

## **Suspension Concentrate**

BROAD SPECTRUM HERBICIDE for selective control of weeds in sugar beets, garden beets, onions, garlic, shallots (in all states) and carrots in Washington and Oregon only. GRASS SEED HERBICIDE for selective control of weeds in certain grass seed crops and commercial sod production in California, Idaho, Nevada, Oregon and Washington. TURF HERBICIDE for selective control of weeds on Ornamental Turf.

ACTIVE INGREDIENT:	(% by weight)
Ethofumesate (2-ethoxy-2, 3-dihydro-3,	
3-dimethyl-5-benzofuranyl methanesulfonate)	42.0%
OTHER INGREDIENTS:	58.0%
TOTAL:	100.0%
This product contains 4.0 lbs. active ingredient per gallon.	

EPA Reg. No.: 91234-195

# 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 below for additional Precautionary Statements.

## FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give anything by mouth to an unconscious person. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

## **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)



## PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- · Long-sleeved shirt and long pants
- · Chemical-resistant gloves (except flaggers, or applicator in cockpits, and enclosed cabs)
- · Shoes plus socks

See Engineering Controls for additional requirements.

#### On-Site Closed Mixing and Loading System Engineering Controls for Liquid Formulations for Commercial Dry Bulk Fertilizer Impregnation

Mixers and loaders must use a closed system designed by the manufacturer to provide dermal and inhalation protection to enclose the pesticide to prevent it from contacting handlers or other people AND the system is functioning properly and is used and maintained in accordance with the manufacturer's written operating instructions. The handlers:

- . Must wear PPE listed on this label
- Must wear protective eyewear if the system operates under pressure
- · Must have immediately available for use in an emergency, including a spill, or equipment breakdown, chemical resistant footwear and chemical resistant apron

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

#### ENGINEERING CONTROLS STATEMENT

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 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 40 CFR 170.240(d) (6).

## **USER SAFETY REQUIREMENTS**

#### Users should:

- · Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate.

#### HISE RESTRICTIONS

DO NOT OVERTREAT. NEKTRON SC or tank mixes must be used for label listed purposes and at label specified rates only.

DO NOT graze livestock on treated crops. DO NOT feed treated grass clippings to livestock.

**DO NOT** apply this product through any type of irrigation system.

If crop is lost due to climatic or soil conditions following application of **NEKTRON SC** or tank mixes, **DO NOT** plant crops other than sugar beets or ryegrass in treated land during the same season. **DO NOT** retreat field with **NEKTRON SC**. If fields are replanted to sugar beets, reseed into treated band.

DO NOT rotate with any crops other than sugar beets or ryegrass for:

- 12 months following preplant incorporated, preemergence, conventional postemergence applications, or split (low rate) applications totaling more than 0.75 pints (0.38 lb. a.i./A) per acre;
- 6 months following split (low rate) postemergence applications totaling 0.75 pints (0.38 lb. a.i./A) per acre or less.

Thorough tillage, including moldboard plowing, must precede the planting of crops other than sugar beets or ryegrass. DO NOT use NEKTRON SC on muck or peat soils.

DO NOT allow spray mixture to stand in tank overnight. Flush and drain spray equipment after each day's use.

Store unused spray mixture in tightly-sealed containers and protect from frost.

This label must be in the possession of the user at the time of pesticide application.

## DIRECTIONS FOR USE

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

Read entire Directions for Use and Condition of Sale and Limitation of Warranty and Liability before using this product.

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

## SHAKE CONTAINER WELL BEFORE USING.

## AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours for all crops, except turf grown for sod. The REI for turf is 9 days. The REI for each crop is listed in the directions for use associated with each crop

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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, including plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- · Shoes plus socks

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.



#### NON-AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow others to enter until sprays have dried.

Professional pesticide applicators applying to residential turf, including residential lawns, parks, and recreation areas must inform their customers that all persons and pets must be kept off the treated turf until sprays have dried.

#### RESISTANCE MANAGEMENT

For resistance management, **NEKTRON SC** is a Group 8 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain or develop plants naturally resistant to **NEKTRON SC** and other Group 8 herbicides. Weeds resistant to Group 8 herbicides may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of NEKTRON SC or other Group 8 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method for example hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- · Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact an Atticus, LLC. Representative at (984)-465-4754 or at AtticusLLC.com.

## **Weed Management Practices**

To minimize the occurrence of ethofumesate-resistant biotypes, observe the following weed management practices:

- · Scout your fields before and after herbicide application.
- Start with a clean field, using either a burndown herbicide application or tillage.
- · Control weeds early when they are relatively small (less than 4 inches).
- Incorporate other herbicides (e.g., a selective and/or a residual herbicide) and cultural practices (e.g., tillage or crop rotation) as part of your weed control system, where appropriate.
- Use the full specified herbicide rate and proper application timing for the hardest to control weed species present in the field. Avoid tank mixtures with other herbicides that reduce the efficacy of this product (through antagonism), or with ones that encourage application rates of this product below those specified on this label.
- · Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- · Use new commercial seed that is as free of weed seed as possible.
- · Use good agronomic principles that enhance crop development and crop competitiveness.
- Report any incidence of repeated non-performance of this product on a particular weed to your Atticus, LLC representative at (984)-465-4754, local retailer, or county extension agent.

## Management of Ethofumesate-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to ethofumesate. Contact your Atticus, LLC representative to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on the Internet www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed ethofumesate-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product may be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g., crop rotation or tillage) can also be used as appropriate.
- Scout treated fields before and after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

## O Mandatory Spray Drift

## **Aerial Applications**

- DO NOT release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- 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 Applications**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray 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.

## **Boom-less Ground Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- $\bullet\,$  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, 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, to reduce fine droplets, nozzles should be oriented 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.

• Boom-less Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:
 Take precautions to minimize spray drift.

## SUGAR BEETS PRODUCT INFORMATION

NEKTRON SC is a selective herbicide for use in sugar beets for the control of the weed species listed below. It provides effective control of these weeds for up to 10 weeks following application.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of NEKTRON SC in the soil is reduced as the soil texture becomes finer and organic matter increases.

## RATE RESTRICTIONS

- For preemergent and preplant applications, **DO NOT** apply more than 7.50 pints of product (3.75 lb a.i./A) per acre in a single application.
- For preemergent and preplant applications, **DO NOT** apply more than 2 applications per year.
- For preemergent and preplant application, **DO NOT** apply more than 7.50 pints of product (3.75 lb a.i./A) per acre per year.
- For postemergent applications, **DO NOT** apply more than 3.00 pints of product (1.50 lb a.i./A) per acre in a single application.
- For postemergent applications, **DO NOT** apply more than 2 applications per year.
- For postemergent applications, **DO NOT** apply more than 7.50 pints of product (3.75 lb a.i./A) per acre per year.
- The combined pre- and postemergence use rates cannot exceed more than 7.50 pints of product (4.00 lb. a.i./A) per acre per year for sugar beets.
- Minimum Retreatment Interval: 10 days
- ${\bf NEKTRON~SC}$  may be applied up to 45 days before harvest.
- . Aerial Application Rate Restriction: DO NOT apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per application with aircraft.

## DDECAUTIONS

See Use Precautions for additional information on proper use.

## TANK-MIXING INSTRUCTIONS

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



## **WEED SPECIES CONTROLLED**

Annual Broadleaf Weeds		Annual Grass Weeds	
Black nightshade	Solanum nigrum	Annual bluegrass	Poa annua
Common chickweed	Stellaria media	Barnyardgrass*	Echinochloa crus-galli
Common lambsquarters	Chenopodium album	Canarygrass	Phalaris canariensis
Common purslane	Portulaca oleracea	Green foxtail	Setaria viridis
Kochia	Kochia scoparia	Large crabgrass	Digitaria sanguinalis
Ladysthumb	Polygonum persicaria	Volunteer barley	Hordeum sp.
Pennsylvania smartweed	Polygonum pensylvanicum	Volunteer wheat	Triticum sp.
Powell amaranth	Amaranthus powellii		
Redroot pigweed	Amaranthus retroflexus	Wild oats**	Avena fatua
Russian thistle	Salsola kali var. tenuifolia	Yellow foxtail	Setaria glauca
Wild buckwheat	Polygonum convolvulus		
Waterhemp	Amaranthus rudis/tuberculatus		

<sup>\*</sup> Control of barnyardgrass may be reduced with the NEKTRON SC + chloridazon tank mix because of the lower rate of NEKTRON SC.

<sup>\*\*</sup> Control of wild oats has been inconsistent in Minnesota and North Dakota.

NEKTRON SC alone will also reduce competition from these HARD-TO-CONTROL weeds:	
Annual Sowthistle	Sonchus oleraceus
Puncturevine	Tribulus terrestris
Shepherdspurse	Capsella bursa-pastoris
Purple nutsedge	Cyperus rotundus
Yellow nutsedge	Cyperus esculentus
Roundup Ready Canola (suppression)	Brassica rapa

Apply tank mixes only in specific regions or States and in accordance with directions on label.

#### PREPLANT INCORPORATED AND PREEMERGENCE APPLICATIONS

SOIL PREPARATION: The soil must be prepared according to good agricultural practices. Large clods can reduce the effectiveness of **NEKTRON SC** and tank mixes. All existing vegetative growth must be thoroughly worked into the soil before treatment.

SPRAY EQUIPMENT: Apply NEKTRON SC alone or in tank mixes to the soil using standard low pressure (20 to 50 psi) spray equipment. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. DO NOT use smaller than 50- mesh strainer. Uniformly apply the label-listed rates of NEKTRON SC or tank mixes in 10 to 60 gallons of water per acre on a broadcast basis. Avoid overlaps since crop injury may result. When applying NEKTRON SC or tank mixes in a band; check to make certain that the band width is accurate for the dosage rate being applied.

The spray tank and lines must be thoroughly cleaned and rinsed prior to using **NEKTRON SC**.

INCORPORATION EQUIPMENT: Where soil incorporation is advised, use a hooded power- or ground- driven rotary tiller, rolling cultivator, or similar equipment properly adjusted to uniformly incorporate NEKTRON SC or tank mixes to a depth of 1 to 2 inches. Deeper incorporation may reduce effectiveness. DO NOT apply NEKTRON SC or tank mixes through soil injector shanks. Incorporation must be accomplished prior to planting. If done after planting, proper precautions must be taken to avoid damaging or moving the crop seed. See below for Application Instructions.

