties: Benton, Franklin, Klickitat, Walla Walla, and Yakima.

**For Rotation to Onions and Carrots:** Sentyx SG in potatoes not to exceed 2½ ounces (0.15625 lb. ai) per acre per year in the following Oregon counties: Morrow and Umatilla.

**For Rotation to Grass Crops Grown for Seed, Hay or Pasture:** Sentyx SG in potatoes not to exceed 1½ ounces (0.09375 lb. ai) per acre per year in the following Washington counties: Adams, Grant, Douglas, and Lincoln.

**For Rotation to Grass Crops Grown for Seed, Hay or Pasture:** Sentyx SG in potatoes not to exceed 2½ ounces (0.15625 lb. ai) per acre per year in the following Washington Counties: Benton, Franklin, Klickitat, Walla Walla, and Yakima.

**For Rotation to Grass Crops Grown for Seed, Hay or Pasture:** Sentyx SG in potatoes not to exceed 2½ ounces (0.15625 lb. ai) per acre per year in the following Oregon Counties: Morrow and Umatilla.

**For Rotation to Peas and Mints:** Sentyx SG in potatoes not to exceed 1½ ounces (0.09375 lb. ai) per acre per year in all areas.

**NOTE: DO NOT** use Sentyx SG in a tank mix or sequential application program with other soil residual ALS-inhibiting herbicides on potatoes as the combined effects of these herbicides on the planting of subsequent crops have not been thoroughly investigated and crop injury may occur.

#### RESTRICTIONS – POTATOES

- **DO NOT** apply more than 1.5 oz. (0.09375 lbs. ai)/A in a single application.
- **DO NOT** exceed 2½ oz. (0.156 lbs. ai)/A of Sentyx SG on potatoes during the same year.
- **DO NOT** make more than 2 applications per year.
- Allow a minimum of 14 days between applications.

- **DO NOT** apply Sentyx SG on potatoes within 30 days of harvest (**30-day PHI**).
- **DO NOT** apply to sweet potatoes or yams.
- **DO NOT** use Sentyx SG on potatoes grown for seed, except as directed on this labeling.
- **DO NOT** apply to potatoes growing in greenhouses, cold frames, pot cultures, etc. Apply only to potatoes growing in fields.

### TOMATOES (DIRECT-SEEDED AND TRANSPLANT)

#### PRE-EMERGENCE APPLICATIONS

Apply Sentyx SG after seeding at 2-4 ounces (0.125 – 0.25 lb. ai) product per acre.

To activate Sentyx SG in the soil, supply moisture by a single rainfall event, or apply sprinkler irrigation of ½-1 inch (sandy soils apply at least ½ inch, sandy loams apply at least ½ inch, silt soils apply at least ¾ inch, clay soils apply at least 1 inch) within 5 days after application to move Sentyx SG 2-3 inches deep into the soil profile.

Activating sprinkler irrigation is required regardless of the soil moisture level at planting or the cumulative precipitation that occurs over the next 5 days (unless rainfall occurs in a single event and equals the activation moisture requirement).

If rainfall or sprinkler activation cannot be managed, waiting for weeds to emerge and applying Sentyx SG post-emergence may result in better weed control.

If a clean, newly prepared seedbed, free of emerged or germinating weeds does not occur and weeds are present at application, add a spray adjuvant to improve weed control (see the "Spray Adjuvant" section of this label for additional information). Control may not be adequate for weeds that are greater than 1 inch in height or diameter or weeds that have an established root system before activation of Sentyx SG.

#### POST-EMERGENCE APPLICATIONS

For post-emergence applications, apply Sentyx SG at 1-2 ounces product (0.0625 - 0.125 lb. ai) per acre (use 2 ounces (0.125 lb. ai) per acre for longer residual) to young, actively growing weeds after the crop has reached the cotyledon stage. Optimum performance is obtained when weeds are less than 1 inch in height or diameter and are actively growing.

Use a surfactant at a minimum rate of 0.25% V/V (2 pints/100 gallons of water). The use of crop oil concentrate, methylated seed oils, nitrogen fertilizer solution, or nonionic surfactant rates above 0.25% V/V may result in temporary crop chlorosis (yellowish color). Symptoms usually disappear within 5-15 days.

Under growing conditions that promote crop stress (including drought, frost, cold temperatures, high temperatures, extreme temperature variations, or saturated or water-logged soils), temporary crop chlorosis (yellowish color) may occur after application with Sentyx SG. Symptoms usually disappear within 5-15 days.

For optimum results with Sentyx SG post-emergence, rainfall or sprinkler irrigation of ½ to 1 inch (sandy soils apply at least ½, sandy loams apply at least ½, silt soils apply at least ¾ inch, clay soils apply at least 1 inch), no sooner than 4 hours but not more than 5 days after application, will activate Sentyx SG in the soil and help provide control of subsequent flushes of annual weeds.

Make post-emergence applications of Sentyx SG after the tomatoes reach the cotyledon stage.

#### SEQUENTIAL APPLICATIONS TOMATOES

Annual weeds at times may have multiple flushes of seedlings, or treated weeds may sometimes regrow from underground stems or roots, depending upon rainfall and other environmental conditions. For optimum control, make a sequential application of Sentyx SG.

#### PRE-EMERGENCE FOLLOWED BY POST-EMERGENCE

Applications of Sentyx SG may be applied pre-emergence followed by a single or multiple applications postemergence.

#### RESTRICTION

For sequential applications the total amount of Sentyx SG must not exceed 4 oz. (0.25 lbs. ai) product per acre per year on a broadcast basis.

#### POST-EMERGENCE FOLLOWED BY POST-EMERGENCE

Multiple applications of Sentyx SG can be applied post-emergence, optimum control is seen when the first application is made to small actively growing weeds, followed by a second application 7-14 days later.

#### RESTRICTION

For sequential applications the total amount of Sentyx SG must not exceed 4 oz. (0.25 lbs. ai) product per acre per year on a broadcast basis.

