| HALOSULFURON-METHYL | GROUP | 2 | HERBICIDE |
|---|---|---|---|

# SANDEA®
HERBICIDE

**SANDEA® is a selective herbicide for control of listed broadleaf weeds and nutsedge.**

| **ACTIVE INGREDIENT:** | **% BY WT.** |
|---|---|
| Halosulfuron-methyl | 75.0% |
| **OTHER INGREDIENTS:** | 25.0% |
| **TOTAL** | 100.0% |

Contains 0.75 lb active ingredient per lb of product

## KEEP OUT OF REACH OF CHILDREN

# CAUTION

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

| **FIRST AID** | |
|---|---|
| **IF IN EYES** | • Hold eye open and rinse slowly and gently with water for 15-20 minutes.<br>• Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.<br>• Call poison control center or doctor for treatment advice. |
| **IF SWALLOWED** | • Call poison control center or doctor immediately for treatment advice.<br>• Have person sip a glass of water if able to swallow.<br>• **DO NOT** induce vomiting unless told to do so by the poison control center or doctor.<br>• **DO NOT** give anything by mouth to an unconscious 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

**USER SAFETY REQUIREMENTS**

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

**ENGINEERING CONTROLS 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 thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARD SECTION OF PRECAUTIONARY STATEMENTS
### GROUND WATER ADVISORY

Halosulfuron-methyl is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

### SURFACE WATER ADVISORY

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

**NET CONTENTS _____ OUNCES**

EPA Reg. No. 81880-18-10163
EPA Est. No.

Gowan®

Distributed by:
Gowan Company, LLC
P.O. Box 5569
Yuma, AZ 85366

**WINDBLOWN SOIL PARTICLES**

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

**NON-TARGET ORGANISM ADVISORY**

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

## 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:

- Coveralls
- 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 MANAGEMENT**

SANDEA contains a (Group 2) herbicide. Any weed population may contain or develop plants naturally resistant to (Group 2) Halosulfuron-methyl herbicides. Weed species with acquired resistance to (Group 2) Halosulfuron-methyl may eventually dominate the weed population if (Group 2) Halosulfuron-methyl herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by SANDEA or other (Group 2) herbicides.

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

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

To delay herbicide resistance consider:

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

Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes. For further information or to report suspected resistance or lack of performance, you may contact Gowan Company, LLC at 1-800-883-1844.

**APPLICATION EQUIPMENT AND INSTRUCTIONS**

Applications may be made by ground or aerial equipment to healthy, actively growing weeds. For best results, avoid applications when weeds are under stress due to weather, disease, insect damage, or combinations of these factors. SANDEA is rainfast after 4 hours; rainfall or irrigation occurring within 4 hours after application may reduce effectiveness. Avoid streaking, skips, overlaps, and spray drift during application.

Thoroughly clean application equipment prior to mixing Sandea Herbicide spray solutions, after SANDEA Herbicide use, and prior to spraying a crop other than those listed on the label. Refer to the “SPRAYER TANK CLEANOUT” section of the label for more detailed information.

**Ground Applications:**
Apply SANDEA as a broadcast or band application with properly calibrated ground equipment in 15 or more gallons of water per acre 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). 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.

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

**Rope-wick or Wiper Applications:**
Apply by wiping SANDEA to the weeds using an absorbent material made of burlap, canvas, rope, sponge, or absorbent pad plumbed into a pipe reservoir filled with SANDEA. The absorbent material must maintain consistent moisture to allow for leaf wetness on targeted weeds, but not to a moisture level that allows for excess moisture to drip from the absorbent material. Selected equipment must be maintained and capable of preventing all contact of the herbicide solution with the crop or soil.

Adjust the height of the wiper applicator to ensure adequate contact with the weeds and so that no wiper contact point is at least 2 inches above the desirable vegetation. Optimum performance can be obtained when more of the weed is exposed to the herbicide solution and weeds are a minimum of 6 inches above the desirable vegetation. Weeds that do not come in contact with SANDEA will not be affected. Poor contact occurs when weeds are growing in dense clumps, in areas of severe weed infestation, when weed height varies dramatically or when operator speeds are too great. Terrain must be considered when making wiper applications. Sloping ground can cause herbicide solution to migrate to one side, causing dripping on the lower end and drying of the wiper on the upper end of the applicator. Due to decreased efficacy **DO NOT** apply this product when weeds are wet.

Mix only the amount of product that will be used during a 1-day application, as reduced product performance can occur from solutions held longer than 24 hours. Avoid leaks or dripping of the herbicide solution onto the crop as contact of this product to desirable vegetation could result in plant injury or destruction. Keep wiper surfaces clean. Clean wiper parts promptly after using SANDEA by thoroughly flushing with water.

**When Using Motorized Ground Equipment:**
Prior to application determine the per acre output of your applicator. If the output rate is unknown it may be obtained by evaluating the output at ~100% weed density. Apply a minimum of 1 oz SANDEA per acre by mixing the desired per acre rate of SANDEA, in ratio with your determined per acre output. **DO NOT** exceed the maximum labeled rate for your crop.

The applicator device will physically wipe this product directly onto the weed in between rows of crop plants (row middles) or over the top of crops for selectively controlling weeds. Operate wiper applicators at a ground speed of no greater than 5 miles per hour. To maintain performance applicator should control chemical application rate by adjusting travel speed to match weed density. In areas of dense weeds better results can be obtained when two applications are made in opposite directions. Refer to the specific crop section of this label for rates and directions for use.

**Spot Treatment:**
For spot treatment or application with a hand held device, mix 1/4 oz – 1 oz SANDEA per 1 gallon of water. For best results, when using a hand held applicator, wipe the desired target weeds in a back and forth motion to ensure proper contact and coverage.
NOTE: When using a surfactant refer to the adjuvants section of this label.

**MANDATORY SPRAY DRIFT MANAGEMENT**

Ground Boom Applications:
- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASAE S572.3).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASAE S572.3).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boom-less Ground Applications:
- Applicators are required to use a Medium or coarser droplet size (ASAE S572.3) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Aerial Applications:
- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S641).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S641).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

**SPRAY DRIFT ADVISORIES:**
Handheld Technology Applications:
- Take precautions to minimize spray drift.

Boom-less Ground Applications:
- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

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

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

Controlling Droplet Size - Ground Boom

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

Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

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

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

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

**TEMPERATURE AND HUMIDITY -** When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

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

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

**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% solution of household ammonia (one quart of ammonia for every 25 gal 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.

## 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 (NIS) and other adjuvants as the last ingredients in the tank. Spray solutions must be applied within 24 hours after mixing.

## ADJUVANTS

Unless otherwise stated, a 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal 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. It is the pesticide user’s responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. It is advised that tank mixtures must be evaluated for miscibility and crop safety on a small test area prior to use. Tank mixtures must not be applied when the plants are under stress due to drought, water saturated soils, low 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 gal of household ammonia* (containing 3% ammonia) for every 100 gal 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.
- Properly crowned beds may minimize the potential for injury when broadcast applications of SANDEA are made over plastic mulch. Significant crop injury could result when spray residue is concentrated in the plant hole by irrigation or rainfall.
- 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) and used according to labeled directions. Not all hybrids/varieties have been tested for sensitivity to SANDEA. For untested varieties, a small amount of the field must be sprayed to determine potential sensitivity to its use.
- 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.
- Under certain environmental conditions, SANDEA applied over the top of a blooming crop may result in some bloom loss.
- Use of SANDEA without an adjuvant can result in reduced efficacy.
- SANDEA may not control ALS resistant weeds.
- Overlapping boom swaths increases the potential for phytotoxicity including leaf yellowing, reddening, and/or stunting.
- Refer to “Application Equipment and Instructions” for spray drift management techniques.
- Refer to the “Weeds Controlled” section of this label for weed control recommendations.