**LAYERING APPLICATION: Spring:** Form beds with appropriate bedding equipment. Pre-irrigate field if necessary. Remove bed top with suitable de-ridging machinery to provide a minimum width of 10" across the top of the bed. Apply **NEKTRON SC** in a band at the specified rate indicated in the appropriate regional dosage table and cover the treated band with 1 inch of soil using ditchers or discs equipment. Shape the bed with roller shaper and irrigate until the tops of the beds are thoroughly wetted. Irrigate from furrows on both sides of the row.

Fall: This method of application can be used when spring moisture is marginal or where irrigation water is not available at planting time. Fall bedding utilizes the winter-accumulated moisture to enhance activation of the herbicide and to aid in germination of the sugar beet crop.

Prepare the field (as for planting; plow; pack, and float, etc.), in the fall, usually late September or October. Apply **NEKTRON SC** in a band to the soil surface at the specified rate indicated in the appropriate regional dosage table. Be sure that the soil surface to be treated is free of trash and vegetation.

Cover the treated bands with soil and form beds or ridges using ditchers or discs. In the spring when the soil is sufficiently dry to be worked, de-ridge the beds down to within 1/2" to 1" of the treated layer using suitable equipment for example the Kirchner bedder or Oregon Northslope harrow. When de-ridging, maintain the original bedding guidance system by using a bull tongue chisel, slide guides or similar equipment. This will ensure that the planter will follow in the treated band. Plant sugar beets in the de-ridged area when the soil conditions allow.

## **APPLICATION INSTRUCTIONS**

Sugar beets grown under rainfall: Apply NEKTRON SC alone or in a tank mix preemergence at time of planting or shortly after, but prior to weed germination. NEKTRON SC or tank mix does not require mechanical soil incorporation provided that sufficient rainfall occurs shortly following application to activate the chemical. One-half inch of rainfall is usually adequate for activation. In areas where rainfall can be marginal for activation, for example the Red River Valley (Minnesota and North Dakota), it is advised that NEKTRON SC or the tank mix be applied before or at the time of planting and incorporated into the soil.

Sugar beets grown under furrow irrigation: Apply NEKTRON SC alone or in a tank mix to the soil surface preplant or at time of planting, but prior to weed germination, and incorporate into the soil. Where sugar beets are grown in beds, apply NEKTRON SC or tank mix after bedding and incorporate. Since NEKTRON SC or tank mix must have moisture to control weeds effectively, irrigate until tops of beds are thoroughly wetted.

Sugar beets grown under sprinkler irrigation: Apply NEKTRON SC alone or in a tank mix preemergence at time of planting or shortly after, and irrigate prior to crop and weed germination. Repeat irrigation as necessary to maintain good moisture in upper soil layer. Apply at least one-half inch of water during first irrigation. DO NOT mechanically incorporate NEKTRON SC or tank mix into the soil under sprinkler irrigation.

Cultural Practices Following Application: When properly applied, NEKTRON SC alone or in a tank mix will provide up to ten weeks control of susceptible weed species. When cultivating fields in which NEKTRON SC or tank mixes have been banded, care must be exercised to minimize the movement of untreated soil into the treated band. Where a broadcast application has been made, DO NOT cultivate deeper than two inches, as this reduces the effectiveness of NEKTRON SC or tank mixes.



## NEKTRON SC ALONE DOSAGE TABLE

(All Regions Except North Dakota and Minnesota):

	Rate of NEKTRON SC per Acre <sup>1</sup>			
			7-inch Band Width²	
Soil Texture	Broadcast	22" Row	28" Row	30" Row
oarse Textured	2.25 to 3.75	0.75 to 1.25	0.67 to 1.00	0.50 to 1.00
oils: Sands,	Pints	Pints	Pint	Pint
amy sands and	(1.13 to 1.88 lb a.i./A)	(0.38 to 0.63 lb a.i./A)	(0.34 to 0.50 lb a.i./A)	(0.25 to 0.50 lb a.i./A)
andy loams				
ledium Textured	3.75 to 6.00	1.25 to 2.00	1.00 to 1.5	1.00 to 1.75
oils: Silt loams,	Pints	Pints	Pints	Pints
ay loams which	(1.88 to 3 lb a.i./A)	(0.63 to 1 lb a.i./A)	(0.50 to 0.75 lb a.i./A)	(0.50 to 0.88 lb a.i./A)
ontain less than				
% organic matter				
ine Textured	6.00 to 7.5	2.00 to 2.5	1.50 to 2.00	1.50 to 1.75
oils: Silt loams,	Pints	Pints	Pints	Pints
ay loams, clays	(3 to 3.75 lb a.i./A)	(1 to 1.25 lb a.i./A)	(0.75 to 1 lb a.i./A)	(0.75 to 0.88 lb a.i./A)
hich contain				
ore than 3%				
rganic matter				

<sup>1</sup> Use the higher rate within each soil texture category on the finer texture soils and/or where Kochia, barnyardgrass or black nightshade are expected to be a problem.

## DOSAGE TABLE (North Dakota and Minnesota only):

	NEKTRON SC per Acre	
Soil Texture	Broadcast	7-inch Band Width¹ 22" Row
Coarse Textured Soils: Sandy loams only	6.00 Pints (3.00 lb a.i./A)	2.00 Pints (1.00 lb a.i./A)
Medium Textured Soils: Silt loams and clay loams	6.00 Pints (3.00 lb a.i./A)	2.00 Pints (1.00 lb a.i./A)
Fine Textured Soils: Heavy clays	7.50 Pints (3.75 lb a.i./A)	2.50 Pints (1.25 lb a.i./A)

<sup>&</sup>lt;sup>1</sup> For other band or row widths, adjust the rate in proportion to the area actually treated.

#### **Preplant and Preemergence Use Restrictions**

**NEKTRON SC** applied alone or in tank mixes according to label directions and under normal growing conditions may cause temporary leaf fusion, distortion and stunting. Crop injury may occur during early growth when crop is stressed due to herbicide residue carryover, highly saline or alkaline soils, unusually cold and wet weather or improperly placed fertilizers or soil insecticides.

Unusually dry, windy weather, which dries the upper soil layer, following application of NEKTRON SC, may reduce effectiveness.

## **DO NOT** OVERTREAT.

Crop Planting Restrictions: If crop is lost due to unfavorable growth conditions following treatment, DO NOT replant with crops other than sugar beets or ryegrass in treated land during the same season. If fields are replanted to sugar beets, reseed into treated band. DO NOT retreat field with conventional rates of NEKTRON SC in the same season.

## POSTEMERGENCE APPLICATION

## **Product Information**

**NEKTRON SC** alone is not advised for postemergent use.

## NEKTRON SC + GLYPHOSATE (TANK MIX)

Postemergence application of NEKTRON SC plus glyphosate can improve control of weeds on this label including glyphosate-resistant biotypes.

## POSTEMERGENCE APPLICATIONS

Apply **NEKTRON SC** + glyphosate to Roundup Ready sugarbeets only.

Apply NEKTRON SC + glyphosate to sugar beets having greater than 2 true leaves. Apply NEKTRON SC + glyphosate to small weeds.

Apply **NEKTRON SC+** glyphosate in a single or multiple application(s) using ground or air application.

The greater the number of **NEKTRON SC** + glyphosate applications, the greater the weed control.

Include the following spray adjuvants to tank mixes of **NEKTRON SC** + glyphosate: ammonium sulfate plus methylated seed oil (MSO) at 1.25 to 2.00 pints/A or high surfactant methylated seed oil (HSMOC) at 1.00 to 2.00 pints/A or nonionic surfactant (NIS) at 0.25% v/v. **DO NOT** include a crop oil concentrate adjuvant with this mixture.

## DOSAGE TABLE

## NEKTRON SC + GLYPHOSATE DOSAGE FOR POSTEMERGENCE APPLICATIONS

Sugar Beet Stage	NEKTRON SC PINTS/ACRE BROADCAST PER APPLICATION
> 2 true leaves to 45-days prior to harvest	0.510 - 8.00
	(0.25 – 4.00 lb a.i./A)

## **NEKTRON SC + Glyphosate Postemergence Use Precautions**

NEKTRON SC + glyphosate applied at greater than 5.00 pints (2.50 lb a.i./A) per acre per application to fields having coarse-textured low organic matter soils will likely cause crop response.

Sugar beet injury is possible when applying NEKTRON SC + glyphosate at greater than 5.00 pints (2.50 lb a.i./A) per acre per application to small sugar beets.

Removing MSO, HSMOC, and NIS from tank mixes with metolachlor, dimethenamid, acetochlor, triflusulfuron-methyl and clopyralid must decrease crop response, but weed control may be reduced.

Tank mixes of metolachlor, dimethenamid, acetochlor, triflusulfuron-methyl and/or clopyralid plus adjuvants with NEKTRON SC + glyphosate will cause crop response and likely yield loss, especially with increasing rates of NEKTRON SC.

Sugar beet injury can occur when NEKTRON SC is applied preemergence and metolachlor, dimethenamid or acetochlor are mixed with NEKTRON SC + glyphosate postemergence.

Sugar beet injury will be enhanced if **NEKTRON SC** + glyphosate is applied following a preplant application of eptam.

Sugar beet injury can be enhanced if the crop is under stress.

NEKTRON SC may be applied up to 45 days before harvest. For all products mixed with NEKTRON SC, follow the most restrictive pre-harvest interval listed on the product label.



<sup>&</sup>lt;sup>2</sup> For other band or row widths, adjust the rate in proportion to the area actually treated.

#### DOSAGE TABLE

## NEKTRON SC + GLYPHOSATE - MAXIMUM DOSAGE AND NUMBER OF GROUND APPLICATIONS FOR POSTEMERGENCE APPLICATIONS

	Annual Rate			Annual Application Rate
Max. Single Rate of NEKTRON SC, lb. AI/A	Max. # Applications of NEKTRON SC per Year	Max. NEKTRON SC Rate, lb. AI/A	Max. No. crop cycles per year	Max. Rate, NEKTRON SC lb. Al/A/year
4.00	4	4.00	1	4.0

## **NEKTRON SC MIXTURES WITH FERTILIZERS**

#### **NEKTRON SC Impregnation on Dry Bulk Fertilizers**

**NEKTRON SC** may be impregnated on many dry bulk fertilizers (See "1" below) and applied and incorporated into the soil before planting for the control of labeled grasses and broadleaf weeds in sugar beets. See instructions for impregnation on dry bulk fertilizers at end of label.

