81880-18

12/12/2012



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D C 20460

> OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

DEC 17 2012

Nıkkı Yepez Canyon Group LLC c/o Gowan Company P O Box 5569 Yuma, AZ 85366-5569

> Subject Label Amendment – Adding Crop Group 17, Proso Millet and Pasture/Rangeland Grasses Sandea Herbicide EPA Reg No 81880-18 Application Dated August 18, 2011

Dear Ms Yepez

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable Per the HED risk assessment, dated July 19, 2012, the following comments apply

- 1 An analytical reference standard for the RRE of halosulfuron-methyl must be submitted to the EPA National Pesticide Standards Repository (860 1650)
- 2 The Immunotoxicity study requirement to fulfill current 40 CFR Part 158 data requirement has not been satisfied We are aware a waiver request has been submitted, but this is still under Agency review (870 7800)
- 3 If future new use requests increase the dietary burden, a new dairy cattle feeding study will be needed (860 1480)

Amended labeling will supersede all previously accepted ones A stamped copy of labeling is enclosed for your records Submit one (1) copy of final printed labeling before you release the product for shipment If you have any questions regarding this action, please contact Maggie Rudick at (703) 347-0257 or rudick maggie@epa gov

Sincerely.

Kable Bo Davis, Product Manager 25 Herbicide Branch Registration Division

Enclosures D396458 D394244 D 394247

GROUP

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SANDEA<sup>®</sup> is a selective herbicide for control of listed broadleaf weeds and nutsedge

ACTIVE INGREDIENT Halosulfuron methyl OTHER INGREDIENTS % BY WT 75 0% <u>25 0%</u> TOTAL 100 0%

# KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta busque a alguien para que se las explique a usted en detaile

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

 FIRST AID

 IF IN EYES

 • Hold eye open and rinse slowly and gently with water for 15 20 minutes. Remove contact lenses if present after 5 minutes then continue rinsing eye
 • Call poison control center or physician for treatment advice.

 IF SWALLOWED

 • Call poison control center or physician immediately for treatment advice.

 IF SWALLOWED

 • Call poison control center or physician 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 to an unconclous person.

 • HOT LINE NUMBER

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

 For emergency information concerning this product call toll free 1 888-478 0798

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

CAUTION

Causes moderate eye irritation Harmful if swallowed Avoid contact with eyes or clothing

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### Applicators and other handlers must wear

Long sleeved shirt and long pants

Shoes plus socks

Follow manufacturers instructions for cleaning/maintaining PPE If no such instructions for washables use detergent and hot water. Keep and wash PPE separately from other laundry

ENGINEERING CONTROLS STATEMENTS When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170 240 (d) (4 6)] the handler PPE requirements may be reduced or modified as specified in the WPS

## USER SAFETY RECOMMENDATIONS

#### Users should

- Wash hands before eating drinking chewing gum using tobacco or using the toilet
- · Remove clothing immediately if pesticide gets inside Then wash thoroughly and put on clean clothing

# ENVIRONMENTAL HAZARDS

This product is toxic to non target vascular plants. Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater The use of this chemical in areas where soils are permeable particularly where the water table is shallow may result in groundwater contamination

In order to limit the potential for ground water contamination and off site movement of phytotoxically significant residues via subsurface flow halosulfuron methyl shall not be used in any areas with the following soil characteristics (use of halosulfuron methyl is only allowed in areas where none of the three sets of criteria below are met)

Areas (within the confines of a contiguous area representing a single soil series as defined within a single mapping unit) of any soil type with less than 2% organic matter in the upper 24 inches of the soil profile with historical average depth to ground water under 30 feet (utilizing the best available data from the NRCS local county extension agents and other sources) within counties with historical average precipitation over 40 inches (utilizing data from any weather station within the county with 20 or more years of continuous weather reporting )

# NET CONTENTS \_\_\_\_\_ OUNCES



Produced For Canyon Group LLC C/O Gowan Company PO Box 5569 Yuma Arizona 85364

EPA Reg No 81880 18 EPA Est No

- 1 Areas with sand or loamy sand soil texture and less than 2 5% organic matter content for at least the upper 24 inches of the soil profile with historical average depth to ground water under 50 feet (utilizing the best available data from the NRCS local county extension agents and other sources) within counties with historical average precipitation over 30 inches (utilizing data from any weather station within the county with 20 or more years of continuous weather reporting )
- 2 Areas with sandy loam soil texture and less than 2% organic matter content for at least the upper 24 inches of the soil profile with historical average depth to ground water under 40 feet (utilizing the best available data from the NRCS local county extension agents and other sources) within counties with historical average precipitation over 35 inches (utilizing data from any weather station within the county with 20 or more years of continuous weather reporting )

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe consult the agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170 This standard contains requirements for the protection of agricultural workers on farms forests nurseries and greenhouses and handlers of agricultural pesticides. It contains requirements for training decontamination notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil or water is

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

## PRODUCT INFORMATION

SANDEA is a dry flowable formulation that selectively controls certain broadleaf weeds and nutsedges in selected crops. SANDEA is effective both preemergence and postemergence SANDEA can be absorbed through roots shoots and foliage and is translocated within the plant.

#### WEED RESISTANCE STATEMENT

Weeds can develop resistance to herbicides Some weed biotypes have inherent resistance to certain herbicides. Also repeated use of herbicides with similar modes of action can result in the development of resistance in weed populations. SANDEA a member of the sulfonylurea family is an ALS enzyme inhibiting herbicide. To minimize the potential for resistance development and/or to control resistant weed biotypes use a variety of cultural mechanical and chemical weed control tactics. Rotate with herbicides having different modes of action (e.g. non ALS/AHAS materials). Contact your professional crop advisor local cooperative extension specialist or Canyon Group representative for additional information.

#### **APPLICATION EQUIPMENT AND INSTRUCTIONS**

#### Ground Applications

SANDEA can be applied as a broadcast or band application. For band applications use proportionally less spray mixture based on the area actually sprayed. Do not concentrate the band. Consult the APPLICATION INSTRUCTIONS section of this label for the rates and procedures that are appropriate for your growing region.

Apply SANDEA in a spray volume that ensures thorough and uniform coverage Use of 15 or more gallons of water per acre is recommended unless otherwise directed in the APPLICATION INSTRUCTIONS section Choose nozzles that provide optimum spray distribution and coverage to the target weed at the appropriate pressure (psi) Avoid streaking skips overlaps and spray drift during application. Thoroughly clean equipment prior to mixing spray solution. Follow the clean up procedures on the labels of applied products. If no directions are provided follow the 6 steps outlined in the Sprayer Tank Cleanout section below.

### Aerial Applications [For Corn, Sorghum, & Rice]

Apply this product or approved tank mixtures with properly calibrated equipment in 3 to 15 gallons of water per acre

Thoroughly clean equipment prior to mixing spray solution Avoid streaking skips overlaps and spray drift during applications

#### Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR Do not allow this product to drift onto neighboring crops or non crop area or use in a manner or at a time other than in accordance with label directions because animal plant or crop injury illegal residues or other undesirable results may occur The interaction of many equipment – and weather – related factors determine the potential for spray drift The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations they should be observed. The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications public health uses or to applications using dry formulations.

- 1 The distance of the outer most nozzles on the boom must not exceed <sup>3</sup>/<sub>4</sub> the length of the wingspan or rotor
- 2 Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations they should be observed

# The importance of spray droplet size

The most effective way to reduce drift potential is to apply large droplets The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control Applying larger droplets reduces drift potential but may not prevent drift if applications are made improperly or under unfavorable environmental conditions (see the following 'Wind Temperature and Humidity and Temperature Inversion sections of this advisory)

#### Controlling initial droplet size

- Volume Use high flow rate nozzles to apply the highest practical spray volume Nozzles with higher flow rates produce larger droplets
- Pressure Use the lower spray pressures recommended for the nozzle Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed use higher flow rate nozzles instead of increasing pressure
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage
- Nozzle orientation Orienting nozzles so the spray stream is released backwards parallel to the air stream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle type Use a nozzle type that is designed for the intended application. With most nozzle types narrower spray angles produce larger droplets. Consider using low drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types. Controlling placement of spray droplets.
- Boom length For some use patterns reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width
- Application height Applications should not be greater than 10 feet above the top of the tallest plants unless a greater height is required for aircraft safety Greater application heights result in greater droplet size reduction through evaporation and greater movement in air currents Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind
- Application speed Slower aircraft speeds within a safe range will produce less air turbulence and fewer small droplets
- Swath adjustment When applications are made with a crosswind the swath will be displaced downwind Therefore on the up and downwind edges of the field the applicator must compensate for this displacement by adjusting the path of the aircraft upwind Swath adjustment distances should increase with increasing drift potential (wind speed droplet size etc.)

#### Key environmental factors

- Wind Drift potential is the lowest between wind speeds of 2 to 10 mph However many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided when wind speeds are below 2 mph due to variable wind direction and high inversion potential. NOTE Local terrain can influence wind patterns. Applicators should be familiar with local wind patterns and how they affect drift.
- Temperature and humidity When making applications in low relative humidity set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry
- Temperature inversions Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable air currents that are common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog, however if fog is not present inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke detector. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### Sensitive areas

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

Thoroughly clean application equipment immediately after the use of SANDEA Prepare a tank cleaning solution that consists of a 1 percent solution of household ammonia (one quart of ammonia for every 25 gallons of water) Use sufficient cleaning solution to thoroughly rinse all surfaces and to flush all hoses Repeat the procedure with the ammonia solution. Complete the cleaning process by rinsing with clean water

#### **CALIFORNIA ONLY**

#### Sensitive Crop

PRUNES

#### **Buffer Zones**

- 1 Aerial applications shall not be made closer than four miles
- 2 Ground applications shall not be made closer than 1 mile from prunes unless wind direction during the application is away from prunes When wind direction during the ground application is away from prunes ground applications shall not be made closer than 1/2 mile from prunes

#### COTTON

Buffer Zones

- 1 Aerial applications shall not be made closer than 1 mile from cotton
- 2 Ground applications shall not be made closer than 1 mile from cotton unless wind direction during the application is away from cotton When wind direction during the ground application is away from cotton ground applications shall not be made closer than 1/2 mile from cotton

## **MIXING INSTRUCTIONS**

Fill the spray tank to about three fourths of the desired volume and begin agitation. Add the labeled amount of SANDEA. Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source. Add nonionic surfactant and other adjuvants as the last ingredients in the tank. Spray solutions should be applied within 24 hours after mixing.

#### ADJUVANTS

Unless otherwise stated a nonionic surfactant (NIS) is recommended in the spray solution for postemergence applications or for preemergence applications where susceptible weeds are present prior to crop emergence. Use only nonionic type surfactants that are approved for use on food crops and contain at least 80% active ingredients. Use 0.25 to 0.50 percent nonionic type surfactant concentration (1 to 2 quarts per 100 gallons of spray solution). Use of SANDEA without an adjuvant when weeds are present may result in reduced efficacy. Use of crop oil concentrate (COC) or silicone based adjuvants can result in increased crop injury and reduced yields and are not recommended for postemergence applications over the crop unless stated otherwise.