## 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 oz/A (0.094 lb ai/A) of SANDEA per year (includes applications to the crop and to row middles/furrows).
- **DO NOT** make more than the maximum number of applications per year for each crop.
- Refer to the “Rotational Crop Restrictions” for applicable rotational crop information.
- CALIFORNIA ONLY SENSITIVE CROP:

**PRUNES**

**Buffer Zones:**

1. Aerial applications shall not be made closer than 4 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.

## FOR OPTIMUM RESULTS

Control typically occurs within 7 to 14 days depending on the weed size, species and growing conditions. Heavy weed infestations should be treated early before the weeds become too competitive with the crop. Good coverage with SANDEA is essential. When applying SANDEA follow “Weed Controlled Chart” and “Application Timing” sections of the label for improved control. When adding approved adjuvant follow mixing instructions regarding adjuvant.

- For best results, wait to cultivate treated soil area for 7 to 10 days after a postemergence application of SANDEA unless otherwise specified. (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).
- To maximize control of annual weeds, it may be necessary to use sequential applications of SANDEA, but do not make more than the maximum number of applications per year for each crop. (Multiple flushes of seedlings, or treated perennials may sometimes re-grow from underground stems or roots).
- Apply SANDEA in a minimum of 15 gallons of water when applying by ground. Apply in 3 to 15 gallons of water when applying by air.

**For preemergence applications:**

- Use a surfactant as directed in the “Adjuvants” section of this label to control susceptible weeds prior to crop emergence.
- Preemergent weed control may be improved by incorporating SANDEA with irrigation (1/4 to 1/2 inch maximum).
- Preemergence applications of SANDEA when ground cover or weed coverage prevents contact with the soil will result in reduced or no residual activity.

**For postemergence applications:**

- Treat young actively growing broadleaf weeds 1 to 3 inches in height.
- Treat actively growing nutsedge plants at the 3 to 5 leaf stage.
- Wait 2 - 3 days after postemergent applications for overhead irrigation.
- Avoid applications when crops are under drought, stress, disease or insect damage.

**WEEDS CONTROLLED BY SANDEA ALONE**
C = Control, S = Suppression, NA = No Activity

| WEED SPECIES | PREEMERGENT ACTIVITY | POSTEMERGENT ACTIVITY |
|---|---|---|
| Amaranth, spiny[2] *Amaranth spinosus* | C[2] | C[2] |
| Bindweed, hedge *Calystegia sepium* | NA | S |
| Burcucumber *Sicyos angulatus* | NA | S |
| California arrowhead[3] *Sagittaria montevidensis* | NA | C[3] |
| Chickweed, common *Stellaria media* | C | NA |
| Cocklebur, common *Xanthium strumarium* | C | C |
| Corn spurry *Spergula arvensis* | C | C |
| Dayflower* *Commelina erecta* | C | S |
| Deadnettle, purple *Lamium purpureum* | C | NA |
| Devils Claw *Proboscidea louisianica* | NA | C |
| Eclipta* *Ecilpta prostrata* | C | S |
| Flatsedge, rice*[2] *Cyperus iria* | S[2] | C[2] |
| Fleabane, Philadelphia *Erigeron philadelphicus* | NA | C |
| Galinsoga *Galinsoga* | C | C |
| Golden crownbeard* *Verbesina encelioides* | NA | C |
| Goosefoot *Chenopodium* | C | C |
| Groundsel, common *Senecio vulgaris* | C | NA |
| Horseweed/Marestail[2] *Erigeron canadensis* | C[2] | NA |
| Horsetail *Equisetum* | NA | S |
| Jimsonweed *Datura stramonium* | C | NA |
| Jointvetch *Aeschynomene virginica* | NA | C |
| Kochia[2] *Kochia scoparia* | C[2] | S[2] |
| Ladysthumb *Polygonum persicaria* | C | C |
| Lambsquarter, common *Chenopodium album* | C | NA |
| Lettuce, prickly *Lactuca serriola* | C | NA |
| Mallow, common *Malva neglecta* | C | NA |
| Mallow, Venice *Hibiscus trionum* | C | C |
| Mayweed chamomile (dog fennel) *Anthemis cotula* | C | NA |
| Milkweed, common *Asclepias syriaca* | NA | S |

| WEED SPECIES | PREEMERGENT ACTIVITY | POSTEMERGENT ACTIVITY |
|---|---|---|
| Milkweed, honeyvine<br>*Ampelamus albidus* | NA | S |
| Morningglory, ivyleaf[3]<br>*Ipomoea hederacea* | NA | S[3] |
| Morningglory, tall[3]<br>*Ipomoea purpurea* | NA | S[3] |
| Mustard, wild<br>*Sinapis arevensis* | C | C |
| Nutsedge, yellow[1]<br>*Cyperus esculentus* | S | C[1] |
| Nutsedge, purple[1]<br>*Cyperus rotundus* | S | C[1] |
| Passionflower, maypop<br>*Passiflora incarnata* | NA | C |
| Pigweed, redroot[2]<br>*Amarunthus retrofiexus* | C[2] | C[2] |
| Pigweed, smooth[2]<br>*Amaranthus hybridus* | C[2] | C[2] |
| Plantain<br>*Plantago major* | C | NA |
| Pokeweed, common<br>*Phytolacca Americana* | NA | C |
| Purslane<br>*Portulaca oleracea* | S | NA |
| Radish, wild<br>*Raphanus raphanistrum* | C | C |
| Ragweed, common[2]<br>*Ambrosia artemisiifolia* | C[2] | C[2] |
| Ragweed, giant[2]<br>*Ambrosia trifida* | NA | C[2] |
| Redstem[3]<br>*Ammania auriculata* | NA | C[3] |
| Ricefield Bulrush[2]<br>*Scirpus mucronatus* | NA | C[2] |
| Sesbania, hemp<br>*Sesbania exaltata* | S | C |
| Sharppoint fluvellin[*,4]<br>*Kickxia elatine* | C | C[4] |
| Shepherdspurse<br>*Capsella bursa-pastoris* | C | S |
| Sida, prickly*<br>*Sida spinosa* | NA | S |
| Smallflower umbrella sedge[2]<br>*Cyperus difformis* | NA | C[2] |
| Smartweed, Pennsylvania<br>*Polygonum pensylvanicum* | C | S |
| Sunflower<br>*Helianthus* | C | C |
| Velvetleaf<br>*Abutilon theophrasti* | C | C |
| Willowherb<br>*Epilobium ciliatum* | C | NA |
| Yellowcress, creeping<br>*Rorippa sylvestris* | C | C |

* Except California

1. Heavy infestations of nutsedge may require sequential applications. An earlier treatment may be required to prevent nutsedge from competing with the crop.
2. 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.
3. Use maximum label rates for best results.
4. Postemergence applications must be made when the basal diameter of the weed is the size of a U.S. quarter or smaller, and before stem elongation.