#### BAND APPLICATIONS – TOMATOES

Sentyx SG can be applied pre-emergence and post-emergence as a banded application. Use proportionally less spray mixture based on the soil area actually sprayed. See the "Pre-emergence Applications" and "Post-emergence Applications" sections of this label for additional details on the use of Sentyx SG.

#### TANK MIXTURES – TOMATOES

Tank mix Sentyx SG with pesticide products labeled for use on tomatoes in accordance with the most restrictive of label limitations and precautions. If tank mixing Sentyx SG with another tomato pesticide(s), read and follow all use directions, restrictions, and precautions of both Sentyx SG and the tank mix partner(s).

Sentyx SG can be used in three-way tank mix combinations with the above pesticide(s). If these instructions conflict with this Sentyx SG label, **DO NOT** use as a tank mix with Sentyx SG. Tank mixtures with products that lower the spray solution pH may reduce weed control (including L1700 surfactant).

#### Sentyx SG plus Foliar Fungicides

Sentyx SG can be tank mixed with suitable registered fungicides (including mancozeb and chlorthaloniol) on tomatoes. Tank mixtures with copper-containing fungicides may reduce weed control.

Read and follow all manufacturers' label instructions for the companion fungicide. If these instructions conflict with this Sentyx SG label, **DO NOT** use as a tank mix with Sentyx SG.

#### RESTRICTIONS

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a year, on a broadcast application basis per year.
- **DO NOT** apply more than 4 oz. per acre (0.25 lbs. ai) per application.
- Allow a minimum of 7 days between applications.

### TOMATOES: CALIFORNIA

#### PRE-EMERGENCE APPLICATIONS

Apply 2-4 oz. (0.125 - 0.25 lbs. ai) Sentyx SG per acre after seeding. To activate Sentyx SG in the soil, supply moisture by a single rainfall event, or apply sprinkler irrigation of ½-1 inch (sandy soils apply at least ¼ inch, sandy loams apply at least ½ inch, silt soils apply at least ¾ inch, clay soils apply at least 1 inch) within 5 days after application to move Sentyx SG 2-3 inches deep into the soil profile. Activating sprinkler irrigation is required regardless of the soil moisture level at planting, or the cumulative precipitation that occurs over the next 5 days (unless rainfall occurs in a single event and equals the activation moisture requirement). If rainfall or sprinkler activation cannot be managed, waiting for weeds to emerge and applying Sentyx SG post-emergence may result in better weed control.

If a clean, newly prepared seedbed, free of emerged or germinating weeds does not occur and weeds are present at application, add a spray adjuvant to improve weed control (see the "Spray Adjuvant" section of this label for additional information). Control may not be adequate for weeds that are greater than 1 inch in height or diameter or weeds that have an established root system before activation of Sentyx SG.

#### POST-EMERGENCE APPLICATIONS

For post-emergence applications, apply 2 oz. (0.125 lbs. ai) Sentyx SG per acre to young, actively growing weeds after the crop has reached the cotyledon stage. Optimum performance is obtained when weeds are less than 1 inch in height or diameter and are actively growing.

Use a surfactant at a minimum rate of 0.25% V/V (2 pints/100 gallons of water). The use of crop oil concentrate, methylated seed oils, nitrogen

fertilizer solution or nonionic surfactant rates above 0.25% V/V may result in temporary crop chlorosis (yellowish color). Symptoms usually disappear within 5-15 days.

Under growing conditions that promote crop stress (including drought, frost, cold temperatures, high temperatures, extreme temperature variations, or saturated or water-logged soils), temporary crop chlorosis (yellowish color) may occur after application of Sentyx SG. Symptoms usually disappear within 5-15 days.

For optimum results with Sentyx SG post-emergence, rainfall or sprinkler irrigation of ½-1 inch (sandy soils apply at least ¼ inch, sandy loams apply at least ½ inch, silt soils apply at least ¾ inch, clay soils apply at least 1 inch) no sooner than 4 hours but not more than 5 days after application will activate Sentyx SG in the soil and help provide control of subsequent flushes of annual weeds.

Make post-emergence applications of Sentyx SG after the tomatoes reach the cotyledon stage.

#### SEQUENTIAL APPLICATIONS

Annual weeds at times may have multiple flushes of seedlings, or treated weeds may sometimes regrow from underground stems or roots, depending upon rainfall and other environmental conditions. To optimize control make a sequential application of Sentyx SG.

#### PRE-EMERGENCE FOLLOWED BY POST-EMERGENCE

Apply Sentyx SG pre-emergence followed by single or multiple applications of post-emergence.

#### RESTRICTION

For sequential applications the total amount of Sentyx SG must not exceed 4 oz. (0.25 lbs. ai) product per acre year on a broadcast basis.

#### POST-EMERGENCE FOLLOWED BY POST-EMERGENCE

Multiple applications of Sentyx SG can be made post-emergence; optimum control is seen when the first application is made to small actively growing weeds followed by a second application 7-14 days later.

#### RESTRICTION

For sequential applications the total amount of Sentyx SG must not exceed 4 oz. (0.25 lbs. ai) product per acre per year on a broadcast basis.

#### BAND APPLICATIONS – TOMATOES

Apply 2-4 oz. (0.125 - 0.25 lbs. ai) per acre Sentyx SG in a pre-emergence band at (For example, ½-1 oz. (0.03125 - 0.0625 lbs. ai) of product per conventional broadcast acre assuming 25% banding) followed by two separate post-emergence band applications applied at 2 oz. (0.125 lbs. ai) product per acre (For example, ½ oz. (0.03125 lbs. ai) of product per conventional broadcast acre assuming 25% banding) over the same sprayed area.