#### TANK MIXES

Unless stated in the Application Instructions section or allowed by supplemental labeling tank mix combinations have not been evaluated and are the user's responsibility. Refer to the companion product label for use instructions additive requirements weeds controlled the size range of weeds that should be treated and application restrictions. It is recommended that tank mixtures should be evaluated for miscibility and crop safety on a small test area prior to use. Tank mixtures should not be applied when the plants are under stress due to drought water saturated soils. Iow fertility (especially low nitrogen levels) or other poor growing conditions.

SPRAYER TANK CLEANOUT

To avoid injury to desirable crops clean all mixing and spray equipment before and immediately following applications of SANDEA as follows

- 1 Drain tank thoroughly rinse spray tank boom and hoses with clean water Remove the nozzles and screens and clean separately in a bucket containing agent and water Loosen and physically remove any visible deposits
- 2 Fill the tank with clean water and 1 gallon of household ammonia (containing 3% ammonia) for every 100 gallons of water Flush the hoses boom and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses boom and nozzles with the cleaning solution and then drain the tank.
- 3 Remove the nozzles and screens and clean separately in a bucket containing agent and water
- 4 Repeat step 2
- 5 Rinse the tank boom and hoses with clean water
- 6 The rinsate may be disposed of on site or at an approved disposal facility

\* Equivalent amount of an alternate strength ammonia solution can be used in the clean out procedure Carefully read and follow the individual cleaner instructions

## USE PRECAUTIONS

- Excessive amounts of water (greater than 1 inch) from rainfall or sprinkler irrigation soon after a preemergent application may cause crop injury This potential injury can be enhanced if seeding depth is too shallow
- · Within 4 hours of a SANDEA application avoid using overhead sprinkler irrigations or making applications when conditions favor rainfall
- Broadcast applications of SANDEA herbicide over plastic mulch may result in significant crop injury when spray residue is concentrated in the plant hole by irrigation or rainfall. Properly crowned beds may minimize the potential for this injury
- SANDEA can cause injury or crop failure under cool and wet growing conditions that delay early seedling emergence vigor or growth Be
  especially cautious during the first planting of the season when these conditions are likely to occur
- SANDEA may delay maturity of treated crops
- SANDEA should not be applied if the crop or target weeds are under stress due to drought water saturated soils low fertility (especially low nitrogen levels) or other poor growing conditions
- Use of soil or foliar applied organophosphate insecticides on SANDEA treated crops may increase the potential for crop injury and/or the severity of the crop injury
- Avoid spray drift outside of targeted area
- SANDEA may be applied to labeled crops (including cultivars and/or hybrids of these) however the user assumes responsibility for such use Not
  all hybrids/varieties have been tested for sensitivity to SANDEA. For untested varieties a small amount of the field should be sprayed to determine
  potential sensitivity to its use. Any plant injury arising from the use of SANDEA is the responsibility of the user.
- Thoroughly clean application equipment immediately after SANDEA use and prior to spraying another crop
- Temporary yellowing or stunting of the crop may occur following SANDEA applications
- Crop rotation intervals may need to be extended on drip irrigated crops in CA and AZ due to environmental conditions
- Under certain environmental conditions SANDEA applied over the top of a blooming crop may result in some bloom loss

### USE RESTRICTIONS

- Do not apply SANDEA using air assisted (air blast) field crop sprayers
- Do not apply this product through any type of irrigation system
- Do not apply more than 2 0 ounces of SANDEA per acre per 12 month period (includes applications to the crop and to row middles/furrows)

### FOR OPTIMUM RESULTS

The level of weed control following SANDEA application is dependent upon application rate and method weed species size and infestation intensity at application time and growing conditions. Soon after SANDEA is applied growth of susceptible weeds is inhibited and they are no longer competitive with the crop. Following growth inhibition, the leaves and growing point begin to discolor. Complete control typically occurs within 7.14 days depending on the weed size species and growing conditions.

- Follow mixing instructions regarding adjuvants
- For preemergence applications
  - · If susceptible weeds are present prior to crop emergence use a surfactant as directed in the Adjuvants section
  - Activating soil moisture is necessary for optimum preemergent weed control
  - Preemergent weed control may be improved by incorporating SANDEA with irrigation (1/4 1/2 inch maximum)
- For postemergence applications
  - Treat young actively growing broadleaf weeds 1 3 inches in height Larger weeds may not be adequately controlled
  - Treat actively growing nutsedge plants at the 3 5 leaf stage
    - Wait to overhead sprinkler irrigate for 2 to 3 days after a postemergence application
  - · Avoid applications when weeds are under drought stress disease or insect damage
  - Use of SANDEA without an adjuvant can result in reduced efficacy
- Heavy infestations should be treated early before the weeds become too competitive with the crop
- A timely cultivation may be necessary to control suppressed weeds weeds that were bigger than the maximum recommended size at application
  weeds that emerge after an application or weed species not on the SANDEA label. For best results wait to cultivate treated soil area for 7 10 days
  after a postemergence application of SANDEA unless specified otherwise.
- Annual weeds may have multiple flushes of seedlings or treated perennials may sometimes re grow from underground stems or roots depending upon rainfall and other environmental conditions. To maximize control of such weeds it may be necessary to use sequential applications of SANDEA

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# WEEDS CONTROLLED BY SANDEA ALONE

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C = Control S = Suppression NA = No Activity

WEED SPECIES	PREEMERGENT ACTIVITY	POSTEMERGENT ACTIVITY
Amaranth spiny <sup>2</sup> Amaranth spinosus	C <sup>2</sup>	C <sup>2</sup>
Bindweed Calystegia sepium	NA	S
Burcucumber Sicyos angulatus	NA	S
California arrowhead <sup>3</sup> Sagittaria montevidensis	NA	C <sup>3</sup>
Chickweed common Stellaria media	С	NA
Cocklebur common Xanthium strumarium	с	с
Corn spurry Spergula arvensis	с	С
Dayflower Commelina erecta	с	S
Deadnettle purple Lamium purpureum	с	NA
Devils Claw Harpagophytum procumbens	NA	С
Eclipta Eclipta prostrata	с	S
Flatsedge rice <sup>3</sup> Cyperus ina	S³	C <sup>3</sup>
Fleabane Philadelphia Erigeron philadelphicus	NA	С
Galinsoga Galinsoga	с	с
Golden crownbeard Verbesina encelioides	NA	С
Chenopodium californicum	С	С
Senecio vulgans	C	NA
Engeron canadensis	C <sup>2</sup>	NA
Equisetum arvense	NA	S
Jimsonweed Datura stramonium	с	NA
Jointvetch Aeschynomene virginica	NA	С
Kochia <sup>2</sup> Kochia scopana	C <sup>2</sup>	S <sup>2</sup>
Ladysthumb Polygonum persicana	С	С
Lambsquarter common Chenopodium album	С	NA
Lettuce prickly Lactuca semola	С	NA
Mallow common <i>Malva neglecta</i>	с	NA
Mallow Venice Hibiscus trionum	с	С
Mayweed chamomile (dog fennel) Anthemis cotula	С	NA
Milkweed common Asclepias syriaca	NA	S

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WEED SPECIES	PREEMERGENT ACTIVITY	POSTEMERGENT ACTIVITY
Milkweed honeyvine Ampelamus albidus	NA	S
Morningglory ivyleaf <sup>3</sup> Ipomoea hederacea	NA	S³
Morningglory tall <sup>3</sup> Ipomoea purpurea	NA	S³
Mustard wild Sinapis arevensis	с	С
Nutsedge yellow <sup>1</sup> Cyperus exculentus	S	C1
Nutsedge purple <sup>1</sup> Cyperus rotundus	S	C1
Passionflower maypop Passiflora incarnata	NA	С
Pigweed redroot <sup>2</sup> Amarunthus retrofiexus	C <sup>2</sup>	C <sup>2</sup>
Pigweed smooth <sup>2</sup> Amaranthus hybridus	C <sup>2</sup>	C <sup>2</sup>
Plantain Plantago major	с	NA
Pokeweed common Phytolacca Amencana	NA	С
Purslane Portulaca oleracea	S	NA
Radish wild Raphanus raphanistrum	С	С
Ragweed common <sup>2</sup> Ambrosia artemisiifolia	C <sup>2</sup>	C <sup>2</sup>
Ragweed giant <sup>2</sup> Ambrosia trifida	NA	C <sup>2</sup>
Redstem <sup>3</sup> Ammania aunculata	NA	C <sup>3</sup>
Ricefield Bulrush <sup>2</sup> Scirpus mucronatus	NA	C <sup>2</sup>
Sesbania hemp Sesbania exaltata	S	С
Shepherdspurse Capsella bursa pastoris	с	S
Sida prickly Sida spinosa	NA	S
Smallflower umbrella sedge <sup>2</sup> Cyperus difformis	NA	C <sup>2</sup>
Smartweed Pennsylvania Polyfonum pennsylvanicum	С	S
Sunflower Helianthus annuus	с	С
Velvetleaf Abutilan theophrasti	С	С
Willowherb Epilobium ciliatum	с	NA
Yellowcress creeping Ronppa sylvestns	с	С

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## Except California

- Accept Conformal Heavy infestations of nutsedge may require sequential applications. An earlier treatment may be required to prevent nutsedge from competing with the crop Certain biotypes of this weed species are known to be resistant to ALS herbicides. Where these ALS resistant biotypes are known to exist an appropriate registered herbicide active against the weed and with another mode of action should be used alone or in tank mixtures with SANDEA to control these biotypes Use maximum label rates for best results

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CROP	PAGE #	CROP	PAGE #
Alfalfa		Fallow Ground	··· · · · · · · · · · · · · · · · · ·
Apple (East of the Rockies)		Honeydews	
Apple (West of the Rockies)		Millet	
Asparagus		Okra	
Beans Dry		Pasture Rangeland & Forage	
Beans Succulent		Peas Succulent	
Bell peppers		Pumpkins	
Bluebernes		Rhubarb	
Cantaloupes		Rice	
Chile peppers		Sorghum	
Corn Field		Sugarcane	
Corn Pop		Summer Squash	
Corn Seed		Tomatoes	
Corn Sweet		Tree Nuts	
Cotton		Turfgrass/Sod	
Crenshaw Melons		Watermelons	
Cucumbers		Winter Squash	

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APPLICATION INSTRUCTIONS PREHARVEST INTERVAL The required days between last application and harvest (PHI) are given in ( ) after each crop name