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## APPLICATION INSTRUCTIONS

**CUCURBIT CROPS**

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **CUCUMBERS (including pickles), MUSKMELON (including cantaloupes), HONEYDEWS, AND CRENSHAW MELONS** | 1/2 - 1 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>**Direct-seeded: Bare ground (no mulch)**<br>• **Preemergence** - Apply SANDEA after planting, but prior to soil cracking. Use the lower rate on lighter textured soils with low organic matter.<br>• **Postemergence** - Apply SANDEA after the crop has reached at least 3 to 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.<br><br>**Direct-seeded: Plastic mulch**<br>• **Pre-seeding -** Apply SANDEA following final bed shaping and just prior to the installation of the plastic mulch. Crop may be seeded into this treated area no sooner than 7 days after 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.<br>• **Postemergence** - Apply SANDEA after the crop has at least 3 to 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.<br><br>**Transplanted: Bare ground (no mulch)**<br>• **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 must be taken to limit movement of SANDEA-treated surface soil during the transplanting process since if treated soil is moved into the transplant hole injury can occur.<br>• **Post-transplant -** Apply SANDEA to transplants that are established and actively growing. Applications should not be made until plants are actively growing and in the 3 to 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 may 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.<br><br>**Transplanted: Plastic mulch**<br>• **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 must 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.<br>• **Post-transplant -** Apply SANDEA to transplants that are established, actively growing and in the 3 to 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. Apply SANDEA 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 can occur when applications are made over plastic due to concentration of product in the transplant hole.<br>NOTE: Over-the-top applications on plastic are not allowed in Northeastern and Midwestern states.<br><br>**Split Applications for Nutsedge**<br>• **Preemergence followed by postemergence for nutsedge control**<br>To maximize control of nutsedge, it may be necessary to use a postemergence application to those areas where the nutsedge has emerged later following a preemergence application. For these situations, use a spot treatment method treating only those areas of emerged nutsedge. The application rate should not exceed 1.0 oz/A 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.<br>• **Postemergence followed by postemergence for nutsedge control**<br>To maximize control of nutsedge, 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. The application rate should not exceed 1.0 oz/A 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. |
| | | **Direct-seeded and Transplant:**<br>• **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 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application** – Apply using a minimum of 1 oz/A . |
| | **PRECAUTIONS:**<br>• Runners that come in contact with the plastic can pick up residual SANDEA and may exhibit a visual crop response.<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA. | |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| | | **RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (includes applications to the crop and to row middles/furrows)<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 57 days of harvest of muskmelon (including cantaloupes), honeydews, and crenshaw melons.<br>• **DO NOT** apply SANDEA within 14 days of harvesting cucumbers.<br>• **DO NOT** use on "Mamba" variety of Cucumber. |
| **PUMPKINS and WINTER SQUASH** | 1/2 - 3/4 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre. For all applications where possible, apply 1/4 to 1/2 inch of sprinkler irrigation to settle the soil after planting and prior to application.<br>**Direct-seeded:**<br>• **Preemergence** - Apply SANDEA after planting, but prior to soil cracking. Use the lower rates on lighter textured soils with low organic matter.<br>• **Postemergence** - Apply SANDEA after the crop has reached the 2 to 5 true leaf stage, preferably 4 to 5 true leaves, but before first female flowers appear. Use lower rates on lighter textured soils with low organic matter.<br>**Transplanted:**<br>• **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 must be taken to limit movement of SANDEA-treated surface soil during the transplanting process since if treated soil is moved into the transplant hole injury can occur.<br>• **Post-transplant -** Apply SANDEA to transplants that are established, actively growing and in the 3 to 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. |
| | 1/2 - 1 | Apply uniformly as a broadcast spray with ground equipment in a minimum of 15 gal of water per acre.<br>**FOR PROCESSING ONLY – Direct-seeded (including Edible Seed/Squash grown for seed):**<br>• **Preemergence -** Apply SANDEA after planting, but prior to soil cracking. Use the lower rates on lighter textured soils with low organic matter.<br>• **DO NOT** apply SANDEA postemergence to squash grown for seed (including edible seed). |
| | 1/2 - 1 | **Direct-seeded and Transplant:**<br>• **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. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | | **PRECAUTIONS:**<br>• When rainfall or irrigation in excess of 3/4 inch occurs following a preemergence application and the crop is in the germination to early-seedling stage, there is the potential for significant plant stunting to occur.<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>• 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (includes applications to the crop and to row middles).<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |
| **SUMMER SQUASH FOR PROCESSING**<br><br>**(AR, OK and MO only)** | 2/3 - 1 | Apply uniformly with ground equipment in a minimum of 20 gal of water per acre.<br>**Direct-seeded:**<br>• **Preemergence -** Apply SANDEA after planting, but prior to cracking. Use the lower rate on lighter textured soils with low organic matter. |
| | 1/2 - 1 | **Direct-seeded and Transplant:**<br>• **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. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | 1/2 - 3/4 | Apply uniformly as a broadcast spray with ground equipment in a minimum of 20 gal of water per acre.<br>**FOR PROCESSING ONLY Direct- seeded (Edible Seed/Squash grown for seed):**<br>• **Preemergence** - Apply SANDEA after planting, but prior to soil cracking. Use the lower rates on lighter textured soils with low organic matter.<br>• **DO NOT** apply SANDEA postemergence to squash grown for seed (including edible seed).<br>Under certain conditions, Sandea may impact seed yield and delay harvest. |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (includes applications to the crop and to Row Middles/Furrows)<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |
| **WATERMELONS**<br><br>**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, OR, PA, RI, SC, TN, TX, VA, VT, WA, WV, WI** | 1/2 - 3/4 | Apply uniformly with ground equipment in a minimum of 20 gal of water per acre.<br>**Direct-seeded: Bare ground**<br>• **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.<br>**Direct Seeded: Plastic mulch**<br>• **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.<br>**Transplanted: Bare ground**<br>• **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<br>• interval. Use the lower rate on lighter textured soils with low organic matter. Care must 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.<br>**Transplanted: Plastic mulch**<br>• **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. |
| | 1/2 - 1 | **Direct-seeded and Transplant:**<br>• **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. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | | **PRECAUTIONS:**<br>• Runners that come in contact with the plastic can pick up residual SANDEA and may exhibit a visual crop response.<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 1 oz/A (0.047 lb ai/A) per year. (includes applications to the crop and to row middle)<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 57 days of harvest. |
| **OTHER COMMODITIES IN MELON SUBGROUP 9A AND SQUASH/ CUCUMBER SUBGROUP 9B**<br>*Chayote (fruit); Chinese waxgourd; cucumber; gherkin; gourd, edible; Momordica spp.; pumpkin; squash, summer; squash, winter, citron melon; muskmelon; watermelon* | 1/2 - 1 | **Direct-seeded and Transplant:**<br>• **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. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** apply within 14 days of harvest for cucumbers in subgroup 9B.<br>• **DO NOT** apply within 30 days of harvest for squash/subgroup 9B, except for cucumbers.<br>• **DO NOT** apply within 57 days of harvest for melons, subgroup 9A.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (includes applications to the crop and to row middle)<br>• Minimum of 21 days between applications. |

**FRUITING VEGETABLE CROPS**

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **PEPPERS, BELL/CHILE** | 1/2 - 1 | Apply uniformly with ground equipment in a minimum of 20 gal of water per acre.<br>**Direct-seeded:**<br>• **Postemergence** - 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 with low organic matter.<br>**Transplanted:**<br>• **Post-transplant -** 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:**<br>• **Row Middle/Furrow Applications -** Apply SANDEA between rows of direct-seeded or transplanted peppers 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. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | **PRECAUTIONS:**<br>• Not all pepper varieties have been tested.<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (includes applications to the crop and to row middles/furrows).<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. | |
| **TOMATOES** | 1/2 - 1 | Apply uniformly with ground equipment in a minimum of 20 gal of water per acre.<br>**Direct-seeded:**<br>• **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.<br>**Transplanted:**<br>• **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.<br>• **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 7 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 transplant process.<br>• **Post-transplant -** Apply SANDEA over-the-top, post directed or with crop shields to tomato transplants that are established, actively growing and a minimum of 14 days after transplanting unless local conditions demonstrate safety at an earlier interval. Applications following bloom could cause some bloom drop under certain environmental conditions. Application as a directed spray or with crop shields should be considered when conditions are present.<br>**Direct-seeded and Transplant:**<br>• **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.<br>**<u>Split Applications for Nutsedge</u>**<br>**Direct-seeded and Transplant:**<br>• **Pre-transplant followed by postemergence for nutsedge control**<br>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/A 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.<br>• **Postemergence followed by postemergence for nutsedge control**<br>To maximize control of nutsedge, it may be necessary to use a postemergence spot application to those areas where the nutsedge has germinated or regrown. Application rate should not exceed 1 oz/A in these areas. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (Includes applications to the crop and to row middles/furrows).<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |
| **FRUITING VEGETABLES GROUP 8**<br><br>*Eggplant, groundcherry, pepino, pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), tomatillo, tomato* | 1/2 - 1 | **Direct-seeded and Transplant:**<br>• **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. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.031 lb ai/A).<br>• **DO NOT** make more than up to 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |

**PERMANENT CROPS**

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **13-07B HIGHBUSH BLUEBERRIES** | 1/2 - 2/3<br>1 - 4 year bushes<br><br>1/2 -1<br>>4 year bushes | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>Apply as a directed spray application to the ground on either side of the row.<br>• **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<br>• **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 to 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 when nutsedge plants are in the 3 to 5 leaf stage. For best results, use a minimum of 0.75 oz/A of SANDEA. SANDEA may not control ALS resistant weeds. |
| | | **PRECAUTIONS:**<br>• Contact of SANDEA with the blueberry bushes should be avoided. Contact will result in temporary chlorosis of treated leaves.<br>• Use of a shielded boom is recommended.<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• Allow a minimum of 45 days between applications.<br>• **DO NOT** concentrate the application rate into the treated swath.<br>• **DO NOT** apply to bushes established less than one year or to plants under stress.<br>• **DO NOT** apply to 'Elliott' variety bushes established less than four years.<br>• **DO NOT** apply to areas where water is known to pond for periods of time following rainfall.<br>• **DO NOT** contact foliage or green wood renewal canes with SANDEA. Herbicide uptake via contacted foliage or green canes will result in plant injury.<br>• **DO NOT** exceed the Maximum Single Application Rate of 2/3 oz/A (0. 0.031 lb ai/A) 1-4 year established bushes and 1 oz/A (0.031 lb ai/A) >4 year established bushes.<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• **DO NOT** apply SANDEA within 14 days of harvest. |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **13-07A CANEBERRY SUBGROUP**<br><br>(Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties and/or hybrids of these)<br><br>**(For use in Oregon and Washington only)** | 3/4 – 1 1/3 | Apply SANDEA uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>• Apply as a broadcast directed spray application to the ground on either side of the row. Applications of SANDEA must be made pre-emergence up to and including primocane burndown. **DO NOT** apply to developing primocanes in season until hardened off. Stunting of the canes is possible following applications.<br>• **Preemergence and Postemergence directed application for control of labeled weeds:** Apply a single or sequential application based on weed pressure. 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.<br>• **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 to 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 when nutsedge plants are in the 3 to 5 leaf stage. For best results, use a minimum of 0.75 oz/A of SANDEA. |
| | 1 | **Rope-wick or Wiper Applications:**<br>• **Row Middle/Furrow Application –** Apply using a minimum of 1 oz/A. |
| | | **PRECAUTIONS:**<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>• Contact of SANDEA with the caneberry bushes should be avoided. Contact will result in temporary chlorosis of treated leaves.<br>• Use of a shielded boom is recommended.<br>**RESTRICTIONS:**<br>• For preemergence control, **DO NOT** apply SANDEA if excessive weed growth prevents contact with the ground.<br>• Minimum of 45 days between applications.<br>• **DO NOT** concentrate the application rate into the treated swath.<br>• **DO NOT** apply to areas where water is known to pond for periods of time following rainfall.<br>• **DO NOT** apply to bushes established less than one year or to plants under stress.<br>• **DO NOT** contact foliage or green wood renewal canes with SANDEA. Herbicide uptake via contacted foliage or green canes will result in plant injury.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A)<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than exceed 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by air.<br>• **DO NOT** apply to developing primocanes in season until hardened off.<br>• **DO NOT** apply SANDEA within 14 days of harvest. |
| **11-10 POME FRUIT GROUP**<br><br>**(West of the Rockies)**<br>Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these | 3/4 - 2 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>• **Postemergence application for control of nutsedge:** Apply SANDEA as a single broadcast application to orchard floor on either side of the row 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.<br>• **Preemergence and Postemergence application for control of labeled broadleaf weeds:** Apply SANDEA as a single or sequential broadcast application to orchard floor on either side of the row 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.<br>Preemergence applications of SANDEA when ground cover prevents contact with the soil will result in reduced or no residual activity. |
| | | **PRECAUTIONS:**<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Avoid spray contact with tree foliage and fruit with spray or drift.<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** apply when orchard temperatures exceed 85°F at the time of application.<br>• **DO NOT** concentrate the application rate into the treated swath.<br>• **DO NOT** apply to trees established in a permanent orchard less than one calendar year.<br>• **DO NOT** apply to nursery stock.<br>• Minimum of 45 days between applications.<br>• **DO NOT** exceed the Maximum Single Application Rate of 2 oz/A (0.094 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• **DO NOT** apply SANDEA within 14 days of harvest. |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **11-10 POME FRUIT GROUP**<br><br>**(East of the Rockies)**<br>(Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these) | 1/2 - 1 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>• **Postemergence application for control of nutsedge:** Apply SANDEA as a single broadcast application to orchard floor on either side of the row 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.<br>• **Preemergence and Postemergence application for control of labeled broadleaf weeds:** Apply SANDEA as a single or sequential broadcast application to orchard floor on either side of the row 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 when ground cover prevents contact with the soil will result in reduced or no residual activity. Mix with a postemergence broad-spectrum type herbicide.<br>Preemergence applications of SANDEA when ground cover prevents contact with the soil will result in reduced or no residual activity. |
| | **PRECAUTIONS:**<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Avoid spray or drift contact with tree foliage and fruit.<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** apply when orchard temperatures exceed 85°F at the time of application.<br>• **DO NOT** concentrate the application rate into the treated swath.<br>• **DO NOT** apply to trees established in a permanent orchard less than one calendar year.<br>• **DO NOT** apply to nursery stock.<br>• Minimum of 45 days between applications.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• **DO NOT** apply SANDEA within 14 days of harvest. | |
| **TREE NUT CROP GROUP 14 including PISTACHIOS**<br><br>**(Excluding Almonds)** | 2/3 - 1 1/3 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre. Apply SANDEA as a directed spray to established tree nut crops. Established tree nut crops are defined as those that have been transplanted into their final growing location for a period of at least 12 months, and where the soil has firmly settled around the roots from packing and rainfall or irrigation.<br>• Extreme care must be exercised to avoid contact of spray containing SANDEA with trunk, stems, roots, or foliage of tree nut crops, or severe damage or death may result.<br>• Labeled rates are based on broadcast treatment. For band applications reduce the broadcast rate of SANDEA in proportion to the area actually sprayed. For all applications, adjust the rate of SANDEA to account for high volume output nozzles, such as off-center nozzles, and overlaps in the spray pattern. Use of controlled droplet application, spot application, irrigation, or chemigation equipment for application of this product is not recommended due to variations in the actual application rate. Excessive application rates can result in severe tree injury or death.<br>• Use a maximum of 1 oz/A (0.047 lb ai/A) of SANDEA on coarse textured soils classified as sands, loamy sands, and sandy loams with less than 18% clay and more than 65% sand, or on soils with less than 1% organic matter. **DO NOT** apply to gravely soils. For the best results apply SANDEA in the spring when nutsedge is not drought stressed and maximize the interval between application and subsequent irrigation.<br>• Mechanical cultivation or mowing may be required to control weed species not on the SANDEA label. If so, a sequential treatment may be required to control weeds in areas of disturbed soil.<br>• If SANDEA is applied to trees that have been weakened by or recovering from stress caused by, but not limited to, excessive fertilizer or soil salts, disease, nematodes, frost, wind injury, drought, flooding, previously applied pesticides, insects, winter injury, soil pan of any type, nutrient deficiency, or mechanical damage, severe injury or death may result. Application of SANDEA to weakened or stressed trees as described, especially in soils with less than 1% organic matter, significantly increases the probability of severe injury or death.<br>• SANDEA may be applied at 2/3 to 1 1/3 oz/A in combination with glyphosate agricultural herbicides for control of emerged annual grasses, broadleaf weeds and nutsedge. |
| | **PRECAUTIONS:**<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 2/3 oz/A (0.125 lb ai/A) per year, on coarse-textured soils classified as sand, loamy sand, and sandy loam with less than 18% clay and more than 65% sand.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year, on soils with less than 1% organic matter.<br>• **DO NOT** apply by rope-wick wiper application.<br>• Minimum of 45 days between applications.<br>• **DO NOT** apply SANDEA within 1 day of harvest.<br>• **DO NOT** apply to gravely soils. | |