#### RESTRICTION

**DO NOT** make any more than three band applications of Sentyx SG in one year.

**WEEDS CONTROLLED - TOMATO**

PRE-EMERGENCE WEED CONTROL	
Grass Weeds	Broadleaf Weeds
Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Filaree, redstem ( <i>Erodium cicutarium</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Henbit ( <i>Lamium amplexicaule</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Kochia ( <i>Kochia scoparia</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Mustard, black ( <i>Brassica nigra</i> )
Wheat, volunteer ( <i>Triticum aestivum</i> )	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
	Purslane, common ( <i>Portulaca oleracea</i> )

PRE-EMERGENCE PARTIAL WEED CONTROL <sup>‡</sup>	
Grass Weeds	Broadleaf Weeds
Crabgrass, large ( <i>Digitaria spp.</i> )	Cocklebur ( <i>Xanthium spp.</i> )
Wild Oat ( <i>Avena fatua</i> )	Lambsquarters, common ( <i>Chenopodium album</i> )
	Nightshade*, black <sup>†</sup> ( <i>Solanum nigrum</i> )
	Nightshade, hairy ( <i>Solanum sarrachoides</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
	Velvetleaf ( <i>Abutilon theophrasti</i> )

<sup>†</sup> Eastern black nightshade (*Solanum ptycanthum*) is NOT controlled or suppressed. Black nightshade partial control is only for use in Tomatoes in California.

<sup>‡</sup> See "Specific Weed Problems".

<sup>‡</sup> Weed partial control is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area.

POST-EMERGENCE WEED CONTROL (weeds not to exceed 1 inch in height)	
Grass Weeds	Broadleaf Weeds
Barley, volunteer ( <i>Hordeum vulgare</i> )	Chamomile, false ( <i>Matricaria maritima</i> )
Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Chickweed, common ( <i>Stellaria media</i> )
Bluegrass, annual ( <i>Poa annua</i> )	Henbit ( <i>Lamium amplexicaule</i> )
Crabgrass ( <i>Digitaria spp.</i> )	Kochia ( <i>Kochia scoparia</i> )
Foxtail, bristly ( <i>Setaria verticillata</i> )	Mustard, birdsrape ( <i>Brassica rapa L.</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Mustard, black ( <i>Brassica nigra</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Mustard, wild ( <i>Sinapsis arvensis</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
Panicum, fall ( <i>Panicum dichotomiflorum</i> )	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
Wheat, volunteer ( <i>Triticum aestivum</i> )	Purslane, common ( <i>Portulaca oleracea</i> )
	Shepherd's purse ( <i>Capsella bursa-pastoris</i> )
	Wild Radish ( <i>Raphanus raphanistrum</i> )

POST-EMERGENCE PARTIAL WEED CONTROL <sup>‡</sup>	
Grass Weeds	Broadleaf Weeds
Johnsongrass, seedling ( <i>Sorghum halepense</i> )	Thistle, Canada <sup>†</sup> ( <i>Cirsium arvense</i> )
Millet, wild-proso ( <i>Panicum miliaceum</i> )	Cocklebur ( <i>Xanthium spp.</i> )
Oat, wild ( <i>Avena fatua</i> )	Lambsquarters, common ( <i>Chenopodium album</i> )
Quackgrass ( <i>Elymus repens</i> )	Morningglory, ivyleaf ( <i>Ipomoea hederacea</i> )
Stinkgrass ( <i>Eragrostis ciliaris</i> )	Nightshade, hairy ( <i>Solanum sarrachoides</i> )
Yellow Nutsedge ( <i>Cyperus esculentus</i> )	Nightshade*, black <sup>†</sup> ( <i>cotyledon stage only</i> ) ( <i>Solanum nigrum</i> )
	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )
	Quackgrass <sup>‡</sup> ( <i>Elymus repens</i> )
	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
	Smartweed, Pennsylvania ( <i>Polygonum pensylvanicum</i> )
	Velvetleaf ( <i>Abutilon theophrasti</i> )
	Volunteer Alfalfa** ( <i>Medicago sativa</i> )

<sup>†</sup> Eastern black nightshade (*Solanum ptycanthum*) is NOT controlled or suppressed. Black nightshade partial control is only for use in Tomatoes in California.

\*\* Except in California.

<sup>‡</sup> Weed partial control is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of partial control varies with the rate used, the size of weeds, and the environmental conditions following treatment.

<sup>‡</sup> See "Specific Weed Problems".

**SENTYX SG ROTATIONAL CROP GUIDELINES – TOMATO**

For crops listed below, planting prior to the interval shown may result in crop injury when using Sentyx SG. Rotation intervals may need to be extended to 18 months if drought conditions prevail after application and before the rotational crop is planted, unless supplemental sprinkler irrigation has been applied and totals greater than 15 inches during the growing season. For tank mixtures, follow the most restrictive rotational crop guideline.

Rotation Crop	Interval (Months)
Corn (Field), Potatoes, Tomatoes	Anytime
Wheat, Winter	4
Garlic	6
Beans (Dry/Snap), Corn (Sweet), Cotton, Cucumber, Soybeans	10
Crops Not Listed	12

**Note:** Where drip-irrigated tomatoes are grown, rotate only to tomato, potato, or field corn as crop injury may result.

Rotational crops may be planted at indicated intervals provided the fields are deep disked or plowed and thorough soil mixing is achieved prior to planting the rotational crop.

**RESTRICTIONS – TOMATO**

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 4 applications per acre per year, when using reduced application rates.
- Allow a minimum of 7 days between applications.

- **DO NOT** apply Sentyx SG within 45 days of tomato harvest (**45-day PHI**).
- **DO NOT** apply Sentyx SG by air on tomatoes.
- **DO NOT** apply using assisted (Air Blast) field crops sprayers on tomatoes.
- **DO NOT** exceed 4 ounces (0.25 lb. ai) Sentyx SG per acre (broadcast basis) on tomatoes during the same year.
- **DO NOT** apply to tomatoes growing in greenhouses, cold frames, pot cultures, etc. Apply only to tomatoes growing in fields.
- **DO NOT** apply through any type of irrigation system.