CUCURBIT CRO	PS	
CROP	OZ/ACRE	COMMENTS
CUCUMBERS	1/2 1	Apply uniformly with ground equipment in a minimum of 15 gallons of water per acre
(30)		Direct seeded Bare ground (no mulch)
(including		• Preemergence Apply SANDEA after planting but prior to soil cracking Use the lower rate on lighter
pickies)		textured soils with low organic matter
CANTALOUPES		• Postemergence Apply SANDEA after the crop has reached at least 3 5 true leaves but before first
		termale nowers appear SANDEA can be applied as an over the top application a directed spray
(57) AND		application of with cop sneus to minimize contact of the herbicide with the crop
CRENSHAW		Direct sector result match
MELONS (57)		• Fre seeding Apply SANDEA following may be shaping and just pillot to the installation of the plastic much Cron may be seeded into this treated area no sonner than Z days after application and the
		installation of the plastic mulch unless local conditions demonstrate safety at an earlier instanzal. Like the
		Invertise on induction matching of the provide the solution of the induction of the provide the solution of the provide the provid
		• Postemergence Apply SANDEA after the crop has at least 3.5 true leaves but before first female
		flowers appear SANDEA can be applied as an over the top application a directed spray application or
		with crop shields to minimize contact of the herbicide with the crop Additional phytotoxicity may occur
		when applications are made over plastic due to concentration of product in the planting hole Note
	{	Over the top applications on plastic are not allowed in Northeastern and Midwestern states
		Transplanted Bare ground (no mulch)
		• Pre transplant Apply SANDEA as a pre transplant application Crop may be transplanted into this
		treated area no sooner than 7 days after application unless local conditions demonstrate safety at an
		earlier interval Use the lower rate on lighter textured soils with low organic matter. Care should be
		taken to limit movement of SANDEA treated surface soil during the transplanting process since it treated
		soils is moved into the transplant note injury can occur
		• Post transpiant Apply SANDEA to transpiants that are established and actively growing Applications
		dave after transplanting unless local conditions demonstrate safety at an earlier interval but before first
		female flowers appear SANDEA may be applied as an over the top application a directed stray
		application or with crop shields to minimize contact of the herbicide with the crop
	f	Transplanted Plastic mulch
		• Pre transplant Apply SANDEA following final bed shaping and just prior to the installation of the plastic
		mulch Crop may be transplanted into this treated area no sooner than 7 days after the application and
		the installation of the plastic mulch unless local conditions demonstrate safety at an earlier interval Use
		the lower rate on lighter textured soils with low organic matter. Care should be taken to limit movement
		of SANDEA treated surface soil during the transplanting process since if treated soils is moved into the
		transplant noie injury can occur
		<ul> <li>Post transplant Apply SANDEA to transplants that are established actively growing and in the 3.5 true of other states and the second states are stablished actively growing and in the 3.5 true</li> </ul>
		teal stage of no source that it doys allet transplanting times local conditions demonstrate safety at an
		directed spray application or with error shields to minimize contact of the berbuilde with the cron
		Additional phytotoxicity can occur when applications are made over plastic due to concentration of
		product in the transplant hole Note Over the top applications on plastic are not allowed in
		Northeastern and Midwestern states
		Direct seeded and Transplant
		Row Middle/Furrow Applications Apply SANDEA between rows of direct seeded or transplanted crop
		Avoid contact of the herbicide with the planted crop If plastic is used on the planted row adjust
		equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area
		actually sprayed
1		Split Applications for Nutsedge
		Preemergence followed by postemergence for nutsedge control
		To maximize control of nutsedge it may be necessary to use a postemergence application to those areas
		where the nutseage has emerged later following a preemergence application - For these situations use a
		spot treatment method treating only those areas or emerged husedge Application rate should not exceed
		the plants. Avail contact of the hardware with the plantad con
		Destemanance followed by nostemanance for puteodae control
		<ul> <li>Postemengence forlowed by postemengence for nuiseage control</li> <li>To maximize control of nuiseage. It may be necessary to use a second nostemerance shot annication to</li> </ul>
		those areas where the nutsedge has emerged or re grown. For these situations use a shot application to
		method treating only those areas of emerged rutsedee. Allow a minimum of 21 days between
		applications Application rate should not exceed 1 0 oz product per treated acre in these areas. Use a
		water volume that will allow for good coverage of the plants Avoid contact of the herbicide with the
		planted crop
	A maxi	mum of 2 applications may be made per crop cycle
	Do not	apply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month
	period	(includes applications to the crop and to row middle/furrows)
	Runner     Consu	rs that come in contact with the plastic can pick up residual SANDEA and may exhibit a visual crop response It Use Precautions and For Optimum Results sections for important usage information

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CROP	OZ/ACRE	COMMENTS
PUMPKINS and WINTER	1/2 3/4	Apply uniformly with ground equipment in a minimum of 15 gallons of water per acre
SQUASH(30)		<ul> <li>Preemergence Apply SANDEA after planting but prior to soil cracking. Use the lower rates on lighter textured soils with low organic matter.</li> </ul>
		<ul> <li>Postemergence Apply SANDEA after the crop has reached the 2 5 true leaf stage preferably 4 5 true leaves but before first female flowers appear Use lower rates on lighter textured soils with low organic matter</li> <li>Transplanted</li> </ul>
		<ul> <li>Pre transplant Apply SANDEA prior to transplant Crop may be transplanted into this treated area no sooner than 7 days after application unless local conditions demonstrate safety at an earlier interval. Use the lower rate on lighter textured soils with low organic matter. Care should be taken to limit movement of SANDEA treated surface soil during the transplanting process since if treated soils is moved into the transplant hole injury can occur.</li> </ul>
		<ul> <li>Post transplant Apply SANDEA to transplants that are established actively growing and in the 3.5 true leaf stage or no sooner than 14 days after transplanting unless local conditions demonstrate safety at an earlier interval but before first female flowers appear SANDEA can be applied as an over the top application a directed spray application or with crop shields to minimize contact of the herbicide with the crop</li> </ul>
	1/2 1	Apply uniformly as a broadcast spray with ground equipment in a minimum of 15 gallons of water per acre FOR PROCESSING ONLY Direct seeded • Preemergence Apply SANDEA after planting but prior to soil cracking Use the lower rates on lighter
		<ul> <li>Postemergence Apply SANDEA after the crop has reached the 2.5 true leaf stage but before first female flowers appear. Use lower rates on lighter textured soils with low organic matter</li> </ul>
	1/2 1	<ul> <li>Direct seeded and Transplant</li> <li>Row Middle/Furrow Applications Apply SANDEA between rows of direct seeded or transplanted crop while avoiding contact of the herbicide with the planted crop If plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed</li> </ul>
	<ul> <li>A maximuli</li> <li>Do not app (include</li> <li>Where pos</li> <li>When rain germina</li> <li>Consult</li> </ul>	m of 2 applications may be made per crop cycle oly more than 1 ounce SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month period as applications to the crop and to row middles) ssible apply 1/2 to 3/4 inch of sprinkler irrigation to settle the soil after planting and prior to application fall or irrigation in excess of 3/4 inch occurs following a preemergence application and the crop is in the ation to early seedling stage there is the potential for significant plant stunting to occur Use Precautions and For Optimum Results sections for important usage information
SUMMER SQUASH FOR PROCESSING (30)	2/3 1	<ul> <li>Apply uniformly with ground equipment in a minimum of 20 gallons of water per acre</li> <li>Direct seeded</li> <li>Preemergence Apply SANDEA after planting but prior to cracking Use the lower rate on lighter textured soils with low organic matter</li> </ul>
(AR OK and MO only)	1/2 1	<ul> <li>Direct-seeded and Transplant</li> <li>Row Middle/Furrow Applications Apply SANDEA between rows of direct seeded or transplanted summer squash If plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed Avoid contact of the herbicide with the planted crop</li> </ul>
	<ul> <li>Do not app (includes a</li> <li>Consult Information</li> </ul>	bly more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month period applications to the crop and to Row Middle/Furrows) Use Precautions and For Optimum Results sections on the EPA label for important usage on
WATERMELONS (57)	1/2 3/4	Apply uniformly with ground equipment in a minimum of 20 gallons of water per acre Direct-seeded Bare ground
Oniy AL AR AZ CA CT DE FL GA IL IN		Preemergence Apply SANDEA after planting but prior to soil cracking Use the lower rate on lighter textured soils with low organic matter Where soil is fumigated prior to planting allow at least five days after soil fumigation before an application of SANDEA Direct Seeded Plastic mulch
KS KY LA MA, MD ME MI MO MS NC NH NJ NY OH OK PA RI SC TN TX VA, VT WV WI		Pre seeding Apply SANDEA following final bed shaping and just prior to the installation of the plastic mulch. Watermelons should be seeded into this treated area no sooner than 7 days after the application and the installation of the plastic mulch unless local conditions demonstrate safety at an earlier interval. Use the lower rate on lighter textured soils with low organic matter. SANDEA treated soil from the soil surface into the planting hole can result in crop injury. Care should be taken to limit movement of SANDEA treated surface soil during the transplant process.
		Pre transplant Apply SANDEA pre transplant Watermelons should be transplanted into this treated area no sooner than 7 days after application unless local conditions demonstrate safety at an earlier interval. Use the lower rate on lighter textured soils with tow organic matter. Care should be taken to limit movement of SANDEA treated surface soil during the transplanting process since if treated soils is moved into the transplant hole injury can occur.