**FIELD CROPS**

<table>
<tr><th>CROP</th><th>OZ/ACRE</th><th>DIRECTIONS FOR USE</th></tr>
<tr><td rowspan="5">BEANS, DRY</td><td>1/2 - 2/3</td><td>Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>Preplant or At Planting:<br>Incorporation - Apply and incorporate 1/2 to 2/3 oz/A SANDEA with EPTAM® 7E (EPA Reg. No. 10163-283, EPTC) at a depth of approximately 2 inches just before planting. Use lower rate on lighter textured soils with low organic matter. Refer to EPTAM 7-E (EPTC) label for specific incorporation directions.<br><br>Direct-seeded:<br>• Preemergence - Apply SANDEA after planting but prior to soil cracking. Use the lower rate on lighter textured soils with low organic matter.<br>• Postemergence - Apply SANDEA when plants have 1 to 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 post-application per year.<br>• Only apply as a post directed row middle or furrow application in the State of California.<br><u>Tank Mixtures for Dry Beans:</u><br>It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br>• Tank mixtures for additional broadleaf weed control can be added.<br>• Tank mixtures for postemergent grass control, including but not limited to TARGA® (EPA Reg No. 33906-9-81880, Quizalofop-P-Ethyl) or other graminicides can be added.</td></tr>
<tr><td colspan="2">Preplant or At Planting, Direct Seeded, Preemergence, and Postemergence applications:<br>PRECAUTIONS:<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>• 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.<br>• Use of COC or MSO adjuvant may cause temporary crop response when plants are under stress.<br>RESTRICTIONS:<br>• COC or MSO adjuvants can only be used in the states of CO, MN, NE, ND, and SD.<br>• DO NOT exceed the Maximum Single Application Rate of 2/3 oz/A (0.031 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per crop year.<br>• DO NOT apply more than 2 oz/A (0.094 lb ai/A) per year. (Includes applications to the crop and to row middles/furrows).<br>• Minimum of 14 days between applications.<br>• DO NOT apply SANDEA within 30 days of harvest.</td></tr>
<tr><td>1/2 - 1</td><td>• 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.</td></tr>
<tr><td colspan="2">Row Middle/Furrow applications:<br>PRECAUTIONS:<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 2 oz/A (0.094 lb ai/A) per year. (Includes applications to the crop and to row middles/furrows).<br>• Minimum of 14 days between applications.<br>• DO NOT apply SANDEA within 30 days of harvest.</td></tr>
<tr><td rowspan="3">BEANS, SUCCULENT SNAP<br><br>(including lima beans)</td><td>1/2 – 1</td><td>Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>Preplant or At Planting:<br>Incorporation: Apply and incorporate 1/2 to 1 oz/A of SANDEA with EPTAM 7-E (EPA Reg. No. 10163-283, EPTC) at a depth of approximately 2 inches just before planting. Use lower rate on lighter textured soils with low organic matter. Refer to EPTAM 7-E (EPTC) label for specific incorporation directions. Rotary hoe lightly during or shortly after emergence of the beans to break any crust that occurs.<br><br>Direct-seeded:<br>• Preemergence - Apply SANDEA after planting but prior to soil cracking. Use the lower rate on lighter textured soils with low organic matter.</td></tr>
<tr><td>1/2 - 2/3</td><td>Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>Direct-seeded:<br>• Postemergence - Apply SANDEA over-the-top after the crop has reached the 2 to 4 trifoliate leaf stage, but before flowering. Use the lower rate on lighter textured soils with low organic matter. Directed sprays may limit crop injury.</td></tr>
<tr><td>1/2 - 1</td><td>• Row Middle/Furrow Applications - 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.</td></tr>
</table>

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| | | **PRECAUTIONS:**<br>• Application of SANDEA may cause temporary stunting.<br>• Refert to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year. (Includes applications to the crop and to row middles/furrows).<br>• **DO NOT** apply by rope-wick wiper application.<br>• Allow a minimum of 14 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |
| **6B SUCCULENT SHELLED PEA AND BEAN SUBGROUP**<br><br>(Any succulent shelled cultivar of bean (Phaseolus) including lima bean, green; broad bean, succulent; (vigna) including blackeyed pea, cowpea, southern pea | 1/2 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>**Preemergence application for control of labeled broadleaf weeds -** Apply SANDEA as a single broadcast application after planting but before crop emergence.<br><br>Application of SANDEA may cause significant, temporary stunting and delay maturity of peas 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. |
| | | **PRECAUTIONS:**<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1/2 oz/A (0.023 lb ai/A).<br>• **DO NOT** make more than 1 application of SANDEA per year.<br>• **DO NOT** apply more than 1/2 oz/A (0.023 lb ai/A) per year.<br>• **DO NOT** feed to livestock.<br>• **DO NOT** apply SANDEA to English peas and garden peas.<br>• **DO NOT** apply by rope-wick wiper application.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |
| | 1/2 - 1 | Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>**Postemergence –**<br>Apply as a directed spray when plants have 2 to 4 trifoliate leaves and before flowering. Directed sprays are recommended to limit crop injury.<br><br>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 sprayed to determine potential sensitivity to its use. |
| | | **PRECAUTIONS:**<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** feed to livestock.<br>• **DO NOT** apply SANDEA to Adzuki beans, English peas and garden peas.<br>• **DO NOT** apply by rope wick wiper application.<br>• Minimum of 14 days between applications.<br>• **DO NOT** apply SANDEA within 30 days of harvest. |