#### CULTIVATION

A timely cultivation may be necessary to control suppressed weeds, weeds that were beyond the maximum size at application, or weeds that emerge after an application of Sentyx SG.

- Cultivation up to 7 days before the post-emergence application of Sentyx SG may decrease weed control by pruning weed roots, placing the weeds under stress or covering the weeds with soil and preventing coverage by Sentyx SG.
- To allow Sentyx SG to fully control treated weeds, **DO NOT** cultivate for 7 days after application.
- Optimizing timing for cultivation is 7-14 days after a post-emergence application of Sentyx SG.

#### SPECIFIC WEED PROBLEMS

**Quackgrass:** Apply Sentyx SG post-emergence to quackgrass that is 4-8 inches tall. Quackgrass not emerged at the time of application will not be controlled or suppressed and will require a second post-emergence application for acceptable control.

**Black Nightshade (Tomatoes):** For optimum results, apply Sentyx SG pre-emergence (prior to weed germination) at 2-4 oz. (0.125 - 0.25 lbs. ai) per acre followed by a post-emergence application at 1-2 oz. (0.0625 - 0.125 lbs. ai) per acre to small actively growing weeds.

**Canada Thistle:** For optimum results, apply Sentyx SG post-emergence to small actively growing Canada thistle. Canada thistle not emerged at the time of application will not be controlled or suppressed and will require a second post-emergence application for acceptable control.

#### SPRAY ADJUVANTS

Include a spray adjuvant with applications of Sentyx SG when applied by itself and post-emergence to the weeds. Consult your Ag dealer or applicator prior to using an adjuvant system. If another herbicide is tank mixed with Sentyx SG, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients (40 CFR 910 or 40 CFR 920).

#### Nonionic Surfactant (NIS)

- Apply 0.125 to 0.25% v/v (1-2 pints/100 gals. of water). Use the 0.25% v/v rate in arid or drought conditions.
- Surfactant products must contain at least 80% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

#### Petroleum Crop Oil Concentrate (COC) or Modified Seed Oil (MSO)

- Apply at 1% volume/volume (1 gal. per 100 gals. spray solution) or 2% under arid conditions.
- Oil adjuvants must contain at least 80% high-quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.
- Blended products that contain both MSO and silicone are acceptable at labeled rates.

#### Ammonium Nitrogen Fertilizer

- Use 2 quarts/acre of a high-quality urea ammonium nitrate (UAN), including 28%N or 32%N, or 2 lbs./acre of a spray-grade ammonium sulfate (AMS). Use 4 quarts/acre UAN or 4 lbs./acre AMS under arid conditions.
- **DO NOT** use liquid nitrogen fertilizer as the total carrier solution.

#### Special Adjuvant Types

- Combination adjuvant products may be used at doses that provide the required amount of NIS and ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.
- **DO NOT** use any other adjuvant rates or mixtures with Sentyx SG unless instructed to do so by an Loveland Products, Inc. representative.

#### Precautions

- Using a silicone polymer-type surfactants is not suggested as reduced weed control may result.

- Avoid using crop oil concentrate (COC) or methylated seed oil (MSO) when tomatoes are under heat stress (>85°F) as multiple stresses may cause crop injury.

#### EQUIPMENT-SPRAY VOLUMES

Agitate the spray tank continuously to keep the material in suspension.

**DO NOT** use equipment and/or spray volumes that will cause damage from spray by drift onto nontarget sites. **DO NOT** make applications when weather conditions are likely to cause spray to drift onto nontarget sites. (See the "Spray Drift Management" section of this label for additional information.)

#### GROUND APPLICATION - POTATOES AND TOMATOES

To ensure optimum spray distribution and thorough coverage, apply Sentyx SG with a properly calibrated, low-pressure (20-40 psi) boom sprayer equipped with flat fan, "Twinjet", under-leaf banding nozzles or flood jet nozzles. Nozzle screens must be no finer than 50 mesh. When using flood nozzles, the spray pattern must overlap 100% for optimum product performance. For banded applications even-flow flat fan or twin jet spray nozzles may provide a more uniform spray distribution.

For maximum pre-emergence activity, prior to application, the bed or soil surface must be smooth and relatively free of crop and weed trash (dead weeds, decaying leaves, clippings, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide application. Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of Sentyx SG. Cutting water furrows or cultivations that mix untreated soil into the treated areas will also reduce the effectiveness of the herbicide treatment.

For optimum results, apply Sentyx SG with another suitable residual herbicide registered for that crop on all soil types, but especially on coarse-textured soils under standard sprinklers or micro-sprinklers.

More than one banded application of Sentyx SG may be needed to provide extended weed control.

#### Potatoes and Tomatoes Precautions

- Potato and tomato varieties may differ in their response to various herbicides. Consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use to a small area.
- Pre-emergence use on soils containing more than 6% organic matter may not provide adequate soil-residual weed control and may result in reduced weed control.
- Pre-emergence and post-emergence use on rill-irrigated potatoes and tomatoes (furrow or gravity) may not provide adequate weed control in the absence of rainfall.
- If sprinklers are used for frost protection, delay the application of Sentyx SG until stress from environmental conditions has passed.
- Avoid spray drift to any adjacent crops or desirable plants as injury may occur.
- Crop injury may occur following an application of Sentyx SG if there is a prolonged period of cold weather and/or cold weather in conjunction with wet soils caused by poor drainage or excessive use of sprinkler irrigation for frost protection.
- Draining or flushing equipment on or near desirable trees or other plants, or in areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots may injure these plants. Trees or other desirable plants whose roots extend into a treated crop use area may be injured.
- For best results, maintain spray tank solution at pH 5 to 7.
- If the selected companion herbicide has a ground or surface water advisory, consider the advisory when using the companion herbicide.
- Tank mixing Sentyx SG with organophosphate insecticides in tomatoes may result in crop injury.

#### Potatoes and Tomatoes Restrictions

- **DO NOT** apply to frozen or snow-covered soil. Crop injury may occur from applications made to poorly drained soils.