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CROP	OZ/ACRE	COMMENTS
WATERMELONS (57) Only AL AR AZ CA CT DE FL GA, IL IN KS KY LA MA, MD ME MI MO MS NC NH NJ NY OH OK PA, RI SC TN TX VA, VT WV WI (continued)	1/2 3/4	<ul> <li>Transplanted Plastic mulch</li> <li>Pre transplant Apply SANDEA following final bed shaping and just prior to the installation of the plastic mulch. Watermelons should be transplanted into this treated area no sooner than 7 days after the application and the installation of the plastic mulch unless local conditions demonstrate safety at an earlier interval. Use the lower rate on lighter textured soils with low organic matter. Care should be taken to limit movement of SANDEA treated surface soil during the transplanting process since if treated soils is moved into the transplant hole injury can occur.</li> </ul>
	1/2 1	<ul> <li>Direct seeded and Transplant</li> <li>Row Middle Applications Apply SANDEA between rows of direct seeded or transplanted crop while avoiding contact of the herbicide with the planted crop If plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed</li> </ul>
	<ul> <li>Do not a period (i</li> <li>Runners</li> <li>Consult</li> </ul>	pply more than 1 ounce of SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month ncludes applications to the crop and to row middle) that come in contact with the plastic can pick up residual SANDEA and may exhibit a visual crop response Use Precautions and For Optimum Results sections for important usage information
OTHER COMMODITIES IN THE CUCURBIT VEGETABLES GROUP Including but not Imited to summer squash gourd watermelon (See text for PHI)	1/2 1	<ul> <li>Direct seeded and Transplant</li> <li>Row Middle/Furrow Applications Apply SANDEA between rows of direct seeded or transplanted cucurbit vegetables while avoiding contact of the herbicide with the planted crop if plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed</li> </ul>
	<ul> <li>Do not a</li> <li>Do not a</li> <li>Do not a period</li> <li>Consult</li> </ul>	pply within 30 days of harvest for squash/cucumber subgroup pply within 57 days of harvest for melon subgroup pply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month : Use Precautions and For Optimum Results sections for important usage information

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# FRUITING VEGETABLE CROPS

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CROP	OZ/ACRE	COMMENTS
PEPPERS	1/2 1	Apply uniformity with ground equipment in a minimum of 20 gallons of water per acre
BELL/CHILE		Direct-seeded
(30)		• <b>Postemergence</b> Apply SANDEA as a directed spray 28 days after planting or when the plants have
		reached a minimum of six inches in height but prior to flowering. Use lower rates on lighter textured soils
AZ CA NM TX		with low organic matter
and OK Only		Transplanted
		• <b>Post transplant</b> Apply SANDEA as a directed spray 21 days after transplanting or when the plants
		have reached a minimum of six inches in height but prior to flowering
	1/2 1	Direct seeded and Transplant
		Row Middle/Furrow Applications Apply SANDEA between rows of direct seeded or transplanted
		peppers while avoid contact of the herbicide with the planted crop If plastic is used on the planted row
		adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to
		area actually sprayed
	<ul> <li>A maxim</li> </ul>	ium of 2 applications may be made per crop cycle
	<ul> <li>Do not a</li> </ul>	pply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month
	period (i	ncludes applications to the crop and to row middle/furrows)
	<ul> <li>Notall p</li> </ul>	epper varieties have been tested
	<ul> <li>Consult</li> </ul>	Use Precautions and For Optimum Results sections for important usage information
TOMATOES	1/2 1	Apply uniformly with ground equipment in a minimum of 20 gallons of water per acre
(30)		Direct seeded
		Postemergence Apply SANDEA over the top once tomatoes have reached the 4 leaf stage through
		30 days prior to harvest Applications following bloom could cause some bloom drop under certain
		environmental conditions Apply as a directed spray or with crop shield when these conditions are
		present
		Transplanted
		Pre transplant on Bareground Apply SANDEA as a pre plant application to bareground Tomatoes
		can be transplanted into this treated area 7 days after the application unless local conditions
		demonstrate safety at an earlier interval Use lower rate on lighter textured soils with low organic
		matter SANDEA treated soil from the soil surface into the transplant hole can result in crop injury
		Care should be taken to limit the movement of treated surface soil during the transplant process
		Pre transplant Under Plastic Mulch Applications Apply SANDEA following final bed shaping and
		just prior to the installation of the plastic mulch Tomatoes can be transplanted into this treated area /
		days after the application and the installation of the plastic mulch unless local conditions demonstrate
		safety at an earlier interval SANDEA treated soil from the soil surface into the transplant hole can
		result in crop injury Care should be taken to limit movement of SANDEA treated surface soil during the
		transpirant process
		<ul> <li>Post transpiant Apply SANDEA over the top post directed or with crop shields to tomato transplants</li> </ul>
		that are established actively growing and a minimum of 14 days are transplanting unless local
		condutions demonstrate safety at an earlier interval Applications following bloom could cause some
		should be capacidential environmental conditions Application as a directed spray of with crop shields
1	l	snouid be considered when conditions are present

CROP	OZ/ACRE	COMMENTS
TOMATOES	1/2 1	Direct-seeded and Transplant
(30) (continued)		Row Middle/Furrow Applications Apply SANDEA between rows for the control of nutsedge and listed broadleaf weeds Avoid contact of the herbicide with the planted crop If plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed
		Split Applications for Nutsedge Direct seeded and Transplant
		<ul> <li>Pre transplant followed by postemergence for nutsedge control         To maximize control of nutsedge it may be necessary to use a postemergence application to those areas         where the nutsedge has broken through the plastic mulch. For these situations use a spot treatment         method treating only those areas of emerged nutsedge. Application rate should not exceed 3/4 oz         product per treated acre in these areas. Use a water volume that will allow for good coverage of the         plants SANDEA treated soil in the transplant hole may result in crop injury. If transplanting after         herbicide application care should be taken to limit movement of SANDEA treated soil during the         transplant process.     </li> <li>Postemergence followed by postemergence for nutsedge control         To maximize control of nutsedge it may be necessary to use a postemergence spot application to those</li> </ul>
		areas where the hutsedge has germinated or regrown. Allow a minimum of 21 days between applications Application rate should not exceed 1 oz product per treated acre in these areas
	A maxim	num of 2 applications may be made per crop cycle
	Do not	apply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month
	Consult	Use Precautions and For Optimum Results sections for important usage information
FRUITING	1/2 1	Direct seeded and Transplant
VEGETABLES GROUP (30) Including but not limited to		<ul> <li>Row Middle/Furrow Applications Apply SANDEA between rows of direct seeded or transplanted fruiting vegetables while avoiding contact of the herbicide with the planted crop If plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed</li> </ul>
eggplant peppers tomatoes	<ul> <li>Do not a period</li> <li>Consult</li> </ul>	pply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month Use Precautions and For Optimum Results sections for important usage information

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# PERMANENT CROPS

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CROP	OZ/ACRE	COMMENTS
APPLE (14) (West of the	3/4 2	Apply uniformly with ground equipment in a minimum of 15 gals of water per acre Apply as a broadcast application to orchard floor on each side of the tree rows
Rockies)		<ul> <li>Postemergence application for control of nutsedge         Apply SANDEA as a single application when nutsedge is fully emerged (early – midsummer) Alternatively         two applications can be made Apply first application to the initial nutsedge flush when it has reached the         3 5 leaf stage If a second treatment is needed apply SANDEA later in the season directed to secondary         nutsedge emergence To maximize nutsedge control do not apply if nutsedge has exceeded 12 inches in         height         Preemergence and Postemergence application for control of labeled broadleaf weeds         Apply SANDEA as a single or sequential application based on weed pressure If small weeds are present         to maximize and enhance the spectrum of broadleaf control tank mix with a postemergence broad         spectrum type herbicide</li> </ul>
		Preemergence applications of SANDEA when ground cover prevents contact with the soil will result in reduced or no residual activity
	<ul> <li>Use a nor</li> <li>Avoid spr</li> <li>Do not ap</li> <li>Do not co</li> <li>Do not ap</li> <li>Do not ap</li> <li>SANDEA</li> <li>Do not apperiod</li> <li>Consult</li> </ul>	nionic surfactant (NIS) or penetrating type surfactant ay contact with tree foliage and fruit with spray or drift ipply when orchard temperatures exceed 85 F at the time of application incentrate the application rate into the treated swath ipply to trees established in a permanent orchard less than one calendar year ipply to nursery stock may not control ALS resistant weeds oply more than 2 ounces of SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month Use Precautions and For Optimum Results sections for important usage information

CROP	OZ/ACRE	COMMENTS
APPLE (14) (East of the Rockies)	1/2 1	Apply uniformly with ground equipment in a minimum of 15 gals of water per acre Apply as a broadcast application to orchard floor on each side of the tree row
		<ul> <li>Postemergence application for control of nutsedge         Apply SANDEA as a single application when nutsedge is fully emerged. Alternatively two applications can         be made. Apply first application to the initial nutsedge flush when it has reached the 3.5 leaf stage. If a         second treatment is needed it may be applied later in the season directed to secondary nutsedge         emergence. To maximize nutsedge control apply SANDEA when nutsedge plants are in the 3.5 leaf         stage. For best results use a minimum of 0.75 oz/A of SANDEA.     </li> <li>Preemergence and Postemergence application for control of labeled broadleaf weeds         Apply SANDEA as a single or sequential application based on weed pressure. For best results apply to         bare ground. If small weeds are present to maximize and enhance the spectrum of broadleaf control tank         mix with a postemergence broad spectrum type herbicide.</li> </ul>
		Preemergence applications of SANDEA when ground cover prevents contact with the soil will result in reduced or no residual activity
	<ul> <li>For best r</li> <li>Avoid spra</li> <li>Do not ap</li> <li>Do not co</li> <li>Do not ap</li> <li>Do not ap</li> <li>SANDEA</li> <li>Do not ap</li> <li>Consult</li> </ul>	esults use a nonionic surfactant (NIS) with postemergence applications ay or drift contact with tree foliage and fruit ply when orchard temperatures exceed 85 F at the time of application ncentrate the application rate into the treated swath iply to trees established in a permanent orchard less than one calendar year iply to nursery stock may not control ALS resistant weeds ply more than 2 ounces of SANDEA per acre per 12 month period Use Precautions and For Optimum Results sections of the EPA registered label for important usage
13 07B	1/2 2/3	Apply uniformly with ground equipment in a minimum of 15 gals of water per acre
Bushberry subgroup (14) (excluding lowbush blueberries)	1 4 year bushes 1/2 1 >4 year bushes	<ul> <li>Preemergence and Postemergence directed application for control of labeled weeds         Apply SANDEA as a single or sequential directed spray application. If small weeds are present tank mix         with a postemergence broad spectrum type herbicide to maximize and enhance the spectrum of broadleaf         and grass control         Preemergence applications of SANDEA when ground cover prevents contact with the soil will result in         reduced or no residual activity         Postemergence directed application for control of nutsedge         Apply SANDEA as a single directed spray application when nutsedge is fully emerged. Alternatively two         directed spray applications can be made. Apply first directed spray application to the initial nutsedge flush         when it has reached the 3 5 leaf stage. If a second treatment is needed it may be applied later in the         season directed to secondary nutsedge emergence. To maximize control apply SANDEA         should be avoided. Contact will result in temporary chlorosis of         treated leaves. Use of a shielded boom is recommended       </li> </ul>
	<ul> <li>Minimum</li> <li>Do not col</li> <li>Do not ap</li> <li>Do not ap</li> <li>Do not ap</li> <li>Do not col</li> <li>will result</li> <li>SANDEA</li> <li>Do not ap</li> <li>Consult</li> </ul>	of 45 days between applications incentrate the application rate into the treated swath ply to bushes established less than one year or to plants under stress ply to Elliott variety bushes established less than four years ply to areas where water is known to pond for periods of time following rainfall intact foliage or green wood renewal canes with SANDEA. Herbicide uptake via contacted foliage or green canes in plant injury may not control ALS resistant weeds ply more than 2 ounces of SANDEA per acre per 12 month period Use Precautions and For Optimum Results sections of label for important usage information
13 07B Lowbush Blueberries (14)	1/2 1	Apply uniformly with ground equipment in a minimum of 15 gals of water per acre SANDEA should be tank mixed with products such as Velpar <sup>®</sup> or Sinbar <sup>®</sup> to broaden the spectrum of weeds controlled Vegetative (Non Crop) Year
		Broadcast application prior to breaking dormancy for control of labeled weeds
	t.	Apply SANDEA as a single broadcast spray application if small weeds are present tank mix with a postemergence herbicide to maximize and enhance the spectrum of broadleaf and grass control Applications applied 1.2 months prior to breaking domancy will allow for better weed control
		Preemergence applications of SANDEA when ground cover prevents contact with the soil will result in reduced or no residual activity