<table>
<tr><th>CROP</th><th>OZ/ACRE</th><th>DIRECTIONS FOR USE</th></tr>
<tr><td>CORN, FIELD AND FIELD CORN GROWN FOR SEED</td><td>2/3 - 1 1/3</td><td>Apply SANDEA in a minimum of 15 gallons of water when applying by ground and apply in 3 to 15 gallons of water when applying by air.<br>Postemergence - Apply SANDEA over-the-top or with drop nozzles from the spike-through layby stage of field corn.<br><u>Tank Mixtures for Corn Only</u><br>It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br><br>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 tall should be directed or semi-directed using drop nozzles.<br><br>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 NIS or COC.<br><br>Tank mixtures for additional broadleaf weed control, including but not limited to 2,4-D, topramezone, atrazine, bromoxynil octanoate, mesotrione, dicamba, tembotrione, or YUKON© (EPA Reg. No. 81880-6-10163, Halosulfuron-methyl and Sodium salt of dicamba) can be added.<br><br>Tank mixtures for postemergence grass control, including but not limited to nicosulfuron, Beacon® (EPA Reg. No. 10163-376, Primisulfuron-methyl), or nicosulfuron and rimsulfuron can be added.<br><br>Tank mixtures for additional postemergence grass and broadleaf control, including but not limited to Roundup® brands or glyphosate (glyphosate-tolerant corn only) or glufosinate and glufosinate-resistant trait hybrids only can be added.<br><br>Tank mixtures for residual control of foxtails and other grasses, including but not limited to alachlor, acetochlor, metolachlor, dimethenamid, and pyroxasulfone can be added.</td></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 2 2/3 oz/A (0.125 lb ai/A) per year.<br>• DO NOT allow grazing domestic livestock, harvesting forage, or harvesting silage for 30 days following application to foliage.<br>• DO NOT apply within 30 days of harvest.<br>• Minimum of 14 days between applications.</td></tr>
<tr><td>CORN, SWEET AND POPCORN</td><td>2/3 - 1</td><td>Apply SANDEA in a minimum of 15 gallons of water when applying by ground. Apply in 3 to 15 gallons of water when applying by air.<br>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 oz/A may be applied only with drop nozzles semi-directed or directed to avoid application into the corn plant whorl.</td></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>• Not all varieties have been tested for resistance. 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.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 1 oz/A (0.047 lb ai/A) per year when using reduced application rates.<br>• DO NOT allow grazing of domestic livestock, harvesting forage, or harvesting silage 30 days following application to foliage.<br>• DO NOT apply within 30 days of harvest.<br>• DO NOT use SANDEA on "Jubilee" sweet corn. All varieties have not been tested for sensitivity to SANDEA.<br>• Minimum of 14 days between applications.</td></tr>
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<table>
<tr><th>CROP</th><th>OZ/ACRE</th><th>DIRECTIONS FOR USE</th></tr>
<tr><td>COTTON</td><td>2/3 - 1 1/3</td><td>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.</td></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 1 1/3 oz/A (0.062 lb ai/A) per year when using reduced application rates<br>• DO NOT apply by rope-wick wiper application.<br>• Minimum of 14 days between applications.<br>• DO NOT apply SANDEA within 28 days of harvest.</td></tr>
<tr><td>MILLET, PROSO</td><td>1/2 - 2/3</td><td>Apply SANDEA in a minimum of 15 gallons of water when applying by ground. Apply in 3 to 15 gallons of water when applying by air.<br>Millet Growth Stage: SANDEA, alone, can be applied from the 2 leaf through layby stage (before grain head emergence).<br><br>Temporary stature reduction may occur to the crop following application of SANDEA if the proso millet is under stress. This effect will be most evident 7 to 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.<br><u>TANK MIXTURES</u><br>It is the pesticide user’s responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br><br>Tank mixtures for additional broadleaf weed control, including but not limited to 2,4-D, and dicamba can be added.<br><br>Insecticide and fungicide products can be tank mixed with SANDEA.<br>Listed day intervals following an application of SANDEA.
<table>
<tr><th rowspan="2">CROP</th><th colspan="3">All Animals (Lactating and Non-lactating)</th></tr>
<tr><th>Pre-Grazing Interval (PGI)</th><th>Pre-Harvest Interval (PHI)</th><th>Pre-Slaughter Interval (PSI)</th></tr>
<tr><td>Millet Forage</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Millet Grain</td><td>N/A</td><td>50</td><td>0</td></tr>
<tr><td>Millet Straw</td><td>N/A</td><td>50</td><td>0</td></tr>
<tr><td>Millet Hay</td><td>N/A</td><td>37</td><td>0</td></tr>
</table></td></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>• There is no pregrazing interval for ALL animals (lactating and non-lactating) for grass forage.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 2/3 oz/A (0.031 lb ai/A).<br>• DO NOT make more than 1 application of SANDEA per year.<br>• DO NOT apply more than 2/3 oz/A (0.031 lb ai/A) per year.<br>• DO NOT apply within 0 days of harvesting millet forage.<br>• DO NOT apply within 50 days for millet grain and millet straw.<br>• DO NOT apply within 37 days for millet hay.</td></tr>
</table>

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **RICE** | 2/3 - 1 1/3 | Use a minimum 3 to 15 gal of water per acre for aerial equipment and a minimum of 15 gal of water per acre for ground equipment. It is best to apply spray solutions the day they are mixed.<br>**Pre-plant, at planting, preemergence and postemergence applications to rice**<br>• **Pre-plant:** Apply SANDEA at 2/3 oz/A 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.<br>• **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 oz/A, with the total application rate not to exceed 1 1/3 oz/A (0.062 lb ai/A) per 12 month period.<br><br>SANDEA can be applied as a foliar spray.<br><br>SANDEA can be tank mixed with propanil containing rice herbicides at 2/3 to 1 1/3 oz/A of this herbicide and labeled rates of the tank mix products.<br><br>Foliar applications of SANDEA can be made at the 3 to 5 leaf stage of rice when weeds have 2 to 4 leaves.<br><br>Control of emerged weeds with foliar applications is best when 70% to 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.<br><br>**SANDEA Tank Mixture Options in Rice**<br>It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br>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 NIS or COC.<br>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.<br>• **Preemergence & Pre-Plant Applications:** Tank mixtures for additional preemergence weed control, including but not limited to thiobencarb, clomazone), glyphosate, pendimethalin or quinclorac can be added.<br>• **Postemergence Applications:** Tank mixtures for additional broadleaf weed control, including but not limited to triclopyr, and triethylamine salt), propanil and propanil products, carfentrazone-ethyl), quinclorac, bentazon, bensulfuron methyl, penoxsulam, bispyribac-sodium, imazethapyr, imazamox, and 2-4-D can be added.<br>• **Sequential Applications** - SANDEA can be applied sequentially with thiobencarb, cyhalofop), bispyribac-sodium, and carfentrazone-ethyl. Refer to the product labels for application information, restrictions, and precautions.<br>Tank mixtures for postemergence grass control, including but not limited to imazethapyr, imazamox), propanil, quinclorac, penoxsulam, and bispyribac-sodium can be added.<br>Insecticide and fungicide products can be tank mixed with SANDEA. |
| | | **PRECAUTIONS:**<br>• For best results 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** apply within 48 days of harvest, in all states except California.<br>• **DO NOT** apply within 69 days of harvest in California.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 1 1/3 oz/A (0.062 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• Minimum of 14 days between applications. |
| **SORGHUM, GRAIN (MILO)** | 2/3 - 1 | Apply SANDEA in a minimum of 15 gallons of water when applying by ground. Apply in 3 to 15 gallons of water when applying by air.<br>**Postemergence -** Apply SANDEA from the 2 leaf through layby stage (before grain head emergence).<br><br>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.<br>**Tank Mixtures for Grain Sorghum**<br>It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br>Tank mixtures with SANDEA can include, but are not limited to atrazine, bromoxynil octanoate, dicamba and diglycolamine salt, or 2,4-D. |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• **DO NOT** make more than 1 application of SANDEA per year.<br>• **DO NOT** apply more than 1 oz/A (0.047 lb ai/A) of SANDEA per year.<br>• Following application to foliage, allow 30 days before grazing domestic livestock, harvesting forage, or harvesting silage.<br>• **DO NOT** apply within 30 days of harvest. |
| **SUGARCANE** | 2/3 - 1 1/3 | Apply SANDEA in a minimum of 15 gallons of water when applying by ground. Apply in 3 to 15 gallons of water when applying by air.<br>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 sequential treatment may be required to control weeds in areas of disturbed soil.<br>Apply SANDEA at 2/3 to 1 1/3 oz/A(0.031 to 0.062 lb ai/A) in combination with glyphosate agricultural herbicides for pre-plant burn down of emerged annual grasses, broadleaf weeds and nutsedge in sugarcane.<br>**Tank Mixtures for Sugarcane**<br>It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br>Tank mixtures with SANDEA can include, but are not limited to asulam, sodium salt, atrazine, mesotrione, trifloxysulfuron-sodium, ametryn, glyphosate, or 2,4-D. |
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• **DO NOT** make more than 3 applications (including pre-plant applications) of SANDEA per year.<br>• **DO NOT** apply more than 2 2/3 oz/A (0.125 lb ai/A) per year.<br>• Following application to foliage allow 30 days before grazing domestic livestock, harvesting forage, or harvesting silage.<br>• **DO NOT** apply within 30 days of harvest.<br>• Minimum of 14 days between applications. |