## **NEKTRON SC** with Liquid Fertilizer

Directions for mixing NEKTRON SC with liquid fertilizers for spray tank applications, and testing physical compatibility of liquid fertilizer - NEKTRON SC mixture can be found at the end of the label.

## BEETS, TABLE (GARDEN) PRODUCT INFORMATION

**NEKTRON SC** is a selective herbicide for use in table beets for the control of the weed species listed below.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of NEKTRON SC in the soil is reduced as the soil texture becomes finer and organic matter increases.

## WEED SPECIES CONTROLLED

Annual Broadleaf Weeds	
Black nightshade	Solanum nigrum
Common chickweed	Stellaria media
Common lambsquarters	Chenopodium album
Common purslane	Portulaca oleracea
Eastern black nightshade	Solanum ptycanthum
Kochia	Kochia scoparia
Ladysthumb	Polygonum persicaria
Pennsylvania smartweed	Polygonum pensylvanicum
Redroot pigweed	Amaranthus retroflexus
Russian thistle	Salsola kali var. tenuifolia
Wild buckwheat	Polygonum convolvulus

Annual Grass Weeds	
Annual bluegrass	Poa annua
Barnyardgrass	Echinochloa crus-galli
Canarygrass	Phalaris canariensis
Green foxtail	Setaria viridis
Large crabgrass	Digitaria sanguinalis
Volunteer barley	Hordeum sp.
Volunteer wheat	<i>Triticum</i> sp.
Wild oats**	Avena fatua
Yellow foxtail	Setaria glauca

<sup>\*\*</sup> Control of wild oats has been inconsistent in Minnesota and North Dakota

NEKTRON SC alone will also reduce competition from these HARD-TO-CONTROL weeds:	
Annual Sowthistle	Sonchus oleraceus
Puncturevine	Tribulus terrestris
Shepherdspurse	Capsella bursa-pastoris
Purple nutsedge	Cyperus rotundus
Yellow nutsedge	Cyperus esculentus

Apply tank mixes only in specified regions or States and in accordance with directions on label.

## APPLICATION INSTRUCTIONS

Table Beets Grown Under Rainfall: Apply NEKTRON SC alone or in a tank mix preemergence at time of planting or shortly after, but prior to weed germination. NEKTRON SC or tank mix does not require mechanical soil incorporation provided that sufficient rainfall occurs shortly following application to activate the chemical. One-half inch of rainfall is usually adequate for activation. In areas where rainfall can be marginal for activation, it is advised that NEKTRON SC be applied before or at the time of planting and incorporated into the soil.

Table Beets Grown Under Furrow Irrigation: Apply NEKTRON SC alone or in a tank mix to the soil surface preplant or at time of planting, but prior to weed germination. Where table beets are grown in beds, apply NEKTRON SC or tank mix after bedding and incorporate. Since NEKTRON SC must have moisture to control weeds effectively, irrigate until tops of beds are thoroughly wetted.

Table Beets Grown Under Sprinkler Irrigation: Apply NEKTRON SC alone or in tank mix preemergence at time of planting or shortly after, and irrigate prior to crop and weed germination. Repeat irrigation as necessary to maintain good moisture in upper soil layer. Apply at least one-half inch of water during first irrigation. DO NOT mechanically incorporate NEKTRON SC into the soil under sprinkler irrigation.

Cultural Practices Following Application: When properly applied, NEKTRON SC alone can provide up to 6 weeks control of susceptible species. When cultivating fields in which NEKTRON SC has been banded, care must be exercised to minimize the movement of untreated soil into the treated band. Where a broadcast application has been made, DO NOT cultivate deeper than two inches, as this reduces the effectiveness of NEKTRON SC.



#### NEKTRON SC ALONE DOSAGE FOR BROADCAST APPLICATIONS

NEXTHON OF ALONE DOUAGE FOR DITOADDAOT AT I ETOATIONS	
Table Beet Stage	NEKTRON SC PINTS/ACRE BROADCAST PER APPLICATION
Preemergence	3.75 (1.88 lbs a.i./A)
Postemergence:	
2-Leaf	0.33 (0.17 lbs a.i./A)
4-Leaf	0.33 (0.17 lbs a.i./A)
6-Leaf to 8-Leaf	0.66 (0.33 lbs a.i./A)

## PREPLANT AND PREEMERGENCE USE RESTRICTIONS

**NEKTRON SC** applied alone or in tank mixes according to label directions and under normal growing conditions may cause temporary leaf fusion, distortion and stunting. Crop injury may occur during early growth when crop is stressed due to herbicide residue carryover, highly saline or alkaline soils, unusually cold and wet weather or improperly placed fertilizers or soil insecticides.

Unusually dry, windy weather, which dries the upper soil layer, following application of **NEKTRON SC**, may reduce effectiveness.

#### **NOT OVERTREAT**

Crop Planting Restrictions: If crop is lost due to unfavorable growth conditions following treatment, DO NOT replant with crops other than sugar beets, table beets, garlic, onions, shallots or ryegrass in treated land during the same season. If fields are replanted to sugar beets, reseed into treated band. DO NOT retreat field with preemergence rates of NEKTRON SC in the same season.

#### RATE RESTRICTIONS

- For preemergent applications, **DO NOT** apply more than 3.00 pints of product (1.50 lb. a.i./A) per acre in a single application.
- DO NOT apply more than one preemergent application per year.
- For combined pre- and postemergent applications, DO NOT exceed a total of 5.20 pints of product (2.60 lb a.i./A) per acre per year.
- If one preemergent application is made at 3.00 pints of product (1.50 lb a.i./A), DO NOT make more than two postemergent applications at 0.66 pints (0.33 lb a.i./A) per acre per year.
- DO NOT make more than three postemergent applications at the lower rate of 0.33 pints of product (0.17 lb a.i./A) per acre per year. See Use Precautions for additional information on proper use.
- **DO NOT** apply more than 4 total applications per year.
- . Minimum Retreatment Interval: 10 days.

## PREPLANT AND PREEMERGENCE APPLICATIONS

Soil Preparation: The soil must be prepared according to good agricultural practices. Large clods can reduce the effectiveness of **NEKTRON SC** and tank mixes. All existing vegetative growth must be thoroughly worked into the soil before treatment.

Spray Equipment: Apply NEKTRON SC alone or in tank mixes to the soil using standard low pressure (20 to 50 psi) spray equipment. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. DO NOT use smaller than 50-mesh strainer. Uniformly apply the specified rates of NEKTRON SC or tank mixes in 10 to 60 gallons of water per acre on a broadcast basis. Avoid overlaps since crop injury may result. When applying NEKTRON SC or tank mixes in a band, check to make certain that the band width is accurate for the dosage rate being applied.

The spray tank and lines must be thoroughly cleaned and rinsed prior to using **NEKTRON SC**.

## POSTEMERGENCE APPLICATION

## **Product Information**

**NEKTRON SC** applied postemergence broadens and enhances the control of weeds.

Mixing the Spray: Add NEKTRON SC to the water in the spray while agitating the spray solution thoroughly.

Spray Equipment: Apply the mixture using standard low pressure (20-60 psi) spray equipment. Ensure that the sprayer is thoroughly clean. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. Uniformly apply the specified rate in 10-40 gallons of water per acre on a broadcast basis or 5-10 gallons of water per acre in a band. Avoid overlaps, since crop injury may result. When applying in a band, check to make certain that the band width is accurate for the dosage rate being applied. DO NOT use strainer smaller than 50-mesh.

Moisture Following Application/Residual Weed Control: Rainfall or sprinkler irrigation within 6 hours of spraying may reduce weed control; however, with preemergence rates, moisture after this period of time is advantageous for moving NEKTRON SC into the top layer of soil where it can be absorbed by the roots of sprayed and germinating weeds to provide optimum control. One-half inch or more of sprinkler irrigation is required to activate NEKTRON SC on most soil types.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of **NEKTRON SC** in the soil is reduced as the soil texture becomes finer and organic matter increases.

## NEKTRON SC MAY CAUSE CROP INJURY OR STAND LOSS IF THE CROP IS UNDER STRESS FROM ONE OR MORE OF THE FOLLOWING CONDITIONS:

- Rapid climatic changes from cool, overcast days, to hot (80°F or over), bright days. When the air temperature is, or is likely to be, above 80°F on the day of spraying, application must be made in the evening when the temperature is lower.
- · Frost within seven days following treatment
- · Windy or drought conditions
- Use of a preplant or preemergence herbicide or other chemicals
- Insect or disease injury
- Close cultivation

## POSTEMERGENT RESTRICTIONS

- DO NOT OVERTREAT.
- DO NOT spray while dew is present.
- . DO NOT allow spray drift to contact adjacent crops which may be injured by spray drift.

## Precautions

- Rainfall or sprinkler irrigation within 6 hours of application may reduce weed kill.
- If stress conditions are present, delay application until crop has recovered.
- If NEKTRON SC is applied on fields with heavy crop residue, including from a previous corn crop, reduced weed control may occur.



## ONION, DRY BULB; GARLIC, BULB; SHALLOT, BULB PRODUCT INFORMATION

**NEKTRON SC** is a selective herbicide for use in onion, garlic and shallot for the control of the weed species listed below.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of NEKTRON SC in the soil is reduced as the soil texture becomes finer and organic matter increases.

#### WEED SPECIES CONTROLLED

Annual Broadleaf Weeds	
Black nightshade	Solanum nigrum
Common chickweed	Stellaria media
Common lambsquarters	Chenopodium album
Common purslane	Portulaca oleracea
Eastern black nightshade	Solanum ptycanthum
Kochia	Kochia scoparia
Ladysthumb	Polygonum persicaria
Pennsylvania smartweed	Polygonum pensylvanicum
Redroot pigweed	Amaranthus retroflexus
Russian thistle	Salsola kali var. tenuifolia
Wild buckwheat	Polygonum convolvulus

Annual Grass Weeds		
Annual bluegrass	Poa annua	
Barnyardgrass	Echinochloa crus-galli	
Canarygrass	Phalaris canariensis	
Green foxtail	Setaria viridis	
Large crabgrass	Digitaria sanguinalis	
Volunteer barley	Hordeum sp.	
Volunteer wheat	Triticum sp.	
Wild oats**	Avena fatua	
Yellow foxtail	Setaria glauca	

<sup>\*\*</sup>Control of wild oats has been inconsistent in Minnesota and North Dakota

## NEKTRON SC alone will also reduce competition from these HARD-TO-CONTROL weeds:

Annual sowthistle	Sonchus oleraceus
Puncturevine	Tribulus terrestris
Shepherdspurse	Capsella bursa-pastoris
Purple netsedge	Cyperus rotundus
Volunteer potato	Solanum tuberosum
Yellow nutsedge	Cyperus esculentus

Apply tank mixes only in specified regions or States and in accordance with directions on label.