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13 07B       Do not apply to bushes established less than one year or to plants under stress         Lowbush       Do not apply to areas where water is known to pond for periods of time following rainfall         Blueberries       Do not apply SANDEA after the crop has progressed into budbreak or significant injury will         (14)       Overlapping boom swaths increases the potential for phytotoxicity including leaf yellowing         SANDEA will not control ALS resistant weeds       Do not apply more than 1 ounce of SANDEA per acre per 12 month period         Consult       Use Precautions       and For Optimum Results       sections of label for importation	occur reddening and/or stunting nt usage information tree nut crops are defined as
Lowbush       • Do not apply to areas where water is known to pond for periods of time following rainfall         Blueberries       • Do not apply SANDEA after the crop has progressed into budbreak or significant injury will         (14)       • Overlapping boom swaths increases the potential for phytotoxicity including leaf yellowing         SANDEA will not control ALS resistant weeds       • Do not apply more than 1 ounce of SANDEA per acre per 12 month period         • Consult Use Precautions and For Optimum Results sections of label for importation	occur reddening and/or stunting nt usage information tree nut crops are defined as
Blueberries       • Do not apply SANDEA after the crop has progressed into budbreak or significant injury will         (14)       • Overlapping boom swaths increases the potential for phytotoxicity including leaf yellowing         (continued)       • SANDEA will not control ALS resistant weeds         • Do not apply more than 1 ounce of SANDEA per acre per 12 month period         • Consult Use Precautions and For Optimum Results sections of label for importation	occur reddening and/or stunting nt usage information tree nut crops are defined as
<ul> <li>(14)</li> <li>Overlapping boom swaths increases the potential for phytotoxicity including leaf yellowing</li> <li>SANDEA will not control ALS resistant weeds</li> <li>Do not apply more than 1 ounce of SANDEA per acre per 12 month period</li> <li>Consult Use Precautions and For Optimum Results sections of label for importation</li> </ul>	reddening and/or stunting nt usage information tree nut crops are defined as
<ul> <li>(continued)</li> <li>SANDEA will not control ALS resistant weeds</li> <li>Do not apply more than 1 ounce of SANDEA per acre per 12 month period</li> <li>Consult Use Precautions and For Optimum Results sections of label for importation</li> </ul>	nt usage information
<ul> <li>Do not apply more than 1 ounce of SANDEA per acre per 12 month period</li> <li>Consult Use Precautions and For Optimum Results sections of label for importation</li> </ul>	nt usage information tree nut crops are defined as
Consult Use Precautions and For Optimum Results sections of label for importa	nt usage information tree nut crops are defined as
	tree nut crops are defined as
TREE NUT       2/3       1 1/3       Apply SANDEA as a directed spray to established tree nut crops       Established         14       those that have been transplanted into their final growing location for a perior where the soil has firmly settled around the roots from packing and rainfall or irmg         (1)       Extreme care must be exercised to avoid contact of spray containing SAN or foliage of tree nut crops or severe damage or death may result         Labeled rates are based on broadcast treatment       For band applications sANDEA in proportion to the area actually sprayed. For all applications account for high volume output nozzles such as off center nozzles and Use of controlled droplet application spot application irrigation or application rates can result in severe tree injury or death.         Use a maximum of 1 ounce by weight (0 047 pound active ingredient) SA coarse textured soils classified as sands loamy sands and sandy loams and more than 65 percent sand or on soils with less than 1 percent org gravely soils. For the best results apply SANDEA in the spring when nut and maximize the interval between application and subsequent irrigation.         •       Mechanical cultivation or mowing may be required to control weeds in areas of did.         •       Is applied to trees that have been weakened by or recovering to the set the application and subsequent ingestor.	d of at least 12 months and gation IDEA with trunk stems roots reduce the broadcast rate of adjust the rate of SANDEA to overlaps in the spray pattern chemigation equipment for the actual application rate ANDEA herbicide per acre on with less than 18 percent clay janic matter Do not apply to sedge is not drought stressed is not on the SANDEA label If sturbed soil from stress caused by but not
<ul> <li>In SANDEA is applied to trees that have been weakened by on recovering in limited to excessive fertilizer or soil salts disease nematodes frost with previously applied pesticides insects winter injury soil pan of any mechanical damage severe injury or death may result. Application of stressed trees as described especially in soils with less than 1 percent increases the probability of severe injury or death. All such risks shall be a SANDEA may be applied at 2/3 to 1 1/3 ounces by weight per glyphosate agricultural herbicides for control of emerged annual granutsedge.</li> </ul>	wind injury drought flooding type nutrient deficiency or of SANDEA to weakened or t organic matter significantly assumed by the user acre in combination with asses broadleaf weeds and
AISO TETEL TO THE ROTATIONAL GROF INFORMATION Section of this label for applicable rola	d 2 2/3 ounces of product by
weight (0 125 pound active ingredient) per acre per use season. On coarse textured si	oils classified as sand loamy
sand and sandy loam with less than 18 percent clay and more than 65 percent sand	or on soils with less than 1
percent organic matter SANDEA may be applied up to 2 applications with a total of all	applications not to exceed 2
ounces of product by weight (0 094 pound active ingredient) per acre per use season	
Consult Use Precautions and For Optimum Results sections for important usage	e information

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# FIELD CROPS

CROP	OZ/ACRE	COMMENTS
BEANS DRY (30)	1/2 2/3	<ul> <li>Apply uniformly with ground equipment in a minimum of 15 gallons of water per acre</li> <li>Direct seeded</li> <li>Preemergence Apply SANDEA after planting but prior to soil cracking. Use the lower rate on lighter textured soils with low organic matter.</li> </ul>
		<ul> <li>Postemergence Apply SANDEA when plants have 1.3 trifoliate leaves but before flowering Applications with a weed size of 6 inches or below will allow for the greatest control. Make only one broadcast application per season.</li> </ul>
		Only apply as a post directed row middle or furrow application in the state of California <u>Tank Mixtures for Dry Beans</u>
		<ul> <li>Refer to the specific product labels and observe all precautions mixing and application instructions for all products used in tank mixtures. Be sure to follow the specifications listed on the most restrictive label when planning and making applications.</li> </ul>
		<ul> <li>Tank mixtures for additional broadleaf weed control can be added</li> <li>Tank mixtures for postemergent grass control including but not limited to TARGA® or other graminicides can be added</li> </ul>
		Not all varieties have been tested for tolerance Under adverse growing conditions (dry or excessive moisture cool weather etc.) maturity of the treated crop may be delayed which can influence harvest date yield and quality. Use of COC or MSO adjuvant may cause temporary crop response when plants are under stress. COC or MSO adjuvants can only be used in the states of CO MN NE ND and SD.
	1/2 1	Row Middle/Furrow Applications for Dry Beans Apply SANDEA between crop rows while avoiding contact of the herbicide with the planted crop Reduce rate and spray volume in proportion to area actually sprayed
	Do not     period (     Consul	apply more than 1 ounce SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month includes applications to the crop and to row middles/furrows) to Use Precautions and For Optimum Results sections for important usage information

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CROP	OZ/ACRE COMMENTS				
BEANS DRY	SANDEA @ Apply uniformly with ground equipment in a minimum of 15 gallons of water per acre				
(30) (continued)	1/2 – 2/3 oz Preplant or At Planting Incornoration Apply and incorporate 1/2 to 2/3 ounce SANDEA and 3 1/2 to 4 1/2 pints EPTAM 7				
(001111111011)		per acre to a depth of approximately 2 inches just before	re planting Use lower rate on lighter		
	textured soils with low organic matter Refer to EPTAM 7 E label for specific incorpo				
	which occurs				
	<ul> <li>Do not apply more than 2/3 ounce SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month period (includes applications to the crop and to row middles/furrows)</li> <li>Do not use EPTAM 7 E on Adzuki beans cowpeas (black eyed peas black eyed beans) Mung beans or garbanzo beans Under abnormal weather conditions stunting may occur on Gratiot Michilite Sanilac Seafarer and Seaway varieties Do not exceed 9 pints EPTAM 7 E per acre per crop</li> <li>Do not exceed 3 1/2 pints EPTAM 7 E per acre on small white beans or green beans grown on coarse textured soils</li> <li>Do not exceed 7 pints per acre per crop of EPTAM 7 E in the Southwestern and Southeastern regions Do not exceed 8</li> </ul>				
	pints per acre per crop of EPTAM 7 E in the Western Region Do not exceed 9 pints per acre per crop of EPTAM 7 E in				
	<ul> <li>the Pacific</li> <li>Consult</li> </ul>	Northwestern Region Do not exceed 9 3/4 pints of EPTAM 7 E in the ise Precautions and For Optimum Results sections for importa	Northern Region		
	A tank mix combination of SANDEA Herbicide plus EPTAM 7 E will give a broader spectrum of weed control than either				
	product used separately				
	and limita	ions on labeling of both products	before using Observe an cautions		
EANS	1/2 1	Direct seeded			
NAP (30)		<ul> <li>Preemergence Apply SANDEA after planting but prior to soil textured soils with low organic matter</li> </ul>	cracking Use the lower rate on lighter		
including lima		Apply uniformly with ground equipment in a minimum of 15 gallo	ns of water per acre		
eans)	1/2 2/3	Direct-seeded	and reached the 2 4 trifeliote leaf stars		
		<ul> <li>Postemergence Apply SANDEA over the top after the crop is but before flowering Use the lower rate on lighter textured s</li> </ul>	soils with low organic matter Directed		
		sprays may limit crop injury	• •		
	1/2 1	<ul> <li>Row Middle/Furrow Applications Apply SANDEA between herbicide with the planted crop Reduce rate and spray volume in</li> </ul>	crop rows while avoiding contact of the proportion to area actually sprayed		
	• Do not apply more than 1 ounce SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month period				
	<ul> <li>(includes applications to the crop and to row middles/furrows)</li> <li>Application of SANDEA may cause temporary stunting</li> <li>Consult Use Precautions and For Optimum Results sections for important usage information</li> </ul>				
	SANDEA @	Preplant or At Planting			
	Plus	Incorporation Apply and incorporate 1/2 to 1 ounce SAND	EA and 3 1/2 to 4 1/2 pints EPTAM 7 E		
	EPTAM 7E (	per acre to a depth of approximately 2 inches just before plai	nting Use lower rate on lighter textured		
	3 1/2 - 4 1/2	is soils with low organic matter Refer to EPTAM 7 E label for hoe lightly during or shortly after emergence of the beans to br	specific incorporation directions Rotary reak any crust which occurs		
	Do not apply more than 1 ounce SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month per				
	(includes a	pplications to the crop and to row middles/furrows)			
	<ul> <li>Do not use</li> <li>Do not exc</li> </ul>	eed 3 1/2 pints EPTAM 7 E per acre on green beans grown on coarse	textured soils		
	<ul> <li>Do not exceed 7 pints per acre per crop of Eptam in the Southwestern and Southeastern regions. Do not exceed 8 pints per acre per crop of EPTAM 7 E in the Western Region. Do not exceed 9 pints per acre per crop of EPTAM 7 E in the Western Region.</li> <li>Consult Use Precautions and For Optimum Results sections for important usage information.</li> </ul>				
	A tank mp	combination of SANDEA Herbicide plus EPTAM 7E will give a broad	er spectrum of weed control than either		
	Product Us     Caution	Read both the SANDEA Herbicide and EPTAM 7E labels carefully	v before using Observe all cautions		
	and limita	ions on labeling of both products	······································		
B succulent helled pea and	1/2	Preemergence application for control of labeled broadleaf weeds application after planting but before crop emergence	Apply SANDEA as a single broadcast		
ean subgroup					
30) Any succulent		Application of SANUEA may cause significant temporary stuntin in delayed harvest. This product is available to the end user	g and delay maturity of peas resulting grower solely to the extent that the		
helled cultivar of		benefit and utility in the sole opinion of the end user/grower of	sutweigh the extent of potential injury		
ean (Phaseolus		associated with the use of this product Due to the risk of cro	o damage all such use is at the end		
pp) or immature ovbean seed	- Do rot or	Where then 1/2 ounce of SANDEA has not her user			
Glycine max) or	<ul> <li>Do not ap</li> <li>SANDEA</li> </ul>	nay not control ALS resistant weeds			
ny Vigna spp nd garden pea	Consult	Jse Precautions and For Optimum Results sections of the EP	A registered label for important usage		
'isum spp)	Information				