**OTHER CROPS AND APPLICATIONS**

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **ALFALFA**<br><br>**AZ, CA & NM** | 2/3 - 1 | Apply uniformly with ground equipment in a minimum of 20 gal of water per acre.<br>**Established Fields**<br>• **Postemergence Broadcast -** Apply SANDEA as a broadcast application to established alfalfa. Alfalfa should be well established in the field for a minimum of 6 months prior to application of SANDEA. 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.<br>• **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/A in these areas. Use a water volume that will allow for good coverage of the plants.<br>• **Postemergence followed by Postemergence -** To maximize control of nutsedge, 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/A 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.<br>Research has shown that alfalfa growth and yields will be reduced for one or more cuttings after a SANDEA application. Application of SANDEA to alfalfa where re-growth exceeds 6" will result in greater yield reduction. Symptoms may be temporary. Follow all directions carefully to minimize potential reduced plant growth and yield. Use a water volume that will provide uniform coverage of plants. |
| | | **PRECAUTIONS:**<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• Minimum of 14 days between applications.<br>• **DO NOT** apply SANDEA within 14 days of harvest. |

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **ARTICHOKE** | 1 – 2 | Apply SANDEA uniformly with ground equipment in a minimum of 15 gal of water per acre. Apply as a directed application on either side of the row and winter ditches while avoiding crop foliage.<br>• **Row Middle -** Apply SANDEA between rows of perennial artichokes for the control of nutsedge and listed broadleaf weeds. Applications should be made when oxalis is in full bloom. 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. To maximize nutsedge control, apply when plants are in the 3 to 5 leaf stage.<br>Application of SANDEA may cause significant, temporary stunting and delay maturity of artichokes if sprayed directly. 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. |
| | | **PRECAUTIONS:**<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>• Use rates are broadcast per acre. Reduce rate and spray volume in proportion to area actually sprayed.<br>**RESTRICTIONS:**<br>• **DO NOT** apply by air.<br>• **DO NOT** exceed the Maximum Single Application Rate of 2 oz/A (0.094 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• Minimum of 14 days between applications.<br>• **DO NOT** apply SANDEA within 5 days of harvest. |
| **ASPARAGUS** | 1/2 - 1 1/2 | Apply uniformly with ground equipment in a minimum of 15 gal per acre.<br>**Nursery, Transplanted Crowns and Established Beds**<br>• **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 varieties 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.<br>• **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. An NIS or COC 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.<br>• **Split application for enhanced control of nutsedge -** Apply a split application with 3/4 to 1 oz/A during the cutting/harvesting season when the first flush of nutsedge is in the 3 to 5 leaf stage, followed by a second application of 3/4 to 1 oz/Aat least 21 to 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 nutsedge. |
| | | **PRECAUTIONS:**<br>• For first year transplants, apply no sooner than six weeks after fern emergence.<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** use a surfactant from spear emergence to harvest west of the Rockies.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/2 oz/A (0.0628 lb ai/A).<br>• **DO NOT** make more than 2 applications per year.<br>• **DO NOT** apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• **DO NOT** apply by rope-wick wiper application.<br>• Minimum of 21 days between applications.<br>• **DO NOT** apply SANDEA within 1 day of harvest. |
| **FALLOW GROUND** | 2/3 - 1 1/3 | Apply SANDEA in a minimum of 15 gallons of water when applying by ground with specified surfactant to fallow ground. Apply in 3 to 15 gallons of water when applying by air**.** |
| | | **PRECAUTIONS:**<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 2/3 oz (0.125 lb ai/A) per year.<br>• Minimum of 14 days between applications. |
| **OKRA** | 1/2 - 1 | **Direct-seeded and Transplant:**<br>**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. |

<table>
<tr><th>CROP</th><th>OZ/ACRE</th><th>DIRECTIONS FOR USE</th></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 2 oz/A (0.094 lb ai/A) per year.<br>• DO NOT apply by rope-wick wiper application.<br>• Minimum of 14 days between applications.<br>• DO NOT apply SANDEA within 30 days of harvest.</td></tr>
<tr><td>CROP GROUP 17<br>PASTURE,<br>RANGELAND &<br>CRP<br>FORAGE<br>GRASSES/HAY</td><td>2/3 – 1 1/3</td><td>Apply uniformly with ground equipment in a minimum of 10 gal of water per acre.<br><u>Established Fields</u><br>• Postemergence Broadcast – Apply SANDEA as a broadcast application to established Pasture & Rangeland. 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 or before weeds exceed label height restriction. Wait for at least 48 hours after application before irrigation.<br>• Postemergence Spot Treatment – Apply SANDEA as a spot treatment application to established Pasture, Rangeland, CRP or Forage Grasses/Hay. Spot treatments will be applied at rates equivalent to broadcast field rates and not exceeding the maximum application rate. Water volume must be ample to allow for adequate weed coverage.<br><br>Spot treatment table for SANDEA applications per 1 gallon of water (tsp=teaspoon). For applications more than 1 gallon, multiply the tsp listed in the table to attain required product volume rate.
<table>
<tr><th>GPA</th><th>2/3 oz/A</th><th>1 oz/A</th><th>1 1/3 oz/A</th></tr>
<tr><td>10</td><td>6/10 tsp.</td><td>9/10 tsp.</td><td>1 2/10 tsp.</td></tr>
<tr><td>15</td><td>5/10 tsp.</td><td>7/10 tsp.</td><td>9/10 tsp.</td></tr>
<tr><td>20</td><td>3/10 tsp.</td><td>5/10 tsp.</td><td>6/10 tsp.</td></tr>
</table>
• Postemergence followed by Postemergence - To maximize control of nutsedge, 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 should not exceed 3/4 oz/A 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.<br><br><u>TANK MIXTURES</u><br>It is the pesticide user’s responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.<br><br>Tank mixtures for additional broadleaf weed control, including but not limited to 2,4-D, dicamba and, picloram can be added.<br><br>Labeled insecticides and labeled fungicide products can be tank mixed with SANDEA.<br>Listed day intervals following an application of SANDEA.
<table>
<tr><th rowspan="2">CROP</th><th colspan="3">Lactating and Non-lactating Animals</th></tr>
<tr><th>Pre-Grazing Interval (PGI)</th><th>Pre-Harvest Interval (PHI)</th><th>Pre-Slaughter Interval (PSI)</th></tr>
<tr><td>Pasture, Rangeland, CRP and Forage Grasses/Hay</td><td>0</td><td>37</td><td>0</td></tr>
</table></td></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>• There is no pregrazing interval for lactating and non-lactating animals.<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 1 1/3 oz/A (0.062 lb ai/A) per year.<br>• For spot application, do not exceed 0.031 oz/1000 $ft^2$.<br>• Minimum of 14 days between applications.<br>• DO NOT apply SANDEA within 37 days of harvest.</td></tr>
<tr><td>RHUBARB</td><td>1/2 - 1</td><td>Apply uniformly with ground equipment in a minimum of 15 gal of water per acre.<br>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.</td></tr>
</table>