## APPLICATION INSTRUCTIONS

Onion, garlic and shallot grown under rainfall: Apply NEKTRON SC alone or in a tank mix preemergence at time of planting or shortly after, but prior to weed germination. NEKTRON SC or tank mix does not require mechanical soil incorporation provided that sufficient rainfall occurs shortly following application to activate the chemical. One-half inch of rainfall is usually adequate for activation. In areas where rainfall can be marginal for activation, it is advised that NEKTRON SC be applied before or at time of planting and incorporated into the soil.

Onion, garlic and shallot grown under furrow irrigation: Apply NEKTRON SC alone or in a tank mix to the soil surface preplant or at time of planting, but prior to weed germination. Where these crops are grown in beds, apply NEKTRON SC or tank mix after bedding and incorporate. Since NEKTRON SC must have moisture to control weeds effectively, irrigate until tops of beds are thoroughly wetted.

Onion, garlic and shallot grown under sprinkler irrigation: Apply NEKTRON SC alone or in tank mix preemergence at time of planting or shortly after, and irrigate prior to crop and weed germination. Repeat irrigation as necessary to maintain good moisture in upper soil layer. Apply at least one-half inch of water during first irrigation. DO NOT mechanically incorporate NEKTRON SC into the soil under sprinkler irrigation.

CULTURAL PRACTICES FOLLOWING APPLICATION: When properly applied, NEKTRON SC alone can provide up to 6 weeks of control of susceptible weed species. When cultivating fields in which NEKTRON SC has been banded, care must be exercised to minimize the movement of untreated soil into the treated band. Where a broadcast application has been made, DO NOT cultivate deeper than two inches, as this reduces the effectiveness of NEKTRON SC.

# NEKTRON SC ALONE DOSAGE FOR BROADCAST APPLICATIONS TO ONION, GARLIC AND SHALLOT

Use Pattern	NEKTRON SC PINTS/ACRE BROADCAST PER APPLICATION	
Preemergence, soil surface		
Coarse Soils (sand, loamy sand, sandy loam)*	1.00 (0.50 lbs a.i./A)	
Medium and Fine Soils**	2.00 (1.00 lbs a.i./A)	
Postemergence Up to 4 foliar applications at evenly spaced intervals, with last application 30 (+/- 2) days before harvest	1.00 (0.50 lbs a.i./A)	

<sup>\*</sup> On coarse soils: **DO NOT** exceed 3.00 pints (0.38 gallon) (1.50 lb a.i./A) of product per acre per year.

## PREPLANT AND PREEMERGENCE USE RESTRICTIONS

**NEKTRON SC** applied alone or in tank mixes according to label directions and under normal growing conditions may cause temporary leaf fusion, distortion and stunting. Crop injury may occur during early growth when crop is stressed due to herbicide residue carryover, high saline or alkaline soils, unusually cold and wet weather or improperly placed fertilizers or soil insecticides.

Unusually dry, windy weather, which dries the upper soil layer, following application of NEKTRON SC, may reduce effectiveness.

**DO NOT** OVERTREAT.



<sup>\*\*</sup> On medium and fine textured soils: **DO NOT** exceed 6.00 pints (0.75 gallon) (3.00 lb a.i./A) of product per acre per year.

Crop Planting Restrictions: If crop is lost due to unfavorable growth conditions following treatment, DO NOT replant with crops other than sugar beets, table beets, garlic, onions, shallots or ryegrass in treated land during the same season. If fields are replanted to sugar beets, reseed into treated band. DO NOT retreat field with preemergence rates of NEKTRON SC in the same season.

#### **RATE RESTRICTIONS**

- For preemergent applications, **DO NOT** apply more than 2.00 pints (1.00 lb a.i./A) per acre per application.
- For postemergent applications, **DO NOT** apply more than 1.00 pint (0.50 lb a.i./A) per acre per application.
- DO NOT apply more than 2 preemergent applications at lowest rate per year.
- DO NOT apply more than 4 postemergent applications at the maximum single rate per year.
- DO NOT exceed 3.00 pints (0.38 gallon) (1.50 lb a.i./A) of product per acre per year on coarse soils.
- DO NOT exceed 6.00 pints (0.75 gallon) (3.00 lb a.i./A) of product per acre per year on medium and fine textured soils.
- DO NOT apply more than a total of 6.00 pints (3.00 lb a.i./A; 0.75 gallon) of NEKTRON SC per acre per year (combined preemergent and postemergent applications).
- . Minimum Retreatment Interval: 15 days.

#### **PRECAUTIONS**

See Use Precautions for additional information on proper use.

#### PREPLANT AND PREEMERGENCE APPLICATIONS

Soil Preparation: The soil must be prepared according to good agricultural practices. Large clods can reduce the effectiveness of **NEKTRON SC** and tank mixes. All existing vegetative growth must be thoroughly worked into the soil before treatment

Spray Equipment: Apply NEKTRON SC alone or in tank mixes to the soil using standard low pressure (20 to 50 psi) spray equipment. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. DO NOT use smaller than 50-mesh strainer. Uniformly apply the specified rates of NEKTRON SC or tank mixes in 10 to 60 gallons of water per acre on a broadcast basis. Avoid overlaps since crop injury may result. When applying NEKTRON SC or tank mixes in a band, check to make certain that the band width is accurate for the dosage rate being applied.

The spray tank and lines must be thoroughly cleaned and rinsed prior to using NEKTRON SC.

#### POSTEMERGENCE APPLICATION

#### **Product Information**

**NEKTRON SC** applied postemergence broadens and enhances the control of weeds.

Mixing the spray: Add NEKTRON SC to the water in the spray tank while agitating the spray solution thoroughly.

**Spray Equipment:** Apply the mixture using standard low pressure (20-60 psi) spray equipment. Ensure that the sprayer is thoroughly clean. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. Uniformly apply the specified rate in 10-40 gallons of water per acre on a broadcast basis or 5-10 gallons of water per acre in a band. Avoid overlaps, since crop injury may result. When applying in a band, check to make certain that the band width is accurate for the dosage rate being applied. **DO NOT** use strainer smaller than 50-mesh.

Moisture following Application/Residual Weed Control: Rainfall or sprinkler irrigation within 6 hours of spraying may reduce weed control; however, with preemergence rates, moisture after this period of time is advantageous for moving NEKTRON SC into the top layer of soil where it can be absorbed by the roots of sprayed and germinating weeds to provide optimum control. One-half inch or more of sprinkler irrigation is required to activate NEKTRON SC on most soil types. Residual control of weeds is dependent upon soil moisture conditions, rate of herbicide used, and texture. The activity of NEKTRON SC in the soil is reduced as the soil texture becomes finer and organic matter increases.

NEKTRON SC MAY CAUSE CROP INJURY OR STAND LOSS IF THE CROP IS UNDER STRESS FROM ONE OR MORE OF THE FOLLOWING CONDITIONS:

- Rapid climatic changes from cool, overcast days, to hot (80°F or over), bright days. When the air temperature is, or is likely to be, above 80°F on the day of spraying, application must be made in the evening when the temperature is lower.
- · Frost within seven days following treatment
- Windy or drought conditions
- Use of preplant or preemergence herbicide or other chemicals
- Insect or disease injury
- Close cultivation

If stress conditions are present, delay application until crop has recovered.

## RESTRICTIONS

## **DO NOT** OVERTREAT.

DO NOT spray while dew is present.

DO NOT allow spray drift to contact adjacent crops which may be injured by spray drift.

## **Precautions**

Rainfall or sprinkler irrigation within 6 hours of application may reduce weed kill.

If **NEKTRON SC** is applied on fields with heavy crop residue, including from a previous corn crop, reduced weed control may occur.



# CARROT PRODUCT INFORMATION (For Use in Washington and Oregon Only)

**NEKTRON SC** is a selective herbicide for use in carrot for the control of volunteer potatoes and the weed species listed below.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of NEKTRON SC in the soil is reduced as the soil texture becomes finer and organic matter increases.

#### **WEED SPECIES CONTROLLED**

Annual Broadleaf Weeds				
Black nightshade	Solanum nigrum			
Common chickweed	Stellaria media			
Common lambsquarters	Chenopodium album			
Common purslane	Portulaca oleracea			
Kochia	Kochia scoparia			
Ladysthumb	Polygonum persicaria			
Pennsylvania smartweed	Polygonum pensylvanicum			
Redroot pigweed	Amaranthus retroflexus			
Russian thistle	Salsola kali var. tenuifolia			
Wild buckwheat	Polygonum convolvulus			
Annual Grass Weeds				
Annual bluegrass	Poa annua			
Barnyardgrass	Echinochloa crus-galli			
Canarygrass	Phalaris canariensis			
Green foxtail	Setaria viridis			
Large crabgrass	Digitaria sanguinalis			
Volunteer barley	Hordeum sp.			
Volunteer wheat	Triticum sp.			
Wild oats	Avena fatua			
Yellow foxtail	Setaria glauca			
NEKTRON SC alone will also reduce competition from these HARD-TO-CONTROL weeds:	NEKTRON SC alone will also reduce competition from these HARD-TO-CONTROL weeds:			
Annual Sowthistle	Sonchus oleraceus			
Puncturevine	Tribulus terrestris			
Shepherdspurse	Capsella bursa-pastoris			
Purple nutsedge	Cyerus rotundus			
Volunteer potato	Solanum tuberosum			
Yellow nutsedge	Cyperus esculentus			

Apply tank mixes only in specified regions or States and in accordance with directions on label.

## APPLICATION INSTRUCTIONS

Carrot grown under rainfall: Apply NEKTRON SC alone or in a tank mix preemergence at time of planting or shortly after, but prior to weed germination. NEKTRON SC or tank mix does not require mechanical soil incorporation provided that sufficient rainfall occurs shortly following application to activate the chemical. One-half inch of rainfall is usually adequate for activation. In areas where rainfall can be marginal for activation, it is advised that NEKTRON SC be applied before or at the time of planting and incorporated into the soil.