CROP	OZ/ACRE	COMMENTS			
6B succulent	1/2 1	Postemergence - Apply SANDEA uniformly with ground equipment in a minimum of 15 gals of water per			
shelled pea and bean subgroup (30)		acre Apply as a directed spray when plants have 2 4 trifoliate leaves and before flowering Make one broadcast application Directed sprays are recommended to limit crop injury			
(Any succulent shelled cultivar of		Use a nonionic surfactant (NIS)			
bean (Phaseolus spp ) or immature soybean seed		Not all varieties have been tested for tolerance Under adverse growing conditions (dry or excessive moisture cool weather etc.) maturity of the treated crop may be delayed which can influence harvest date yield and quality. For untested varieties a small area of the field should be			
(Glycine max) or		sprayed to determine potential sensitivity to its use			
and darden bea	SANDEA	IDEA may not control ALS resistant weeds			
(Pisum spp)	<ul> <li>Do not ap</li> <li>12 month</li> </ul>	apply more than 1 ounce of SANDEA per acre per crop cycle not to exceed 2 ounces per acre per			
(continued)	Consult	Use Precautions and For Optimum Results sections of the EPA registered label for important usage			
	informati	on ed to Investesk			
CORN FIELD	• D0 1101 1e	Postemergence Apply SANDFA over the top or with drop pozzles from the spike through lavby stage of field			
AND FIELD CORN	2/3 1 1/3	corn			
SEED (30)		<u>Iank Mixtures for Corn Only</u> Ensure that spray equipment is set up to avoid applying an excessive rate directly over the rows and into the			
		whorl of the cornstalk. To insure good spray coverage of weeds and to reduce the risk of spraying directly into the whorl tank mix applications made after corn is 24 inches tail should be directed or semi-directed using			
		SANDEA Post Field Corn Applications			
		Refer to MIXING INSTRUCTIONS and USE RATE GUIDES sections of this label for detailed information			
		on SANDEA application Refer to the specific product labels and observe all precautions mixing and application instructions			
		for all products used in tank mixtures. Be sure to follow the specifications listed on the most			
		restrictive label when planning and making applications Before mixing in the suray tank, it is recommended that compatibility be tested by mixing all components in a			
		small container in proportionate quantities. For tank mixtures add individual formulations to a spray tank in the following sequence water soluble bags dry flowables emulsifiable concentrates drift control additive			
		water soluble liquids followed by nonionic surfactant or crop oil concentrate Tank mixtures should not be applied if the crop is under severe stress due to drought water saturated soils			
		above 92 F at time of application Tank mix applications under these conditions may cause temporary crop injury			
		Tank mixtures for additional broadleaf weed control including but not limited to 2.4 D. Armezon™ atrazine Buctril <sup>®</sup> Callisto <sup>®</sup> dicamba Impact <sup>®</sup> Laudis <sup>®</sup> or Yukon <sup>®</sup> can be added			
		Tank mixtures for post emerge grass control including but not limited to Accent <sup>®</sup> Beacon <sup>®</sup> Option <sup>®</sup> or Steadfast <sup>®</sup> can be added			
		Tank mixtures for additional post emerge grass and broadleaf control including but not limited to Roundup <sup>®</sup> brands or glyphosate (glyphosate tolerant corn only) or Ignite <sup>®</sup> and Liberty <sup>®</sup> (LibertyLink <sup>®</sup> hybrids only) can be added			
		Refer to the specific product labels and observe all precautions mixing and application instructions and follow crop intervals for all products used in tank mixtures			
		SANDEA and SOIL RESIDUALS in emerged corn Alachlor acetochlor metolachlor and dimethenamid may be tank mixed with SANDEA for residual control of foxtails and other grass weeds in field corn			
	<ul> <li>SANDEA may be applied up to 2 applications with a total application not to exceed 2 2/3 ounces of production (0 125 pound active ingredient) per acre per use season</li> </ul>				
	Following application to foliage allow 30 days before grazing domestic livestock harvesting forage or harvestir     Refer to the ROTATIONAL CROP INFORMATION section of this label for applicable rotational crop restriction				
	Mbon used a	SANDEA Soil Applications			
	acre (0 062 to 0 094 pound of active ingredient per acre) for residual control of velvetleaf common cocklebur common lambsquarters common ragweed pigweed smartweed sunflower and other difficult to control weeds				
	This product is labeled as an early pre plant surface applied pre-plant incorporated or preemergence treatment SANDEA offers effective broadleaf control across all tillage systems and is intended for use in tank mixtures with preemergence grass herbicides including but not limited to alachlor acetochlor metolachlor and dimethenamid active ingredient materials. Refer to the labels for these products or any other grass preemergence herbicide used for use instructions, weeds controlled				
	and applicatio	in restrictions			