## BLUEBERRY (HIGH AND LOW BUSH) AND CANEBERRY (RASPBERRY AND BLACKBERRY)

### BLUEBERRY (High Bush)

For broadcast applications, make a single application of Sentyx SG pre-emergence or early post-emergence to actively growing weeds at 4 ounces (0.25 lb. ai) per acre per year. Use a directed spray application adjusted to provide complete coverage of the weeds while minimizing the amount of spray coming into contact with the blueberry plants.

When applied as a banded treatment (50% treated band or less), Sentyx SG may be applied twice per year.

- Allow a minimum of 30 days between applications.
- Applications made after bud break may cause temporary chlorosis and/ or stunting of leaves contacted by the spray.
- Use Sentyx SG on high bush blueberries that have gone through at least one growing season and are in good health and vigor.
- Sentyx SG may be applied in tank mixture with other herbicides registered for use in high bush blueberries.

### Blueberry (High Bush) Restrictions

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 2 applications per year when applied as a banded treatment (50% band or less).
- **DO NOT** make more than 1 application per year when applied as a broadcast treatment.
- Allow a minimum of 30 days between applications.
- **DO NOT** apply within 21 days of first harvest (**21-day PHI**).
- **DO NOT** apply by air.
- **DO NOT** use on soils classified as sand.
- **DO NOT** apply more than 4 ounces (0.25 lb. ai) of product per acre on a broadcast application basis per year.

### BLUEBERRY (Low Bush)

All applications of Sentyx SG are to be applied in the vegetative year growth stage of low bush blueberries. Make a single broadcast application of Sentyx SG pre-emergence or early post-emergence to actively growing weeds at 4 ounces (0.25 lb. ai) per acre per year. When applied as a banded treatment (50% treated band or less), Sentyx SG may be applied twice per year.

- Allow a minimum of 30 days between applications.
- For broadcast treatments, make the application prior to bud break of the blueberries. After bud break, use a directed spray application adjusted to provide complete coverage of the weeds while minimizing spray contact with the blueberry plants.
- Applications made after bud break may cause temporary chlorosis and/ or stunting of leaves contacted by the spray.
- Use Sentyx SG on low bush blueberries that have gone through at least one growing season and are in good health and vigor.
- Sentyx SG may be applied in tank mixture with other herbicides registered for use in low bush blueberries.

### Blueberry (Low Bush) Restrictions

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 2 applications per acre per year when applied as a banded treatment (50% band or less).
- **DO NOT** make more than 1 application per year when applied as a broadcast treatment.
- Allow a minimum of 30 days between applications.
- **DO NOT** apply within 21 days of first harvest (**21-day PHI**).
- **DO NOT** apply by air.
- **DO NOT** use on soils classified as sand.
- **DO NOT** apply more than 4 ounces (0.25 lb. ai) per acre on a broadcast application basis per year.

### CANEERRY (Raspberry, Blackberry)

For broadcast applications, make a single application of Sentyx SG pre-emergence or early post-emergence to actively growing weeds at 4 ounces (0.25 lb. ai) per acre per year. Use a directed spray application adjusted to provide complete coverage of the weeds while minimizing the amount of spray coming into contact with the caneberry plants. When applied as a banded treatment (50% treated band or less), Sentyx SG may be applied twice per year.

- Allow a minimum of 30 days between applications.
- If primocanes are up at time of treatment, temporary chlorosis of foliage and/or stunting of primocane growth may occur. These symptoms are temporary and **DO NOT** affect the overall health and vigor of primocane development.
- Use Sentyx SG on caneberry plants that have gone through at least one growing season and are in good health and vigor.
- Sentyx SG may be applied in tank mixture with other herbicides registered for use in caneberry.

### Caneberry (Raspberry, Blackberry) Restrictions

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 2 applications per year when applied as a banded treatment (50% band or less).
- **DO NOT** make more than 1 application per year when applied as a broadcast treatment.
- Allow a minimum of 30 days between applications.
- **DO NOT** apply within 21 days of first harvest (**21-day PHI**).
- **DO NOT** apply by air.
- **DO NOT** use on soils classified as sand.
- **DO NOT** apply more than 4 ounces (0.25 lb. ai) per acre on a broadcast application basis per year.

## RANGELAND RESTORATION WEST OF THE MISSISSIPPI RIVER

### PRODUCT INFORMATION

A restoration management program that includes Sentyx SG may be used when rangeland has become severely infested with invasive weed species such that the land has deteriorated to a point that it is no longer suitable for grazing or forage production. To reclaim these lands, the invasive weed species must first be controlled to allow native grasses to reestablish or to be replanted with desirable forage grasses. The grasses must be allowed time to reestablish before grazing or forage production is resumed. A typical restoration management program will take one to two years. Sentyx SG may be used to control grass and broadleaf weeds listed in this section under Weeds Controlled. The residual activity of Sentyx SG will also help prevent the reemergence of many of these weeds while desirable grasses are being re-established.

At the maximum application rate of 4.0 ounces (0.25 lb. ai) of Sentyx SG per acre per year, desirable rangeland perennial grasses in the treated area may exhibit a temporary chlorosis (yellowing of foliage) following application. The use of an adjuvant with Sentyx SG can increase desirable perennial grass injury.

**RESTRICTION - DO NOT** graze treated sites or cut for forage or hay for a minimum of 1 year after application in order to allow newly emerged grasses sufficient time to become established. Where practical, fencing or other measures are to be used to prevent early grazing of re-established sites to help promote active grass restoration.