Carrot grown under furrow irrigation: Apply NEKTRON SC alone or in a tank mix to the soil surface preplant or at time of planting, but prior to weed germination. Where carrots are grown in beds, apply NEKTRON SC or tank mix after bedding and incorporate. Since NEKTRON SC must have moisture to control weeds effectively, irrigate until tops of beds are thoroughly wetted.

Carrot grown under sprinkler irrigation: Apply NEKTRON SC alone or in tank mix preemergence at time of planting or shortly after, and irrigate prior to crop and weed germination. Repeat irrigation as necessary to maintain good moisture in upper soil layer. Apply at least one-half inch of water during first irrigation. DO NOT mechanically incorporate NEKTRON SC into the soil under sprinkler irrigation.

Cultural practices following application: When properly applied, NEKTRON SC alone can provide up to 6 weeks control of susceptible weed species. When cultivating fields in which NEKTRON SC has been banded, care must be exercised to minimize the movement of untreated soil into the treated band. Where a broadcast application has been made, DO NOT cultivate deeper than two inches, as this reduces the effectiveness of NEKTRON SC.

## NEKTRON SC

## DOSAGE FOR BROADCAST APPLICATIONS TO CARROT

Use Pattern	NEKTRON SC PINTS/ACRE BROADCAST PER APPLICATION
Preemergence, soil surface	
Coarse Soils (sand, loamy sand, sandy loam)	3.00 (1.50 lbs a.i./A)
Medium and Fine soils	4.00 (2.00 lbs a.i./A)
Postemergence	
2-Leaf to 4 Leaf Stage	4.00 (2.00 lbs a.i./A)

## PREPLANT AND PREEMERGENCE USE RESTRICTIONS

**NEKTRON SC** applied alone or in tank mixes according to label directions and under normal growing conditions may cause temporary leaf fusion, distortion and stunting. Crop injury may occur during early growth when crop is stressed due to herbicide residue carryover, highly saline or alkaline soils, unusually cold and wet weather or improperly placed fertilizers or soil insecticides.

Unusually dry, windy weather, which dries the upper soil layer, following application of **NEKTRON SC**, may reduce effectiveness.

## **DO NOT** OVERTREAT.

Crop Planting Restrictions: If crop is lost due to unfavorable growth conditions following treatment, DO NOT replant with crops other than sugar beets, table beets, carrots, garlic, onions, shallots, or ryegrass in treated land during the same season. If fields are replanted to sugar beets, reseed into treated band. DO NOT retreat field with preemergence rates of NEKTRON SC in the same season.

See Use Precautions for additional information on proper use.



#### RATE RESTRICTIONS

- DO NOT apply more than 4.00 pints of product (2.00 lb a.i./A) per acre per application.
- DO NOT apply more than one preemergent and one postemergent application at the maximum rate per year.
- DO NOT apply more than 8.00 pints of product (4.00 lb a.i./A) per acre per year.
- Minimum Retreatment Interval: 14 days.

#### PREPLANT AND PREEMERGENCE APPLICATIONS

Soil Preparation: The soil must be prepared according to good agricultural practices. Large clods can reduce the effectiveness of **NEKTRON SC** and tank mixes. All existing vegetative growth must be thoroughly worked into the soil before treatment.

Spray Equipment: Apply NEKTRON SC alone or in tank mixes to the soil using standard low pressure (20 to 50 psi) spray equipment. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. DO NOT use smaller than 50 mesh strainer. Uniformly apply the specified rates of NEKTRON SC or tank mixes in 10 to 60 gallons of water per acre on a broadcast basis. Avoid overlaps since crop injury may result. When applying NEKTRON SC or tank mixes in a band, check to make certain that the band width is accurate for the dosage rate being applied.

The spray tank and lines must be thoroughly cleaned and rinsed prior to using **NEKTRON SC**.

#### POSTEMERGENCE APPLICATION

#### **Product Information**

**NEKTRON SC** applied postemergence broadens and enhances the control of weeds.

Mixing the Spray: Add NEKTRON SC to the water in the spray while agitating the spray solution thoroughly.

**Spray Equipment:** Apply the mixture using standard low pressure (20-60 psi) spray equipment. Ensure that the sprayer is thoroughly clean. Spray equipment must be carefully calibrated before use and checked frequently during application to see that it is functioning properly. Uniformly apply the specified rate in 10-40 gallons of water per acre on a broadcast basis or 5-10 gallons of water per acre in a band. Avoid overlaps, since crop injury may result. When applying in a band, check to make certain that the band width is accurate for the dosage rate being applied. **DO NOT** use strainer smaller than 50-mesh.

Moisture Following Application/Residual Weed Control: Rainfall or sprinkler irrigation within 6 hours of spraying may reduce weed control, however, with preemergence rates, moisture after this period of time is advantageous for moving NEKTRON SC into the top layer of soil where it can be absorbed by the roots of sprayed and germinating weeds to provide optimum control. One-half inch or more of sprinkler irrigation is required to activate NEKTRON SC on most soil types.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of **NEKTRON SC** in the soil is reduced as the soil texture becomes finer and organic matter increases.

## NEKTRON SC MAY CAUSE CROP INJURY OR STAND LOSS IF THE CROP IS UNDER STRESS FROM ONE OR MORE OF THE FOLLOWING CONDITIONS:

- Rapid climatic changes from cool, overcast days, to hot (80°F or over), bright days. When the air temperature is, or is likely to be, above 80°F on the day of spraying, application must be made in the evening when the temperature is lower.
- · Frost within seven days following treatment
- · Windy or drought conditions
- · Use of preplant or preemergence herbicide or other chemicals
- · Insect or disease injury
- · Close cultivation

If stress conditions are present, delay application until crop has recovered.

Rainfall or sprinkler irrigation within 6 hours of application may reduce weed kill.

If NEKTRON SC is applied on fields with heavy crop residue, including from a previous corn crop, reduced weed control may occur.

## RESTRICTIONS

- DO NOT allow spray drift to contact adjacent crops which may be injured by spray drift.
- DO NOT spray while dew is present.

## **GRASS SEED AND COMMERCIAL SOD**

(For use in California, Idaho, Nevada, Oregon, and Washington only) AND TURF (Not for Use in California) PRODUCT INFORMATION

## Use Restrictions for Grasses and Commercial and Ornamental Sod

Use **NEKTRON SC** only as directed at the specified rates (**DO NOT** OVERAPPLY).

- DO NOT apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per application.
- DO NOT apply more than 2 applications per year.
- DO NOT apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per year.
- Avoid spray overlap or turf injury may occur.
- Use of a spray colorant or indicator in the spray tank is instructed so that spray pattern overlapping can be avoided.
- DO NOT apply with flood jet nozzles and hand-held sprayers, since treatments may not be uniform.
- DO NOT apply this product through any type of irrigation system.
- · NEKTRON SC application is most effective on healthy, vigorously growing turf.
- NEKTRON SC may be applied to residential lawns by licensed or certified applicators. NEKTRON SC is not intended for residential use.
- Overseeding is directed in conjunction with NEKTRON SC applications to achieve conversion to desired turfgrass species and to avoid stand thinning due to annual bluegrass loss.
- When overseeding, use the rate of NEKTRON SC specified for the overseeded species. In mixed stands of established turfgrasses, use the rate specified for the least tolerant species.
- DO NOT apply NEKTRON SC within 8 weeks following the application of a Plant Growth Regulator. NEKTRON SC program may be initiated on creeping bentgrass 3 weeks after a single application of trinexapac-ethyl has been applied.
- NEKTRON SC application is specified for golf course fairways, roughs, and tees but at fairway-height only. DO NOT apply to putting greens.
- $\bullet\,$  DO NOT apply NEKTRON SC to zoysiagrass and hard or fine fescue; serious injury may result.
- For sod farm turf: DO NOT harvest treated sod for 3 days following application.
- DO NOT graze livestock on treated turf.
- DO NOT feed treated grass clippings to livestock.



## RYEGRASS. TALL FESCUE. BENTGRASS. AND KENTUCKY BLUEGRASS SEED CROPS PRODUCT INFORMATION

(For use in California, Idaho, Nevada, Oregon, and Washington only)

**NEKTRON SC** is a selective herbicide for use in ryegrass, tall fescue, and bentgrass seed crops in California, Idaho, Nevada, Oregon, and Washington. It effectively controls or reduces competition from those weed species listed below. **NEKTRON SC** may be applied preemergence to new seedings of annual or perennial ryegrass or postemergence to perennial ryegrass, tall fescue, or bentgrass. Application to bentgrass is restricted to plantings which have been established for one year or longer. Soil must be moist at time of application. **NEKTRON SC** is less effective when applied to dry soil. Rainfall or overhead irrigation shortly after application is necessary for activation.

Residual control of weeds is dependent upon soil moisture conditions; rates of herbicide used, and soil texture. The activity of NEKTRON SC in the soil is reduced as the soil texture becomes finer and organic matter/thatch increases.

#### RATE RESTRICTIONS

- **DO NOT** apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per application.
- DO NOT apply more than 2 applications per year.
- DO NOT apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per year.
- . Minimum Retreatment Interval: 21 days.

#### **WEEDS CONTROLLED**

Annual bluegrass	Poa annua
Seedling Rattail fescue	Festuca myuros
Seedling volunteer wheat	<i>Triticum</i> spp.
Seedling volunteer barley	Hordeum spp.
Soft chess	Bromus mollis
Seedling Wild oats	Avena fatua
Downy brome	Bromus tectorum
Common chickweed	Stellaria media
Common vetch	Vicia sativa
Common velvetgrass	Holcus lanatus
Mannagrass	Glyceria spp.
Barnyardgrass	Echinochloa crus-galli
Canarygrass	Phalaris canariensis
Green foxtail	Setaria viridis
Large crabgrass	Digitaria sanguinalis
Yellow foxtail	Setaria glauca

Spray equipment: Use a fixed-boom power sprayer properly calibrated to a constant speed and rate of delivery. **DO NOT** use smaller than 50-mesh strainer. Avoid overlapping of spray swath. Shut off boom while starting, turning or stopping to avoid overlapping. Apply in 10 to 50 gallons of water per acre at low pressure (20 to 50 psi).

Soil preparation: A firm, fine and level seedbed free of trash and vegetative matter will provide best results from preemergence applications. Large clods can reduce effectiveness of **NEKTRON SC**. It is advised that all vegetative growth be thoroughly worked into the soil before treatment.