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CROP	OZ/ACRE	COMMENTS			
CORN SWEET AND POPCORN (30)	2/3 1	Apply SANDEA over the top or with drop nozzles from the spike through layby stage of the corn If necessary a sequential treatment of this product at 2/3 ounce per acre may be applied only with drop nozzles semi directed or directed to avoid application into the corn plant whorl			
	<ul> <li>No more than 2 applications of SANDEA may be made per 12 month period in sweet corn or popcom</li> <li>Following application to foliage allow 30 days before grazing domestic livestock harvesting forage of</li> <li>Do not use SANDEA on Jubilee sweet corn All varieties have not been tested for sensitivity to SA</li> <li>Any injury arising from use of SANDEA is the responsibility of the user</li> <li>Consult Use Precautions and For Optimum Results sections for important usage information</li> </ul>				
COTTON (28)	2/3 1 1/3	Apply SANDEA as a directed spray in hooded equipment for postemergent weed control in emerged cotton. Applications may be made anytime after cotton emergence until row closure inhibits use of hooded spray equipment. The applicator is responsible for maintaining proper spray speed and equipment position so spray mist does not contact cotton plants.			
	<ul> <li>Do not apply more than 1 1/3 ounces SANDEA per acre per crop cycle not to exceed 1 1/3 ounces per acre per 12 month period</li> <li>Also refer to the Rotational Crop Information section of this label for applicable rotational crop restrictions</li> <li>Consult, Lise Precautions, and For Ontimum Posities, sections for important usage information.</li> </ul>				
17 MILLET (PEARL &	1/2 2/3	Millet Growth Stage SANDEA alone can be applied from the 2 leaf through layby stage (before grain head emergence)			
PROSO) (0 Millet Forage)		Temporary stature reduction may occur to the crop following application of Sandea Herbicide if the proso millet is under stress. This effect will be most evident 7 10 days after application. The crop will quickly recover under normal growing conditions. Applications should be made after weed emergence and actively growing. If adding a tank mix refer to the tank mix section of this label TANK MIXTURES.			
(50 Millet Grain and Straw) (37 Millet Hay)		Refer to MIXING INSTRUCTIONS and USE RATE GUIDES sections of this label for detailed information on SANDEA Herbicide application Refer to the specific product labels and observe all precautions mixing and application instructions for all products used in tank mixtures. Be sure to follow the specifications listed on the most restrictive label when planning and making applications			
		Tank mixtures for additional broadleaf weed control including but not limited to 2 4 D and Dicamba can be added			
	Insecticide and fungicide products can be tankmixed with SANDEA     Do not exceed 2/3 oz/A of SANDEA per 12 month period     O Day Pre grazing interval for grass forage for ALL animals (lactating and non lactating)     Consult Use Precautions and For Optimum Results sections for important usage information				
RICE	2/3 1 1/3	Pre plant at planting preemergence and postemergence applications to rice			
(48 CA 69)		<ul> <li>Pre plant         Apply SANDEA at 2/3 ounce per acre in combination with glyphosate or other suitable agricultural herbicides for burn down of emerged annual grasses broadleaf weeds and nutsedge. If this product is applied pre plant burn down refer to TIME INTERVAL BEFORE PLANTING table in complete directions for use     </li> <li>Preemergence and Postemergence         Apply SANDEA for postemergent weed control from prior to the emergence of rice until after permanent flood is established. Apply SANDEA at 2/3 to 1 1/3 ounce per acre with the total application rate not to exceed 1 1/3 ounce of product (0 062 lb active ingredient) per acre per use season.     </li> </ul>			
		SANDEA can be tank mixed with Propanil containing rice herbicides (e.g. Stam and Propanil 4E) at 2/3 to 1 1/3 ounce per acre of this herbicide and labeled rates of the tank mix products			
		Foliar applications of SANDEA can be made at the 3 5 leaf stage of rice when weeds have 2-4 leaves Dry broadcast applications can be made at the 1 2 leaf stage of rice when weeds have two leaves or less			
		SANDEA can also be applied post flood with dry broadcast applications of SANDEA herbicide at 1 to 1 1/3 ounce by weight per acre with the total application rate not to exceed 1 1/3 ounce product by weight per acre per use season			
		It is best to use 0.25 to 0.5 percent nonionic surfactant which contains at least 80% active ingredient with foliar applications of SANDEA			
		With all foliar applications of SANDEA use a minimum 3 15 gallons of water per acre for aerial equipment and a minimum of 10 gallons of water per acre for ground equipment. It is best to apply spray solutions the day they are mixed <b>Note</b> See APPLICATION EQUIPMENT AND INSTRUCTIONS section for spray drift management techniques			
		Water levels in rice fields and checks should remain static (3 inch to 6 inch depth) following dry broadcast applications of SANDEA Do not reintroduce water into rice fields or checks for at least five days following dry broadcast applications of SANDEA Rice fields and checks may be irrigated to maintain water level but this may reduce weed control			
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CROP	OZ/ACRE	COMMENTS				
RICE (48 CA 69) (continued)	2/3 1 1/	3 Control of emerged weeds with foliar applications is best when 70% 80% of the weed foliage is exposed Control of submerged weeds is best when weeds have 2 leaves or less Do not reintroduce water into rice fields or checks for at least 24 hours following foliar applications of SANDEA				
		Do not apply within 48 days of harvest Do not apply within 69 days of harvest in California CAUTION To ensure product effectiveness avoid using SANDEA on rice fields which have a history of weed biotypes resistant to ALS herbicides				
		SANDEA Tank Mixture Options in Rice Refer to MIXING INSTRUCTIONS and USE RATE GUIDES sections of this label for detailed information on SANDEA application Refer to the specific product labels and observe all precautions mixing and application instructions for				
		all products used in tank mixtures Be sure to follow the specifications listed on the most restrictive label when planning and making applications Before mixing in the spray tank it is recommended that compatibility be tested by mixing all				
		components in a small container in proportionate quantities. For tank mixtures add individual formulations to a spray tank in the following sequence water soluble bags dry flowables emulsifiable concentrates drift control additive water soluble liquids followed by nonionic surfactant or crop oil concentrate				
		Tank mixtures should not be applied if the crop is under severe stress due to drought poor fertility (especially low nitrogen levels) hail frost and insects Tank mix applications under these conditions may cause temporary crop injury <ul> <li>Pre Emerge &amp; Pre Plant Applications</li> </ul>				
	Tankmixtures for additional pre emerge weed control including but not limited to Bolero <sup>®</sup> Command <sup>®</sup> 3ME glyphosate pendimethalin or quinclorac can be added • Post Emerge Applications					
		Tankmixtures for additional broadleaf weed control including but not limited to Grandstand <sup>®</sup> Propanil and Propanil products Aim <sup>®</sup> Facet <sup>®</sup> Basagran <sup>®</sup> Londax <sup>®</sup> Grasp <sup>®</sup> Regiment <sup>®</sup> NewPath <sup>®</sup> Beyond <sup>®</sup> and 2-4 D can be added				
		Facet <sup>®</sup> Grasp <sup>®</sup> and Regiment <sup>®</sup> can be added				
		Insecticide and fungicide products can be tank mixed with SANDEA <sup>®</sup> Refer to the specific product labels and observe all precautions mixing and application instructions and follow crop intervals for all products used in tank mixtures				
		Sequential Applications SANDEA herbicide may be applied sequentially with Ordram <sup>®</sup> Bolero <sup>®</sup> Clincher® Regiment <sup>®</sup> and Shark <sup>®</sup> Read the Ordram Bolero Clincher Regiment and Shark labels for application information restrictions and precautions				
SORGHUM	2/3 1	Postemergence Apply SANDEA from the 2 leaf through layby stage (before grain head emergence)				
30)		Temporary stature reduction may occur to the crop following application of SANDEA if the grain sorghum is under stress. This effect will be most evident 7 to 10 days after application. The crop will quickly recover under normal growing conditions.				
	-	Tank Mixtures for Grain Sorghum Tank mixtures with SANDEA can include but are not limited to atrazine Buctril <sup>®</sup> or 2.4 D				
		Refer to the specific product labels and observe all precautions mixing and application instructions and follow crop intervals for all products used in tank mixtures				
	Only apply (0 047 p)     Following     Consult	y SANDEA in a single application with the total application rate not to exceed 1.0 ounce of product by weight ound active ingredient) per acre per use season application to foliage allow 30 days before grazing domestic livestock harvesting forage or harvesting silage Use Precautions and For Optimum Results sections for important usage information				
SUGARCANE (30)	2/3 1 1/3	When used alone apply SANDEA prior to planting prior to emergence or after the emergence of the sugarcane and until row closure Mechanical cultivation may be required to control weed species not on the label If so a <b>sequential treatment</b> may be required to control weeds in areas of disturbed soil				
		Apply SANDEA at 2/3 to 1 1/3 ounces by weight per acre (0 031 to 0 062 pound active ingredient per acre) in combination with glyphosate agricultural herbicides for pre plant burn down of emerged annual grasses broadleaf weeds and nutsedge in sugarcane				
		Tank Mixtures for Sugarcane Tankmixtures with SANDEA can include but are not limited to Asulox <sup>®</sup> atrazine Callisto <sup>®</sup> Envoke <sup>®</sup> Evik <sup>®</sup> glyphosate or 2 4 D				
	D-for f- 4	Refer to the specific product labels and observe all precautions mixing and application instructions and follow crop intervals for all products used in tank mixtures				
	Refer to the No more ounces of	than 3 applications (including pre plant applications) may be made with the total use rate not to exceed 2 2/3 product by weight (0 125 pound active ingredient) per acre per year				
	Following     Consult	Use Precautions and For Optimum Results' sections for important usage information				

# OTHER CROPS AND APPLICATIONS

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CROP	OZ/ACRE	COMMENTS			
ALFALFA (14)	2/3 1	Established Fields <ul> <li>Postemergence Broadcast Apply SANDEA as a broadcast application to established alfalfa Alfalfa</li> </ul>			
CA & AZ Only		<ul> <li>should be well established in the field for a minimum of 6 months prior to application of SANDEA Apply uniformly with ground equipment in a minimum of 20 gallons of water per acre. Use a water volume that will provide uniform coverage of plants. It is recommended to make an application as soon as possible after removal of hay from the field and prior to an irrigation to minimize crop injury. Wait for at least 48 hours after application before irrigation.</li> <li>Postemergence Spot Treatment Apply SANDEA as a spot treatment application to only those areas of emerged nutsedge. Application rate should not exceed 3/4 oz product per treated acre in these areas. Use a water volume that will allow for</li> </ul>			
		• Postemergence followed by Postemergence To that inize control of hotsedge it may be necessary to use a second postemergence spot application to those areas where the nutsedge has emerged or re grown. For these situations use a spot treatment method treating only those areas of emerged nutsedge. Application rate must not exceed 3/4 oz product per treated acre in these areas. Use a water volume that will allow for good coverage of the plants. This use pattern will result in greater potential of growth and yield reduction.			
	Research ha Herbicide aj reduction S and yield volume that	as shown that alfalfa growth and yields will be reduced for one or more cuttings after a SANDEA oplication Application of SANDEA to alfalfa where re growth exceeds 6 will result in greater yield symptoms may be temporary Follow all directions carefully to minimize potential reduced plant growth Apply uniformly with ground equipment in a minimum of 20 gallons of water per acre. Use a water will provide uniform coverage of plants			
	Do not ap     period	pply more than 2 ounces of SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month			
	Consult	Use Precautions and For Optimum Results sections for important usage information			
(1)	For first     NIS can     applicati	<ul> <li>Nursery Transplanted Crowns and Established Beds</li> <li>Postemergence/Post transplant Apply SANDEA to asparagus before or during the harvesting season SANDEA may cause a temporary stunting or twisting of fern on certain asparagus vaneties when applied during spear emergence. The addition of surfactants and postemergent grass herbicides may accentuate the crop response Spectrum and degree of weed control may be reduced where SANDEA is used without a surfactant.</li> <li>Post harvest Apply SANDEA at the end of the harvest season. Under heavy nutsedge pressure split applications are recommended. Contact with the fern may cause temporary yellowing A nonionic surfactant or crop oil concentrate should be used with post harvest applications. Crop injury will be minimized and weeds control will be more effective when applications are made with drop nozzles as a directed spray below the ferns to allow for more complete coverage of target weeds</li> <li>Split application for enhanced control of nutsedge. Apply a split application with 3/4 to 1 oz product per acre during the cutting/harvesting season when the first flush of nutsedge is in the 3.5 leaf stage followed by a second application of 3/4 to 1 oz product per acre at least 21.30 days later up to lay by to control later flushes of nutsedge. SANDEA can be applied post harvest during the fern stage. Contact with the fern may cause temporary yellowing. Crop injury will be minimized and nutsedge more effectively controlled when applications are made with drop nozzles directing the spray below the ferns allowing for more complete coverage of the spray below the ferns allowing for more complete coverage of nutsedge.</li> </ul>			
	<ul> <li>Do not apply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month period</li> <li>Consult Use Precautions and For Optimum Results sections for important usage information</li> </ul>				
FALLOW	2/3 1 1/3	Applications of SANDEA to fallow ground			
GROUND • SAN (0 1 • Refe RO		VEA may be applied up to 2 applications with a total application not to exceed 2 2/3 ounces of product by weight 5 pound active ingredient) per acre per use season to the WEEDS CONTROLLED section of this label for weed control recommendations. Also refer to the ATIONAL CROP INFORMATION section of this label for applicable rotational crop restriction with Lise Precautions, and For Optimum Results, sections for important usage information.			
OKRA (30)	1/2 1	Direct seeded and Transplant			
		Row Middle/Furrow Applications/Shielded Spray Apply SANDEA between rows of direct seeded or transplanted okra while avoiding contact of the herbicide with the planted crop If plastic is used on the planted row adjust equipment to keep the application off the plastic Reduce rate and spray volume in proportion to area actually sprayed			
	Do not a     period     Consult	pply more than 2 ounces SANDEA per acre per crop cycle not to exceed 2 ounces per acre per 12 month			