### RESTORATION PROGRAM

An effective restoration program may include one or more of the following steps (A through F):

- Identify and inventory weeds and desired grass densities.
- Consult and plan the entire program with personnel experienced in herbicide programs and range restoration. Make applications of Sentyx SG prior to soil freeze or after spring thaw.
- Make sure all label precautions are followed.
- Include a tank mix partner labeled for use on rangeland to broaden the spectrum of weeds controlled.
- Plant grass seed as needed to improve the site, per the Grass Replant Interval in this section of the label.
  - Plant to obtain the highest possible grass stand establishment.
  - Plant a selected grass mixture to improve the desired stand.
  - Use a properly fitted drill to help ensure correct seed placement and depth.
  - Seed in late fall to best ensure moisture for seed germination. Seeding in the spring has the highest risk of stand failure.
  - Consult with a knowledgeable grass seed supplier to select the best-suited varieties for your area.
- Treat for second year forbs (if necessary): Treat with 75% chlorsulfuron + bromoxynil at specified label rates to weeds at the early growth stage.

#### GRASS REPLANT INTERVAL

The replant interval is for soils with a pH of less than 7.5. Soils having a pH greater than 7.5 will require a longer interval. The replant interval is for applications made in the spring. Because Sentyx SG degradation is slowed by cold, dry, or frozen soils, the replant interval for applications made in the fall must begin the spring following treatment.

Following a treatment with Sentyx SG at use rates up to 4 ounces (0.25 lb. ai) of product per acre, the following grasses may be replanted at least 7 months after a spring application. Rainfall or irrigation of at least ½ inch following treatment is necessary to replant 7 months after a Sentyx SG application. If the treated site does not receive at least ½ inch of rainfall or irrigation within 4 weeks after Sentyx SG application, then the grass replant interval is 12 months.

Crested wheatgrass ( <i>Agropyron cristatum</i> )	Beadless (creeping) wild rye ( <i>Leymus triticoides</i> )
Intermediate wheatgrass ( <i>Thinopyrum intermedium</i> )	Big bluegrass ( <i>Poa ampla</i> )
Blue bunch wheatgrass ( <i>Pseudoroegneria spicata</i> )	Idaho fescue ( <i>Festuca idahoensis</i> )
Squirreltail ( <i>Elymus elymoides</i> )	Smooth brome ( <i>Bromus inermis</i> )

Testing has indicated that there is considerable variation in response among species and types of grasses when seeded into areas treated with Sentyx SG. If species other than those listed above are to be planted into areas treated with Sentyx SG, a field bioassay must be performed, or previous experience may be used to determine the feasibility of replanting treated areas. To conduct a field bioassay, grow to maturity test strips of the grass species you plan to grow the following year. The test strips must cross the entire field including knolls and low areas. Crop response to the bioassay will indicate whether or not to plant the grass species grown in the test strips.

#### APPLICATION EQUIPMENT

Apply Sentyx SG using ground or aerial spray equipment. Fixed-wing aircraft and helicopters can be used to apply Sentyx SG; however, **DO NOT** make applications by fixed-wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift as a result of fixed-wing aircraft application can be tolerated. Aerial equipment designed to minimize spray drift, including a helicopter equipped with a Microfoli® boom or raindrop nozzles, must be used and calibrated. Except when applying with a Microfoli® boom, a drift-control agent may be added at the labeled rate.

#### APPLICATION RATES AND TIMING

Apply 2-4 ounces (0.125 – 0.25 lb. ai) per acre Sentyx SG in the fall or spring, prior to moisture expectation and plant growth. **DO NOT** apply when soil is frozen. For residual activity, moisture is required to activate Sentyx SG. When applied at lower rates in the spring, Sentyx SG provides suppression\* of weeds listed. When applied at higher rates in the fall, weed control is afforded.

\*Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated check. The degree of actual control that may occur will vary with the size of the weeds, the degree of weed or desirable grass competition, and environmental conditions.

#### TANK MIXTURES

Sentyx SG may be tank mixed with other herbicides registered for rangeland use. Refer to the label of the tank mix partner(s) for any additional use instructions or restrictions. Sentyx SG may be mixed with chlorsulfuron at specified label rates to broaden the spectrum of broadleaf and grass weed control. Refer to the chlorsulfuron label for additional information on weed species controlled, use rates, and instructions or restrictions.

#### WEEDS CONTROLLED

When applied at 2 ounces (0.125 lb. ai) per acre in the spring, Sentyx SG suppresses the following weeds and when applied at 3 ounces (0.1875 lb. ai) per acre in the fall, Sentyx SG controls the following weeds:

Brome, downy (cheatgrass) ( <i>Bromus tectorum</i> )	Cheat ( <i>Bromus secalinus</i> )
Brome, Japanese ( <i>Bromus japonicus</i> )	

When applied at 4 ounces (0.25 lb. ai) per acre, Sentyx SG controls the following additional weeds:

Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Mallow, common ( <i>Malva neglecta</i> )
Crabgrass, large ( <i>Digitaria sanguinalis</i> )	Horseweed/marestail* ( <i>Conyza canadensis</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Medusahead ( <i>Taeniatherum caput-medusae</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Mustard, black ( <i>Brassica nigra</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
Filaree redstem ( <i>Erodium cicutarium</i> )	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
Fleabane, hairy ( <i>Conyza bonariensis</i> )	Puncturevine ( <i>Tribulus terrestris</i> )

\* Naturally occurring resistant biotypes of this weed are known to exist in some areas of the U.S. Sentyx SG will not control these biotypes.

#### Use Precautions

- In order to reduce the potential for off-site movement of Sentyx SG from wind or water-related soil erosion, **DO NOT** burn, disk, or otherwise disturb treated sites between the time of application and reseeding or re-establishment of native grasses.
- Pre-emergence use on soils containing more than 6% organic matter may result in reduced weed control.
- Minimize spray drift to any adjacent crops or planned crop planting areas or desirable plants since injury may occur.
- Draining or flushing equipment on or near desirable trees or other plants or in areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots may injure these plants. Crops (especially crops other than pome fruit, tree nuts, stone fruit, citrus, grapes, potatoes, tomatoes, and field corn) whose roots may extend into a treated area may be injured.
- Treatment of powdery, dry soil or light sandy soil when there is little likelihood of rainfall soon after treatment may result in off-target movement and possible damage to susceptible crops when soil particles are moved by wind or water.
- Injury to crops may result if treated soil is washed, blown, or moved onto land used to produce crops.
- Exposure to Sentyx SG may injure or kill most crops. Injury may be more severe when the crops are irrigated.