#### NEW SEEDINGS OF ANNUAL OR PERENNIAL RYEGRASS

Before weed emergence: Apply NEKTRON SC after seeding and prior to weed emergence. For best results apply to moist soil. Apply 1.50 to 3.00 pints (0.75 to 1.50 lb a.i./A) per acre per application. Use the lower rate for control of common chickweed. For control of rattail fescue, wild oats, and volunteer cereals and other weeds listed, use 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application.

After weed emergence: Apply NEKTRON SC at earliest possible weed growth stage but not later than the 4-leaf stage. Rattail fescue, wild oats, and volunteer cereals which are more difficult to control, must be treated no later than the 2-leaf stage. Apply 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application. Use the highest rate where rattail fescue, wild oats, and volunteer cereals are present and where weed infestation is heavy.

## NEW SEEDINGS OF FALL-PLANTED PERENNIAL RYEGRASS AND TALL FESCUE TREATED WITH DIURON PLUS CHARCOAL

Timing of application: Apply NEKTRON SC following crop emergence and after sufficient rainfall and/or overhead irrigation has occurred to dissipate the charcoal band (approximately 4 inches). Use dosage rates listed in Dosage Table 10. Surface debris may result in reduced weed control. Failure to allow for complete dissipation of the charcoal band may result in reduced weed control within the crop row. For best results, apply NEKTRON SC to a moist soil surface.

Before using diuron, read the diuron label for rate directions, timing of applications, directions for use, and precautionary statements, DO NOT exceed maximum dosage rates for either herbicide.

NOTE: DO NOT apply NEKTRON SC when crop shows diuron injury.

## **DOSAGE TABLE**

Сгор	Rate Per Acre	Remarks
Perennial ryegrass and tall fescue	(0.75 to 1.50 lb a.i./A)	For effective control, annual bluegrass must be treated before the 4-leaf stage; rattail fescue, wild oats, and volunteer wheat must be treated before the 2-leaf stage. Use the lower rate for control of annual bluegrass and common chickweed; use the higher rate for control of rattail fescue, wild oats, and other weeds listed.

After weed emergence: Apply NEKTRON SC at earliest possible weed growth stage but not later than the 4-leaf stage. Rattail fescue, wild oats, and volunteer cereals which are more difficult to control, must be treated no later than the 2-leaf stage. Apply 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application. Use the highest rate where rattail fescue, wild oats, and volunteer cereals are present and where weed infestation is heavy.

## ESTABLISHED STANDS OF PERENNIAL RYEGRASS AND TALL FESCUE

**Before weed emergence:** Apply **NEKTRON SC** at 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application prior to weed emergence. Use higher rate where rattail fescue, wild oats, and volunteer cereals are expected to be a problem. For best results, apply to moist soil. Crop residue and debris will reduce effectiveness of treatment and must be removed or destroyed.

After weed emergence: Apply NEKTRON SC at earliest possible weed growth stage but not later than the 4-leaf stage. Rattail fescue, wild oats, and volunteer cereals which are more difficult to control, must be treated no later than the 2-leaf stage. Apply 2.25 to 3.00 (1.13 to 1.50 lb a.i./A) pints per acre per application. Use the higher rate where rattail fescue, wild oats, and volunteer cereals are present. Where weed pressure is very heavy and rattail fescue is at the maximum stage of growth for treating, a rate of 3.00 pints (1.50 lb a.i./A) of NEKTRON SC is specified.

## **ESTABLISHED STANDS OF BENTGRASS**

Apply only to well-established stands which have been seeded for not less than 12 months. Straw from previous crop must be removed or destroyed. Failure to do so may result in reduced weed control.

Before weed emergence: Apply NEKTRON SC at 1.50 to 3.00 pints (0.75 to 1.50 lb a.i./A) per acre per application prior to weed emergence. Use higher rate where rattail fescue, wild oats, and volunteer cereals are expected to be a problem. For best results, apply to moist soil.



After weed emergence: Apply NEKTRON SC at earliest possible weed growth stage, but no later than the 4-leaf stage. Rattail fescue, wild oats, and volunteer cereals which are more difficult to control, must be treated no later than the 2-leaf stage. Apply at the rate of 1.50 to 3.00 pints (0.75 to 1.50 lb a.i./A) per acre per application. Use higher rate when rattail fescue, wild oats, and volunteer cereals are a problem. **DO NOT** apply more than 3.00 pints (1.50 lb a.i./A) of **NEKTRON SC** per acre per application on bentgrass.

## ESTABLISHED STANDS OF KENTUCKY BLUEGRASS (UNDER IRRIGATION ONLY)

Apply only to established stands which have been seeded for at least 12 months. Crop residues, carbon, and debris must be removed. Failure to do so may result in reduced weed control. **NEKTRON SC** is compatible with currently labeled grass seed herbicides. Consult your local fieldman for specified uses.

Before weed emergence: Apply NEKTRON SC at 2.00 pints (1 lb a.i./A) per acre per application prior to weed emergence. For best results, apply to moist soil. Apply at least 1/2 inch irrigation within 2 to 3 days after treatment to incorporate NEKTRON SC.

After weed emergence: Apply NEKTRON SC at 2.00 pints (1.00 lb a.i./A) per acre per application at the earliest possible weed growth stage, but no later than the 4-leaf stage. For best results, apply to moist soil. Apply at least 1/2 inch irrigation within 2 to 3 days after treatment to incorporate NEKTRON SC.

#### **USE PRECAUTIONS**

**NEKTRON SC** may cause stunting and stand reduction of newly seeded perennial ryegrass and tall fescue if the crop is planted late in the fall and subjected to adverse climatic conditions or pesticides which restrict normal growth. If vegetative matter or stover from previous crop was burned, sufficient rainfall or overhead irrigation must have occurred to dissipate the charcoal residue remaining after burning prior to **NEKTRON SC** treatment. Failure to allow for dissipation of charcoal residue may result in reduced weed control.

## COMMERCIAL SOD PRODUCTION PRODUCT INFORMATION

(For use in California, Idaho, Nevada, Oregon, and Washington only)

**NEKTRON SC** is a selective herbicide for use in established and newly planted tall fescue and perennial ryegrass grown for sod in California, Idaho, Nevada, Oregon, and Washington. **NEKTRON SC** may be applied preemergence or postemergence for the control of weed species listed below. Overhead irrigation or rainfall shortly after application is necessary for activation.

**DO NOT** harvest treated sod for 16 days following application.

Residual control of weeds is dependent upon soil moisture conditions; rate of herbicide used, and soil texture. The activity of NEKTRON SC in the soil is reduced as soil texture becomes finer and organic matter/thatch increases.

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#### RATE RESTRICTIONS

- **DO NOT** apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per application.
- DO NOT apply more than 2 applications per year.
- DO NOT apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per year.
- Minimum Retreatment Interval: 28 days.

#### **WEEDS CONTROLLED**

Annual bluegrass	Poa annua
Large crabgrass	Digitaria sanguinalis
Green foxtail	Setaria viridis
Yellow foxtail	Setaria glauca
Canarygrass	Phalaris canariensis
Volunteer barley	Hordeum sp.
Volunteer wheat	<i>Triticum</i> sp.
Wild oats	Avena fatua
Rattail fescue	Festuca myuros
Common velvetgrass	Holcus lanatus
Mannagrass	Glyceria sp.
Downy brome	Bromus tectorum
Soft chess	Bromus mollis

Spray equipment: Use a fixed-boom power sprayer properly calibrated to a constant speed and rate of delivery. **DO NOT** use smaller than a 50-mesh strainer. Avoid overlapping of spray swath. Shut off boom while starting, turning, or stopping to avoid over-application. Make applications in 10 to 50 gallons of water per acre at low pressure (20 to 50 psi).

Soil preparation: All existing vegetative matter must be thoroughly worked into the soil surface before planting. Large clods, trash, or vegetative matter left on the soil surface will reduce effectiveness of the NEKTRON SC treatment.

## NEWLY PLANTED PERENNIAL RYEGRASS AND TALL FESCUE GROWN FOR SOD

Apply **NEKTRON SC** to newly planted areas when crop reaches the 2-to 3-leaf stage of growth. For best results, apply to moist soils.

**Before weed emergence:** Apply **NEKTRON SC** at 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application prior to weed emergence. Use the higher rate where rattail fescue, wild oats, and volunteer cereals are expected to be a problem.

After weed emergence: Apply NEKTRON SC at earliest possible weed growth stage but no later than the 4-leaf stage. Rattail fescue, wild oats, and volunteer cereals which are more difficult to control, must be treated no later than the 2-leaf stage. Apply NEKTRON SC at 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application.

## ESTABLISHED PERENNIAL RYEGRASS AND TALL FESCUE SOD

For preemergence and/or postemergence control of susceptible weeds, apply **NEKTRON SC** prior to weed emergence or at the earliest possible weed growth stage, but not later than the 4-leaf stage. For best results, apply to moist soils. Apply **NEKTRON SC** at 2.25 to 3.00 pints (1.13 to 1.50 lb a.i./A) per acre per application. Repeat applications at 4 to 8 week intervals may be needed to maintain weed control. **DO NOT** apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per year for perennial ryegrass and tall fescue sod.

## **USE PRECAUTIONS**

**NEKTRON SC** may cause stunting, and stand reduction of newly seeded perennial ryegrass and tall fescue, if the crop is planted late in the fall and subjected to adverse climatic conditions or pesticides which restrict normal growth. If vegetative matter or stover from previous crop was burned, sufficient rainfall or overhead irrigation must have occurred to dissipate the charcoal residue remaining after burning prior to **NEKTRON SC** treatment. Failure to allow for dissipation of charcoal residue may result in reduced weed control.

# ORNAMENTAL TURF USE PRODUCT INFORMATION (Not for Use in California)

NEKTRON SC is a herbicide intended for use on ornamental turf including golf courses, parks, cemeteries and residential or commercial lawns, and after overseeding specific grasses. It may be used on established perennial ryegrass, Kentucky bluegrass, creeping bentgrass, turf-type tall fescue, St. Augustinegrass, and dormant bermudagrass for the control and/or suppression of the annual grasses and broadleaf weeds listed in the tables below. NEKTRON SC is intended for commercial use only.

**NEKTRON SC** has both preemergent and early (two-leaf stage) postemergence activity and works best in programs emphasizing both approaches. **NEKTRON SC** application is most effective on healthy, vigorously growing turf.