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7 ASTURE ANGELAND & RP ORAGE RASSES/HAY	2/3 – 1 1/3	2/3 – 1 1/3 Established Fields Post Emergence Broadcast – Apply SANDEA as a broadcast application to established Pasture Rangeland Apply uniformly with ground equipment in a minimum of 10 gallons of water per acre Use water volume that will provide uniform coverage of plants It is recommended to make an application as soo as possible after removal of hay or before weeds exceed label height restriction Wait for at least 48 hou after application before irrigation			
37)		Post Emergence Spot Treatment – Apply SANDEA as a spot treatment application to only those areas of emerged nutsedge Application rate should not exceed 3/4 oz product per treated acre in these areas Use a water volume that will allow for good coverage of the plants			
		<b>Post Emergence followed by Post Emergence</b> To maximize control of nutsedge it may be necessary to use a second post emergence spot application to those areas where the nutsedge has emerged or re grown For these situations use a spot treatment method treating only those areas of emerged nutsedge Application rate should not exceed 3/4 oz product per treated acre in these areas Use a water volume that will allow for good coverage of the plants This use pattern will result in greater potential of growth and yield reduction <b>TANK MIXTURES</b>			
		Refer to MIXING INSTRUCTIONS and USE RATE GUIDES sections of this label for detailed information on SANDEA Herbicide application	ı I		
		Refer to the specific product labels and observe all precautions mixing and application instructions for all products used in tank mixtures. Be sure to follow the specifications listed on the most restrictive label when planning and making applications.			
		Tankmixtures for additional broadleaf weed control including but not limited to 2.4 D Dicamba and Grazon® can be added			
		Labeled insecticides including <b>Confirm<sup>®</sup></b> and labeled fungicide products can be tankmixed with SANDEA Herbicide			
	<ul> <li>Do not ap</li> <li>0 Day pre</li> <li>Consult</li> </ul>	ply more than 1 1/3 ounces of SANDEA per acre per 12 month period grazing interval for lactating and non lactating animals Use Precautions and For Optimum Results sections for important usage information	1		
RHUBARB (60)	1/2 1	Apply uniformly with ground equipment in a minimum of 15 gals of water per acre Apply SANDEA as a single broadcast application to <u>dormant</u> rhubarb. The timing of the application should be as late as possible or just prior to the breaking of rhubarb dormancy. Application of SANDEA may cause significant crop stunting. It is recommended that the user begin with a the lower rate to determine potential sensitivity to its use along with speed and degree of recovery.			
		Use a nonionic surfactant (NIS) if labeled weeds are emerged			
	<ul> <li>SANDEA</li> <li>Do not a</li> <li>Consult usage in</li> </ul>	a may not control ALS resistant weeds pply more than 1 ounce of SANDEA per acre per year Use Precautions and For Optimum Results sections of the EPA registered label for important information			
1C Tuberous and co	1/2 1	<ul> <li>Preemergence and Postemergence applications for control of labeled broadleaf weeds and nutsedge</li> </ul>			
vegetables subgroup		Apply a single broadcast application after planting but prior to crop emergence. If needed make a second postemergence foliar application 45 days before harvest			
Arracacna irrowroot artichok Chinese artichoke	e	Second application add NIS (1 to 2 quarts) per 100 gallons of spray solution			
Jerusalem canna edible cassava pitter and sweet chayote (root) chufa dasheen (taro) ginger lerer		Application of SANDEA may cause significant temporary stunting and delay maturity of potatoes resulting in delayed harvest. This product is available to the end user/grower solely to the extent that the benefit and utility in the sole opinion of the end user/grower outweigh the extent of potential injury associated with the use of this product. Due to the risk of crop damage all such use is at the end user/growers risk.			
potato sweet potato • Do		ot apply more than 1 ounce of SANDEA per acre per year			
bean yam true Co (45)		DEA TRAY HOL CUTIFULALS TESTSTATIL WEEKS			

TURFGRASS SOD AND SEED FARMS	2/3 1 1/3	SANDEA is a selective nutsedge in sod or turf see shrubs when used accord	herbicide for postemergence con ed farms This product will not injure ing to label directions	trol of sedges such as purple and yellow e nearby established ornamentals trees and			
		For postemergence contro ounces by weight of this nutsedge has reached the higher rate in heavy infest.	of purple or yellow nutsedge foun product per acre (0 031 to 0 06 e 3 to 5 leaf stage of growth Use ations	id in established turfgrass apply 2/3 to 1 1/3 2 pounds active ingredient per acre) after e the lower rate in light infestations and the			
		A second treatment may I when new purple or yellow 1/3 ounces by weight of th lower rate in light infestati be made with the total use acre per use season	be required 6 to 10 weeks after the w nutsedge plants have reached th his product per acre (0 031 to 0 062 ons and the higher rate in heavy in e rate not exceeding 2 2/3 ounces o	initial treatment As a sequential treatment e 3 to 5 leaf stage of growth apply 2/3 to 1 pounds active ingredient per acre) Use the festations No more than 2 applications can f product (0 125 pound active ingredient) per			
		Use 0 25 to 0 5 percent no for broadcast applications Use only nonionic surfacta	onionic surfactant concentration (1 t For high volume applications DC ints which contain at least 80 percei	to 2 quarts per 100 gallons of spray solution) NOT exceed 1 quart of surfactant per acre nt active material			
		DO NOT exceed the red higher rates Refer to instructions	commended amount of surfacta the surfactant label and observe	nt due to the potential for turf injury at a all precautions mixing and application			
		When applied as directed under the conditions described the following established turfgrasse tolerant to application of this product					
			Established Cool Season	Grasses			
		Bentgrass creeping	Fescue fine	Ryegrass perennial			
	1	(Agrostis stolonifera)	(Festuca rubra )	(Lolium perenne)			
		Blue Grass Kentucky (Poa pratensis)	Fescue tall (Festuca arundinacea)				
			Established Warm Seaso	n Grasses			
		Bahiagrass	Centipedegrass	Kikuyugrass			
	)	(Paspalum notatum)	(Eremochloa ophiuroides)	(Pennisetum clandestinum)			
		Bermudagrass	Seashore paspalum	Zoysiagrass			
		(Cynodun dactylon)	(Paspaium vaginatum)	(Zoysia japonica)			
		Bunalograss (Buchlos dactivoides)	St Augustinegrass				
		(Buchibe daciyoides)	Tractmente in Trafance Sood on	d Sad Draduation Areas			
		This product may be used on fallow areas prior to establishing turfgrass plants Allow 4 weeks between application and seeding or sodding of turfgrass  Tank Mixtures for Turfgrass Renovation SANDEA plus GLYPHOSATE AGRICULTURAL HERBICIDES plus NONIONIC SURFACTANT For non selective control of all vegetation prior to turfgrass renovation SANDEA may be applied at 2/3 ounce by weight per acre in combination with glyphosate agricultural herbicides for pre plant burndown of emerged annual grasses broadleaf weeds and nutsedge					
		Refer to the glyphosate application restrictions	agricultural herbicide label for	use instructions weeds controlled and			
	<ul> <li>For optin</li> <li>This pro for at learning</li> </ul>	<ul> <li>For optimum results do not mow turf for 2 days before or 2 days after application</li> <li>This product is effective if no rainfall occurs within 3 hours but best results are obtained with no rainfall or irrigation for at least 8 hours</li> </ul>					
	This pro develop	duct may be used on seed a good root system and unif	led sodded or sprigged turfgrass orm stand before application	that is well established Allow the turf to			
	Avoid a     nutsedg     Do not a	pplication of SANDEA w pe control may result pply as an over the top spra	y to desirable shrubs or trees	under stress since turt injury and poor			

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# ROTATIONAL CROP INFORMATION

Canyon Group recommends the following recropping intervals for crop safety. Planting prior to the intervals shown below may result in crop injury when using SANDEA herbicide. Rotation intervals below may need to be extended if drought or cool conditions prevail. Rotation intervals may need to be extended on drip irrigated crops in Arizona and California. Canyon Group recommends that the end user test this product in order to determine its suitability for such intended use. It may be appropriate to use shorter Intervals in areas where local experience has demonstrated safety. In the event of crop failure, labeled crops may be planted back into the treated area at the user's risk for potential phytotoxicity to the subsequent crop. When using SANDEA in tank mixes, refer to the individual product labels being tank mixed. To determine rotational crop restrictions follow the longest rotational limitation of the product being tank mixed.

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CROP	MONTHS	EXCEPTIONS
CROPS NOT SPECIFICALLY LISTED	36	
Alfalfa	9	
Barley (winter)	2	
Beans Dry		
Beans Snap	9	2 months in the northeast midwest and southeast 3 months in TX
Broccoli	18	3 months for muck soils in Fl
Cabbage	15	3 months for muck soils in FL
	15	
Carrot	15	
Cauliflower	18	3 months for muck soils in Fl
Cereal crops Spring	2	
Clovers		
Collards	18	
Corp. IB/IMB Field	0	
Corn Normal Field and IT Field	1	
Corn Seed	2	
Corn Sweet and Pon	3	
Cotton	4	
Cucumbers	9	2 months in the northeast midwest and southeast 3 months in TX
Eggelant	12	4 months for FL Transplants
Eggpant Forage Grasses	2	
	18	3 months for muck soils in Fl
Melons	9	2 months in the southeast and TX
Mint	15	
Oats	2	
Opions and Leeks	18	
Peanuts	6	
Peas	9	
Peas Field	9	
Peopers	10	4 months FL Transplants and 3 months in TX
Potatoes	9	
Pumpkins	9	2 months in the southeast
Proso Millet	2	
Radish	12	3 months for muck soils in FL
Rice	0	
Rye (winter)	2	
Sorahums	2	
Sovbeans	9	Where soil pH is less than 7.5 the interval is 5 months
Spinach	24	3 months for muck soils in FL
Squash	9	2 months in the southeast
Strawberries	36	6 months for annual FL Transplants
Sugarbeet (Michigan only)	21	
Sugarbeet (ND_MN_Red River Valley)	36	
Sugarbeet and Red Beet	24	Where rainfall is sparse or irrigation is required, the time interval is 36 months
Sugarcane	0	
Sunflowers	18	
Tomato	8	2 months in the northeast Midwest and southeast 3 months in TX
Wheat (winter)	2	

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Southeast LA MS AL FL GA NC SC TN Puerto Rico

Northeast & Midwest PA DE MA MD NY ME NJ CT RI VA NH VT WV MI WI MN IA IL IN OH MO KY ND SD NE

#### STORAGE AND DISPOSAL

DO NOT contaminate water food feed or seed by storage or disposal

PESTICIDE STORAGE Store under cool dry conditions (below 120 F) Do not store under moist conditions

PESTICIDE DISPOSAL Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill for pesticide disposal or in accordance with applicable Federal state or local procedures

**CONTAINER DISPOSAL** Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank. 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. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. 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. Disposal AUTHORITIES. If none of the foregoing procedures is permitted by state and local authorities, then contact your State Pesticide or state.

DISPOSAL AUTHORITIES If none of the foregoing procedures is permitted by state and local authorities then contact your State Pesticide or Environmental Control Agency or your local Hazardous Waste Disposal office or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance

> FOR 24 HOUR EMERGENCY ASSISTANCE (SPILL LEAK OR FIRE) CALL CHEMTREC<sup>®</sup> (800) 424 9300 For other product information contact Canyon Group or see Material Safety Data Sheet

#### NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILTY LIMITATIONS

Important Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product If terms are not acceptable return the unopened container for a full refund

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury inadequate performance or other unintended consequences may result due to soil or weather conditions off target movement presence of other materials method of use or application, and other factors all of which are beyond the control of Canyon Group. To the fullest extent permitted by law when you buy this product, you agree to accept these risks.

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