#### Use Restrictions

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 2 applications per year, when using reduced application rates.
- Allow a minimum of 14 days between applications.
- **DO NOT** graze treated sites or cut for forage or hay for a minimum of 1 year after application in order to allow newly emerged grasses sufficient time to become established.
- **DO NOT** apply Sentyx SG when these conditions are identified and where powdery, dry soil or light or sandy soil is known to be prevalent in the area to be treated.
- **DO NOT** contaminate any body of water, including irrigation water that may be used on other crops.
- **DO NOT** treat frozen soil.
- **DO NOT** apply in or on irrigation ditches or canals including their outer banks.
- **DO NOT** apply through any type of irrigation system. If restoration sites treated with Sentyx SG are to be converted to an agricultural use other than rangeland, consult the Sentyx SG label for all rotational crop instructions.

#### SELECTIVE WEED CONTROL AND INVASIVE SPECIES MANAGEMENT IN NON-CROP SITES

(Not for use in New York State)

Sentyx SG is a water dispersible granule formulation to be mixed with water and sprayed for weed control on private, public, and military lands as follows: non-agricultural areas (including airports, highway, railroad and utility rights-of-way, sewage disposal areas); uncultivated agricultural areas – non-crop producing (including farmyards, fuel storage areas, fence rows, non-irrigation ditch-banks, barrier strips); industrial sites – outdoor (including lumberyards, pipeline and tank farms), and non-cropland wildlife habitats.

#### INVASIVE SPECIES MANAGEMENT

Sentyx SG may be used on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive,

consistent with the Federal Interagency Committee for Management of Noxious and Exotic Weeds (FICMNEW) and National Early Detection and Rapid Response (EDRR) System for invasive plants.

Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is specified, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible, eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

Sentyx SG is non-corrosive to spray equipment, non-flammable and non-volatile. **DO NOT** use Sentyx SG in a spray solution or with spray additives that buffer the pH to below 4.0 or above 8.0 as degradation of Sentyx SG may occur.

Sentyx SG may be used in weed management programs on non-crop sites to provide residual preemergence and early post-emergence control of the following weeds:

Barnyardgrass ( <i>Echinochloa crus-galli</i> )	Mallow, common ( <i>Malva neglecta</i> )
Browne, downy ( <i>Bromus tectorum</i> )	Horseweed/marestail* ( <i>Conyza canadensis</i> )
Crabgrass, large ( <i>Digitaria sanguinalis</i> )	Medusahead ( <i>Taeniatherum caput-medusae</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Mustard, black ( <i>Brassica nigra</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )
Foxtail, yellow ( <i>Setaria pumila</i> )	Pigweed, smooth ( <i>Amaranthus hybridus</i> )
Filaree redstem ( <i>Erodium cicutarium</i> )	Puncturevine ( <i>Tribulus terrestris</i> )
Fleabane, hairy ( <i>Conyza bonariensis</i> )	

\* Naturally occurring resistant biotypes of this weed are known to exist in some areas of the U.S. Sentyx SG will not control these biotypes.

Refer to the rest of the label for other weeds controlled.

To provide a broader spectrum of residual weed control, Sentyx SG may be applied in a tank mixture with other registered pre-emergence herbicides. When weeds are present at application, include a labeled burndown herbicide, including glyphosate.

For best results, make post-emergence applications to young, actively growing weeds and include a spray adjuvant. Refer to the label of the tank mixture partner(s) for any additional use instructions or restrictions. Follow the most restrictive labeling of any of the tank-mix component products.

#### TANK MIXTURES

Sentyx SG may be mixed with other herbicides registered for non-crop use. It may also be tank mixed with any adjuvants registered for non-crop use. Refer to the label of the tank mixture partner(s) for any additional use instructions or restrictions.

#### APPLICATION INFORMATION

Apply 4 ounces (0.25 lb. ai) broadcast per acre Sentyx SG. **DO NOT apply more than 4.0 ounces (0.25 lb. ai) of Sentyx SG per acre per year.**

For best pre-emergence and residual activity, Sentyx SG must be activated by rainfall and applied when soil temperatures are cool. Make applications to take advantage of normal rainfall patterns (minimum of ½ inch) and cooler temperatures. For best results, moisture for activation must occur within 2-3 weeks after application.

To help ensure uniform coverage, use a minimum of 10 gallons of spray solution per acre.

Sentyx SG may be applied using ground or aerial spray equipment. Fixed wing aircraft and helicopters can be used to apply Sentyx SG; however, **DO NOT** make applications by fixed wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift as a result of fixed wing aircraft application can be tolerated. Aerial equipment designed to minimize

spray drift, including helicopter equipped with a Microfoil™ boom or raindrop nozzles, must be used and calibrated. Except when applying with a Microfoil™ boom, a drift control agent may be added at the labeled rate.

#### NON-CROPLAND RESTORATION

Sentyx SG is labeled for the control of downy brome (cheatgrass), medusahead, and certain broadleaf weeds in non-cropland. In order to release desirable, perennial grass species for site restoration, Sentyx SG may be applied at 3-4 ounces (0.1875 - 0.25 lb. ai) of product per acre in the fall, within 6 weeks before the expected date when the soil freezes. Use the higher rate for medusahead control.

To provide broader spectrum broadleaf weed control in non-crop land restoration, a tank mixture of Sentyx SG and chlorsulfuron may be used at specified label rates.