## WEED SPECIES CONTROLLED

#### **PREEMERGENCE**

#### **Annual Grasses**

Barnyardgrass (Echinochloa crus-galli)

Bluegrass, annual (Poa annua)

Canarygrass (Phalaris canariensis)

Craborass, large (Digitaria sanguinalis)

Crabgrass, smooth (Digitaria ischaemum)

Foxtail, green (Setaria viridis)

Foxtail, yellow (Setaria glauca)

## Annual Broadleaves

Burclover (Medicago sp.)

Chickweed, common (Stellaria media)

Purslane, common (Portulaca oleracea)

Pigweed, redroot (Amaranthus retroflexus)

## **NEKTRON SC** will also reduce competition from:

Nutsedge, purple (Cyperus rotundus)

Nutsedge, yellow (Cyperus esculentus)

#### **POSTEMERGENCE**

#### **Annual Grasses**

Bluegrass, annual (Poa annua)

## **Annual Broadleaves**

Chickweed, common (Stellaria media)

Clover, white (Trifolium repens)

## PREEMERGENCE/EARLY POSTEMERGENCE

#### **Annual Grasses**

Crabgrass, large (Digitaria sanguinalis)

Crabgrass, smooth (Digitaria ischaemum)

#### RESTRICTIONS

- DO NOT apply more than 3.00 pints (1.50 lb a.i./A) per acre in a single application.
- DO NOT apply more than 2 applications per year.
- DO NOT apply more than 3.00 pints (1.50 lb a.i./A) per acre per year
- . Minimum Retreatment Interval: 21 days.
- NEKTRON SC is not intended for residential use and must be applied to residential lawns by licensed or certified applicators.
- DO NOT OVER APPLY NEKTRON SC. Follow the instructions in this label or damage to non-target turf may result.
- DO NOT apply with hand-held or flood jet nozzles because treatments may not be uniform.
- DO NOT apply this product through any type of irrigation system.
- Delay application of **NEKTRON SC** at least 8 weeks after application of a Plant Growth Regulator although a **NEKTRON SC** program may be initiated on creeping bentgrass 3 weeks after a single application of trinexapac-ethyl has been applied.

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- DO NOT apply NEKTRON SC to putting greens.
- DO NOT apply NEKTRON SC to zoysiagrass and hard or fine fescue to avoid serious injury.

## **PRECAUTIONS**

- Spray overlap can cause turf injury due to over application. Use of a spray colorant or indicator is advised so that spray overlap can be avoided.
- When using **NEKTRON SC**, overseed to prevent stand thinning as a result of loss of annual bluegrass. Use the rate of **NEKTRON SC** listed for the overseeded species when overseeding. In mixed stands of established turfgrasses, use the rate listed for the *least* tolerant species.

## Spray Equipment, Application, and Precautions

Use standard, low-pressure (20 to 50 psi) spray equipment to apply **NEKTRON SC**. Calibrate spray equipment prior to use and frequently check the equipment during application. Use a spray indicator to aid in even application. Prior to and after applying **NEKTRON SC**, thoroughly clean and rinse the spray tank and line.

## Varietal Tolerance

Ethofumesate (the active ingredient in **NEKTRON SC**) has been used on the following turfgrass cultivars. However, **NEKTRON SC** can be used on other cultivars. Prior to large- scale use of **NEKTRON SC** on cultivars other than those listed below, test a small area for tolerance.

- CREEPING BENTGRASS- The following cultivars have shown good to excellent tolerance to NEKTRON SC: Carmen, Cobra, Highland, Lopez, Mariner, National, Penncross, Providence, Putter, Southshore, SR1020, and Viper. Injury has been occasionally noted on Emerald, Penneagle, and Pennilinks cultivars.
  - NEKTRON SC may cause serious injury to Cohansey, Colonial, south German varieties, Egmont, Bardot, Tracenta, Allure, Astoria, and SR7100.
- DORMANT BERMUDAGRASS- Tifgreen, Tidwarf and Common bermudagrass are more susceptible to NEKTRON SC than hybrid bermudagrass.
   KENTUCKY BLUEGRASS- Adelphi, American, Aspen, Asset, Challanger, Classic, Emundi, Huntsville, Georgetown, Glade, Haga, Julic, Liberty, Merit, Midnight, Monopoly, Mystic, Parade, Rugby, Sydsport, Touchdown. NOTE: DO NOT
- APPLY to Explorer, Limousine, Northstar, RAN I and Total Eclipse.

   PERENNIAL RYEGRASS- Acclaim, Blazer, Dasker, Derby, Elka, Fiesta, Goalie, Hunter, Linn, Loretta, Manhattan II, Palmer, Pennfine, Regal, Yorktown.
- ST. AUGUSTINEGRASS- Raleigh
- TURF-TYPE FALL FESCUE- America, Arid, Mustana
- For fall control of annual bluegrass, begin applications of NEKTRON SC during the period of maximum weed germination and end as close to the first killing freeze as possible.
- Spring applications must be made during the period of maximum weed germination. Consult your weed science specialist or university extension service for the directed application timing in your area. Spring applications are most effective following fall applications.



#### SEE CHART BELOW FOR USE RATES AND TIMINGS AND READ TEXT BELOW FOR SPECIFIC DIRECTIONS FOR EACH TYPE OF GRASS.

**Application Rates and Timings** 

		1			go			
Turf Type Primary Targets Appli		Use Rate <sup>1</sup>				Overseeding Safety	Application Safety	
	Application Timing	Pints/Acre	0z/1,000 Sq. Ft.	# of Apps⁵ Per Year	Application Interval (Days)	Interval <sup>3</sup> (Weeks After Treatment)	Interval <sup>4</sup> (Weeks After Emergence)	
Creeping Bentgrass	Annual Bluegrass	Fall	1.50 (0.75 lb a.i./A)	9/16	0-2	21-28	4	4
		Spring <sup>2</sup>	1.50 (0.75 lb a.i./A)	9/16	0-2	21-28		
Kentucky Bluegrass	Annual Bluegrass	Fall	1.50 (0.75 lb a.i./A)	9/16	2	21-28	6	8
Ryegrass	Annual Bluegrass	Fall Spring	2.00-3.00 (1.00 - 1.50 lb a.i./A)	3/4-1.1	0-1 0-1	N/A N/A	1-2	1-2
St. Augustinegrass (Est. Turf)	Bermudagrass Suppression	Spring	1.50 (0.75 lb a.i./A)	9/16	2	21-28	N/A	N/A
Turf-Type Tall Fescue	Annual Bluegrass	Fall	1.50-3.00 (0.75 - 1.50 lb a.i./A)	3/4-1.1	1-2	21-28	0	2-3
Overseeded (ryegrass) Bermudagrass: Dormant Bermudagrass	Annual Bluegrass	Fall	1.50-3.00 (0.75 – 1.50 lb a.i./A)	9/16 - 1.1	1-2	21-28	N/A	N/A
Nondormant Bermudagrass	Annual Bluegrass	Fall	2.00-2.25 (1.00 - 1.13 lb a.i./A)	3/4-7/8	1	N/A	N/A	N/A

N/A= Not applicable.

<sup>1</sup> Apply **NEKTRON SC** in 20 to 60 gallons of water per acre or 1 to 3 gallons of water per 1,000 sq. ft.

<sup>2</sup>Only make spring applications after previous fall treatments.

3After the last treatment of NEKTRON SC, the interval provided applies to overseeding of the specific grass on same type of grass to which NEKTRON SC was applied.

<sup>4</sup>NEKTRON SC may be applied to specific grass following seed emergence after the specified time interval.

\*DO NOT exceed the maximum single application rate or yearly maximum application rate of 3.00 pints (1.50 lb a.i./A) per acre (i.e. a split application of 1.50 pints (0.75 lb a.i./A) per acre once in the spring and once in the fall OR a single application of 3.00 pints (1.50 lb a.i./A) per acre in either the spring or the fall).

## INSTRUCTIONS FOR SPECIFIC GRASS TYPES

#### COOL SEASON TURFGRASSES

#### **Creeping Bentgrass**

Apply NEKTRON SC to bentgrass as long as the turf is at a length typically found on fairways (or longer). When applying to bent-grass, use the following guidelines.

#### RESTRICTIONS

- Avoid using **NEKTRON SC** in areas that are heavily shaded and/or poorly drained.
- Creeping bentgrass tolerance to **NEKTRON SC** may be improved by tank mixing **NEKTRON SC** with nitrogen fertilizer (controlled release or soluble) at a rate of 0.10 to 0.25 lb N per 10,000 ft<sup>2</sup>. This may also improve creeping bentgrass conversion in the areas treated.
- . Control of annual bluegrass is best achieved by making two applications of NEKTRON SC; one in the fall followed by one in the spring.
- NEKTRON SC works best in the spring if applied after creeping bentgrass has resumed active growth and is fully green.

When overseeding with creeping bentgrass, use the following guidelines:

- After applying NEKTRON SC, wait a minimum of 3-4 weeks before overseeding with bentgrass.
- When an area has been renovated or overseeded with bentgrass, DO NOT apply NEKTRON SC until 3-4 weeks after seedling emergence.

## Kentucky Bluegrass

## RESTRICTIONS

- Delay application of **NEKTRON SC** to bluegrass until at least 8 weeks after emergence.
- Bluegrass overseeded with ryegrass may be treated with **NEKTRON SC** 1-2 weeks after ryegrass emergence.

When overseeding with Kentucky Bluegrass use the following guidelines:

- Wait at least six weeks after the last **NEKTRON SC** application before reseeding with Kentucky bluegrass.
- Note that sod quality during the spring may be diminished following the fall applications of **NEKTRON SC**. Alternatives to fall application of **NEKTRON SC** include seeding with dormant bluegrass in the late fall or to delay reseeding until the spring.

## **Perennial Ryegrass**

Control of annual bluegrass in perennial ryegrass is easiest when it is newly emerged, and application of **NEKTRON SC** is made during the primary period of annual bluegrass germination (and up to 30 days after annual bluegrass emergence) in the fall and/or spring. Consult your local Extension Service or university weed specialist for the date(s) that annual bluegrass germinates in your area.

## RESTRICTIONS

- DO NOT apply more than 1.50 pints (0.75 lb a.i./A) per acre per application (0.50 oz./1,000 sq. ft.) once in the fall and once in the spring.
- DO NOT apply more than 2 applications per year.
- **DO NOT** apply more than 3.00 pints of product (1.50 lb a.i./A) per acre per year.
- Application in the fall or spring will also reduce competition from selected broadleaf weeds and crabgrass.