#### USE PRECAUTIONS

- Pre-emergence use on soils containing more than 6% organic matter may result in reduced weed control. Avoid spray drift to any adjacent crops or planned crop planting areas or desirable plants since injury may occur.
- Draining or flushing equipment on or near desirable trees or other plants or in areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots may injure these plants.
- Crops (especially crops other than pome fruit, tree nuts, stone fruit, citrus, grapes, potatoes, tomatoes, and field corn) whose roots may extend into a treated area may be injured.
- Where food and/or feed crops are grown, or in areas where food and/or feed crops are planned to be grown, care must be taken to prevent any direct spray of Sentyx SG onto, or drift to, these crops or planned planting areas since severe crop injury may occur.
- Treatment of powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment may result in off-target movement and possible damage to susceptible crops when soil particles are moved by wind or water.
- Injury to crops may result if treated soil is washed, blown, or moved onto land used to produce crops.
- Exposure to Sentyx SG may injure or kill most crops. Injury may be more severe when the crops are irrigated.

#### USE RESTRICTIONS

- **DO NOT** apply more than 4 oz. (0.25 lbs. ai)/A in a single application.
- **DO NOT** exceed 4 oz. (0.25 lbs. ai)/A in a year.
- **DO NOT** make more than 1 application per year.
- **DO NOT** apply Sentyx SG when these conditions are identified and powdery, dry soil or light, or sandy soil is known to be prevalent in the area to be treated.
- **DO NOT** contaminate any body of water, including irrigation water that may be used on other crops.
- **DO NOT** apply in or on irrigation ditches or canals including their outer banks. **DO NOT** apply when the soil is frozen.

If non-crop sites treated with Sentyx SG are to be converted to an agriculture use, consult the Sentyx SG package label for all rotational crop instructions.

### ADDITIONAL USE INFORMATION – ALL CROPS AND USES

#### MIXING INSTRUCTIONS

Sentyx SG must be completely dissolved in clean water before adding to spray tanks that **DO NOT** have continuous agitation during loading and mixing. (This is common for airplanes with turbine engines).

1. Fill the tank ¼ to ⅓ full of water.
2. While agitating, add the required amount of Sentyx SG.
3. Continue agitation until the Sentyx SG is fully dissolved, at least 5 minutes.
4. Once the Sentyx SG is fully dissolved, maintain agitation and continue filling tank with water.
5. As the tank is filling, add tank mix partners (if desired) then add the required amount of spray adjuvant (if needed). Always add the spray adjuvant last.
6. Dispersed tank mix partners can settle if the tank mixture is not continually agitated. If settling occurs, thoroughly re-agitate before using.
7. Apply Sentyx SG spray mixture within 24 hours of mixing to avoid product degradation.
8. If Sentyx SG and a tank mix partner are to be applied in multiple loads, fully dissolve the Sentyx SG in clean water prior to adding to the tank.

If the selected companion herbicide has a ground or surface water advisory, consider this advisory when using the companion herbicide.

#### At the end of the day

After each day of spraying multiple loads of Sentyx SG, the interior of the tank must be rinsed with fresh water and then partially filled and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits from accumulating in the application equipment.

#### After Spraying Sentyx SG and Before Spraying Other Crops

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of Sentyx SG as follows:

1. Empty the tank and drain the sump completely.
2. Spray the tank walls with clean water using a minimum volume of 10% of the tank volume. Circulate the water through the lines, including all by-pass lines, for at least two minutes. Flush the boom well and empty the sprayer. Completely drain the sump.
3. Repeat step 2.
4. Remove the nozzles and screens and clean separately in a bucket containing water.

The rinsate solution may be applied back to the crop(s) listed on this label. **DO NOT** exceed the maximum labeled use rate. If cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

#### Notes:

1. Always start with a clean spray tank.
2. Steam-cleaning aerial spray tanks must be done to facilitate the removal of any caked deposits.
3. When Sentyx SG is tank mixed with other pesticides, all cleanout procedures for each product must be examined and the most rigorous procedure must be followed.
4. Follow any pre-cleanout guidelines specified on other product labels.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the user 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 HANDLING:

**Bag:** Nonrefillable outer bag. **DO NOT** reuse or refill the outer bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Plastic Container:** Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**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 AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND 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 AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH 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 CONSISTENT WITH 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.

**INTENTIONALLY LEFT BLANK**

**INTENTIONALLY LEFT BLANK**

RIMSULFURON GROUP 2 HERBICIDE



## Water Soluble Granule

For Weed Control in \*Field Corn, Citrus Fruit Group 10-10, Stone Fruit Group 12-12, Tree Nuts Group 14-12, Pome Fruit Group 11-10, Grapes, Blueberry (High and Low Bush), Caneberry (Raspberry, Blackberry), Potatoes, Potatoes Grown for Seed, Field-Grown Tomatoes, \*Pre-plant Weed Control in Cotton and Soybeans, Rangeland Restoration, Non-Crop Sites including Industrial Sites, Roadsides, Highway Medians, Utility Substations, Non-Cropland Wildlife Habitats.

\*NOT FOR USE ON FIELD CORN, PRE-PLANT BURNDOWN IN COTTON AND SOYBEAN IN THE STATE OF CALIFORNIA.

ACTIVE INGREDIENT:	(% by weight)
Rimsulfuron	
N-[(4,6-dimethoxypyrimidin-2-yl)aminocarbonyl]-3-(ethylsulfonyl)-2-pyridinesulfonamide.....	25.0%
OTHER INGREDIENTS:.....	75.0%
TOTAL	100.0%

## KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

See inside label booklet for Precautionary Statements and Directions for Use.

## FIRST AID

<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 a person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything to an unconscious person.</li> </ul>
<b>If on skin:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

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

You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.

## PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

KEEP OUT OF REACH OF CHILDREN

**CAUTION:** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING:

**Bag:** Nonrefillable outer bag, **DO NOT** reuse or refill the outer bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. **Plastic Container:** Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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

EPA REG. NO. 34704-1144

EPA EST. NO. 5905-CA-1

NET WEIGHT: 20 OZ.

L100622-07225

MANUFACTURED FOR: LOVELAND PRODUCTS, INC.®, P.O. BOX 1286, GREELEY, COLORADO 80632-1286



PEEL HERE TO OPEN