When overseeding with perennial ryegrass, use the following guidelines:

- Wait 1-2 weeks (or until the seedlings are approximately 1" tall) before applying **NEKTRON SC** to the seeded area.
- To the extent possible, thatch must be removed from the area being seeded as it can diminish the effectiveness of the **NEKTRON SC** treatment.
- DO NOT apply mulch or straw to the seeded areas until after NEKTRON SC has been applied.



#### Turf-Type Tall Fescue

Make NEKTRON SC applications to turf-type tall fescue in the fall. If overseeding with turf- type tall fescue, application of NEKTRON SC may be done at the same time as seeding.

#### RESTRICTIONS

- **DO NOT** apply more than a total of 3.00 pints of product (1.50 lb a.i./A) per acre in a single application.
- DO NOT apply more than 2 applications per year.
- DO NOT apply more than a total of 3.00 pints of product (1.50 lb a.i./A) per acre per year.
- Minimum Retreatment Interval: 21 days.

#### WARM SEASON TURFGRASSES

## St. Augustinegrass (Established Turf)

**NEKTRON SC** suppresses the development of actively growing Bermudagrass in established St. Augustine sod. Apply **NEKTRON SC** to St. Augustinegrass in the spring and early summer to suppress Bermudagrass and Bermudagrass seedhead formation and/or for control of annual bluegrass.

#### RESTRICTIONS

- DO NOT treat St. Augustinegrass in the first six months after germination.
- DO NOT treat St. Augustinegrass that is under stress or injury to the turf may result.
- Temporary stunting and minor discoloration of St. Augustinegrass may occur after application. If the St. Augustinegrass shows signs of severe yellowing or stunting, discontinue applications.

Use the following guidelines when applying **NEKTRON SC** to St. Augustinegrass:

- Begin NEKTRON SC applications when Bermudagrass first breaks dormancy in the spring. Application timing is critical to achieve optimum results and will vary depending on location and temperature.
- For best results, make two applications of NEKTRON SC at 1.50 pints (0.75 lb a.i./A) per acre (0.50 oz./1,000 sq. ft.) with the second application being made 21-28 days after the first application.
- To improve suppression, each application of NEKTRON SC may be tank-mixed with Atrazine at up to 2.00 lb ai/A for first application and 0.75 lb-1.00 lb ai/A triazine for second or third application.

#### **Overseeded Dormant Bermudagrass**

#### RESTRICTIONS

- DO NOT make more than one application at 3.00 pints (1.50 lb a.i./A) per acre (1.00 oz./1,000 sq. ft) of NEKTRON SC when treating nondormant bermudagrass. Treatment to turf that is not fully dormant may cause early injury and/or delayed spring green-up.
- Application of NEKTRON SC to bermudagrass that is stressed due to shade, poorly drained soils, and high traffic may result in increased turf injury. Avoid use of NEKTRON SC or use lower rates under these conditions.

Use the following guidelines when applying **NEKTRON SC** to Bermudagrass:

- To control annual bluegrass, make applications of NEKTRON SC in late fall (ideally 1-2 weeks after emergence of overseeded perennial ryegrass) on overseeded bermudagrass.
- When **NEKTRON SC** is applied in late November or early December, applications of 2.00-2.25 pints (1.00-1.13 lb a.i./A) per acre per application have shown acceptable control of annual bluegrass with minimum injury to nondormant (or predormant) bermudagrass. If lower rated are used, expect reduced control of annual bluegrass. If higher rates are used, increased injury to Bermudagrass may occur.
- NEKTRON SC must not be applied to Bermudagrass in the 4 weeks prior to breaking winter dormancy. Applications made to Bermudagrass in the 4 weeks prior to breaking dormancy may temporarily delay the normal start of active growth.

When overseeding bermudagrass, use the following guidelines:

- Common bermudagrass in fairways or roughs may be more susceptible to herbicide injury than hybrid bermudagrass.
- . When making applications to nondormant bermudagrass, NEKTRON SC must be kept within areas that are overseeded so that the ryegrass will mask any early injury or late transition in the spring that may occur.
- Using a higher than normal seeding rate may be desirable in order to minimize the appearance of thin turf.

## **NEKTRON SC MIXTURES WITH FERTILIZERS**

## **NEKTRON SC Impregnation on Dry Bulk Fertilizers**

**NEKTRON SC** may be impregnated on many dry bulk fertilizers (See "1" below) and applied for the control of labeled grasses and broadleaf weeds on turf, and applied and incorporated into the soil before planting in sugar beets.

All **NEKTRON SC** label and supplementary literature instructions and precautions regarding rates per acre, soil type, application, and other directions must be followed. All individual State regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the **NEKTRON SC** fertilizer mixtures. A minimum of 200 pounds and a maximum of 700 pounds of approved fertilizer ingredients (See "2" below) impregnated with the appropriate amount of **NEKTRON SC** must be applied per acre. For impregnating the pesticide on dry fertilizers, use a closed rotary drum type mixer equipped with suitable spraying equipment. The spray nozzles must be positioned inside of the mixer to provide uniform spray coverage of the tumbling fertilizer. The **NEKTRON SC** must be sprayed uniformly onto the fertilizer using a fine spray pattern.

The physical properties of fertilizers vary, particularly in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with **NEKTRON SC** provides a satisfactory dry mixture. If the absorptivity is not adequate, use of a highly absorptive powder is required to provide a dry, free-flowing mixture. Microcel E (Johns-Manville Products Corporation) is the advised absorbent powder. It must be added separately and uniformly to the prepared pesticide/fertilizer mixture in a quantity that is sufficient to provide a suitably free-flowing mixture. Less than 2% by weight of Microcel E is required.

The amount of **NEKTRON SC** actually required in the formulation of specific fertilizer mixtures must be calibrated carefully for each production operation. This is necessary to ensure that the amount of **NEKTRON SC** actually contained in the fertilizer mixture applied to the soil represents the correct dosage rate.

Bulk fertilizers impregnated with **NEKTRON SC** must be applied immediately, NOT STORED.

## 1. Approved dry fertilizer ingredients for use with NEKTRON SC. NEKTRON SC Impregnation on Dry Bulk Fertilizers

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	N	Р	K	
Ammonium nitrate	34	0	0	
Ammonium sulfate	21	0	0	
Ammonium phosphate-sulfate	16	20	0	
Diammonium phosphate	18	46	0	
Monoammonium phosphate	11	56	0	
Potassium chloride	0	0	60	
Potassium sulfate	0	0	52	
Single superphosphate	0	20	0	
Triple superphosphate	0	46	0	
Urea	45	0	0	

NEKTRON SC Physical Data		
Density	1.15 g/cm <sup>3</sup>	
Pounds/gallon	9.60	
Flashpoint	Non-combustible	



#### 2. Rate Chart for the Impregnation of Dry Bulk Fertilizers with NEKTRON SC: Gallons of NEKTRON SC per Ton of Dry Bulk Fertilizer

Fertilizer Rate lb/acre	2.25 pt./acre	Impregnation Rate 3 pt./acre	4.5 pt./acre
200	2.80	3.75	5.63
250	2.25	3.00	4.50
300	1.88	2.50	3.75
350	1.59	2.16	3.19
400	1.41	1.88	2.81
450	1.25	1.69	2.50
500	1.13	1.50	2.25
550	1.03	1.38	2.06
600	0.94	1.25	1.88
650	0.87	1.13	1.75
700	0.80	1.08	1.62

#### **NEKTRON SC** with Liquid Fertilizer

The following procedure is suggested for evaluation of physical compatibility of NEKTRON SC in mixtures with liquid fertilizers for spray tank applications.

#### Material Required

- 1. NEKTRON SC components of tank sizes if intended for use
- 2. Liquid fertilizer to be used.
- 3. Adjuvant for fertilizer tank mix: Compex\* or E-Z Mix\*\*
- 4. Two (or more) one quart wide mouth containers with lids or stoppers
- 5. Measuring spoons (25 ml pipette or graduated cylinder provides more accurate measurement)
- 6. Measuring cup, 8 fl. oz. (237 ml)
- \*Compex, Kalo Baloratories, Inc., Kansas City, MO
- \*\*E-Z Mix, United Agri-Products, Greeley, CO

#### Procedure

- 1. Pour one pint (473 ml) of the liquid fertilizer into each of the quart containers.
- 2. Add adjuvant(s) to one or more of the containers and mix; follow label directions of adjuvant.
- 3. Add the **NEKTRON SC** and tank mix components to the containers (see rate table below).
- 4. Close the containers with lids or stoppers and mix contents by inverting the containers ten times.
- 5. Inspect the surface and body of mixture:
- a. immediately after mixing
- b. after allowing mixtures to stand quietly for 30 minutes,
- c. immediately after mixing again (invert the containers ten more times).

If uniform mixture does not occur, the spray tank mixture must not be used. If any of the mixtures remain uniform for 30 minutes, that mixture may be used in spray tank applications. If any of the mixtures separate after 30 minutes but remix readily into a uniform mixture with inversion of the container, the mixture may be used provided that adequate agitation is maintained in the spray tank. If a **NEKTRON SC** plus fertilizer mixture utilizing an adjuvant is satisfactory, but the one without adjuvant is not, be sure to use the adjuvant in the spray tank at the rate specified on the label which was used in the test.

If non-dispersible oil, sludge, or clumps of solids form in the mixtures, those combinations must not be used for spray tank application.

## Rate Table for NEKTRON SC Mixtures with Liquid Fertilizers

Gal. of Liquid Fertilizer to be applied per acre	ml or tsp of NEKTRON SC to be added to 1 pint of fertilizer	
gal	ml	tsp.
20	17.60	3.60
30	12.00	2.40
40	9.00	1.90
50	7.10	1.50
60	6.00	1.20

<sup>\*</sup> Based on field rate of 3.00 lb. ai/acre (3/4 gal/acre) in the fertilizer volumes indicated. Adjust amount of **NEKTRON SC** added proportionately to correspond with intended field use rate listed on **NEKTRON SC** label (taking into account soil type when using on sugar beets). Add the proportionate amount of tank mix component (e.g., chloridazon) if intended for use, based on volume of **NEKTRON SC** used in the test.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Protect product from freezing temperatures.

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

CONTAINER HANDLING: Nonrefillable container. DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Nonrefillable containers;  $\leq$  5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable > 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.



#### LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. All such risks shall be assumed by the user or buyer.

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