<table>
<tr><th>CROP</th><th>OZ/ACRE</th><th>DIRECTIONS FOR USE</th></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>•<br>RESTRICTIONS:<br>• DO NOT exceed the Maximum Single Application Rate of 1 oz/A (0.047 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 1 oz/A (0.047 lb ai/A) per year.<br>• DO NOT apply by rope-wick wiper application.<br>• Minimum of 14 days between applications.<br>• DO NOT apply SANDEA within 60 days of harvest.</td></tr>
<tr><td>TURFGRASS SOD</td><td>2/3 - 1 1/3</td><td>SANDEA is a selective herbicide for postemergence control of sedges such as purple and yellow nutsedge in sod farms. This product will not injure nearby established ornamentals, trees, and shrubs when used according to label directions.<br><br>For postemergence control of purple or yellow nutsedge found in established turfgrass, apply 2/3 to 1 1/3 oz/A (0.031 to 0.062 lbs. ai/A) after nutsedge has reached the 3 to 5 leaf stage of growth. Use the lower rate in light infestations and the higher rate in heavy infestations.<br><br>A second treatment may be required 4 to 6 weeks after the initial treatment. As a sequential treatment, when new purple or yellow nutsedge plants have reached the 3 to 5 leaf stage of growth, apply 2/3 to 1 1/3 oz/A (0.031 to 0.062 lb ai/A). Use the lower rate in light infestations and the higher rate in heavy infestations.<br><br>Use 0.25 to 0.5% NIS concentration (1 to 2 quarts per 100 gal of spray solution) for broadcast applications. For high volume applications, DO NOT exceed 1 quart of surfactant per acre. Use only NIS which contains at least 80% active material. Refer to the surfactant label and observe all precautions, mixing and application instructions.<br><br>When applied as directed under the conditions described, the following established turfgrasses are tolerant to application of this product:<br><br>
<table>
<tr><th colspan="3">Established Cool-Season Grasses</th></tr>
<tr><td>Bentgrass, creeping<br>(Agrostis stolonifera)</td><td>Fescue, fine<br>(Festuca rubra)</td><td>Ryegrass, perennial<br>(Lolium perenne)</td></tr>
<tr><td>Blue Grass, Kentucky<br>(Poa pratensis)</td><td>Fescue, tall<br>(Festuca arundinacea)</td><td></td></tr>
</table>
<br>
<table>
<tr><th colspan="3">Established Warm-Season Grasses</th></tr>
<tr><td>Bahiagrass<br>(Paspalum notatum)</td><td>Centipedegrass<br>(Eremochloa ophiuroides)</td><td>Kikuyugrass<br>(Pennisetum clandestinum)</td></tr>
<tr><td>Bermudagrass<br>(Cynodun dactylon)</td><td>Seashore paspalum<br>(Paspalum vaginatum)</td><td>Zoysiagrass<br>(Zoysia japonica)</td></tr>
<tr><td>Buffalograss<br>(Buchloe dactyloides)</td><td>St. Augustinegrass<br>(Stenotaphrum secundatum)</td><td></td></tr>
</table>
<br>Fallow Treatments in Turfgrass Seed and Sod Production Areas<br>This product may be used on fallow areas prior to establishing turfgrass plants. Allow 4 weeks between application and seeding or sodding of turfgrass.<br><br><u>Tank Mixtures for Turfgrass Renovation</u><br>SANDEA plus GLYPHOSATE AGRICULTURAL HERBICIDES plus NIS<br>For non-selective control of all vegetation prior to turfgrass renovation, SANDEA may be applied at 2/3 oz/A in combination with glyphosate agricultural herbicides for pre-plant burndown of emerged annual grasses, broadleaf weeds and nutsedge.<br><br>Refer to the glyphosate agricultural herbicide label for use instructions, weeds controlled, and application restrictions.<br><br>It is the pesticide user’s responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.</td></tr>
</table>

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<tr><td></td><td colspan="2">PRECAUTIONS:<br>• For best results, do not mow turf for 2 days before or 2 days after application.<br>• 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.<br>• This product may be used on seeded, sodded, or sprigged turfgrass that is well established. Allow the turf to develop a good root system and uniform stand before application.<br>• Avoid application of SANDEA when turfgrass or nutsedge is under stress since turf injury and poor nutsedge control may result.<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>RESTRICTIONS:<br>• DO NOT apply as an over the top spray to desirable shrubs or trees.<br>• DO NOT exceed the recommended amount of surfactant due to the potential for turf injury at higher rates.<br>• DO NOT exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 2 2/3 oz/A (0.125 lb ai/A) per year.<br>• DO NOT apply by rope-wick wiper application.<br>• Minimum of 4 to 6 weeks between applications.<br>• For Fallow Treatments in Turfgrass seed and Sod production areas, allow 4 weeks between application and seeding or sodding of turfgrass.</td></tr>
<tr><td>GRASSES GROWN FOR SEED</td><td>3/4 – 1 1/3</td><td>ESTABLISHED GRASSES<br>SANDEA may be applied to established grass grown for seed after at least one grass seed crop has been harvested.<br><br>For postemergence control of listed broadleaf weeds and nutsedge found in established grasses grown for seed, apply 3/4 to 1 1/3 oz/A(0.035 to 0.062 lbs. ai/A).<br><br>For postemergence applications, use 0.25 to 0.5% NIS concentration (1 to 2 quarts per 100 gal of spray solution) for broadcast applications. For high volume applications, do not exceed 1 quart of surfactant per acre. Use only NIS which contains at least 80% active material. Refer to the surfactant label and observe all precautions, mixing and application instructions.<br><br>When applied as directed under the conditions described, the following established grasses are resistant to application of this product:<br><br>
<table>
<tr><th colspan="3">Established Cool-Season Grasses</th></tr>
<tr><td>Bentgrass, creeping<br>(Agrostis stolonifera)</td><td>Fescue, fine<br>(Festuca rubra)</td><td>Ryegrass, perennial<br>(Lolium perenne)</td></tr>
<tr><td>Blue Grass, Kentucky<br>(Poa pratensis)</td><td>Fescue, tall<br>(Festuca arundinacea)</td><td>Orchardgrass<br>(Dactylis glomerata L.)</td></tr>
</table></td></tr>
<tr><td></td><td colspan="2">PRECAUTIONS:<br>• 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.<br>• This product may be used on labeled grass seed crops that are well established, defined as having at least one grass seed crop harvested. Allow grass to develop a good root system and uniform stand before application. *See specific use directions for spring planted tall fescue.<br>• Avoid application of SANDEA when grass seed crops or weeds are under stress conditions, such as drought, low fertility, water saturated soil, disease or insect damage, since crop injury and poor weed control may result.<br>• Applications made in late fall or spring when grass seed crops are actively growing may result in injury.<br>• Certain perennial ryegrass varieties have shown sensitivity to sulfonylurea herbicides.<br>• Refer to “Mixing Instructions”, “Use Precautions”, and “For Optimum Results” for detailed and important use information on the application of SANDEA.<br>RESTRICTIONS:<br>• DO NOT apply as an over the top spray to desirable shrubs or trees.<br>• DO NOT exceed the specified amount of surfactant due to the potential for crop injury at higher rates.<br>• DO NOT exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• DO NOT make more than 2 applications of SANDEA per year.<br>• DO NOT apply more than 2 2/3 oz/A (0.125 lb ai/A) per year.<br>• Minimum of 14 days between applications.<br>• DO NOT apply by rope-wick wiper application.</td></tr>
</table>

| CROP | OZ/ACRE | DIRECTIONS FOR USE |
|---|---|---|
| **GRASSES GROWN FOR SEED** | 3/4 - 1 1/3 | **SPRING PLANTED TALL FESCUE GROWN FOR SEED WEST OF THE CASCADES**<br>For postemergence control of listed broadleaf weeds, apply 3/4 to 1 1/3 oz/A (0.035 to 0.062 lb ai/A). Apply as a broadcast spray in a minimum of 10 gallons of water/acre to new establishment seedling tall fescue in the spring once the first tiller of the crop is established.<br><br>Applications for the control of sharppoint fluvellin must be made when the basal diameter of the weed is the size of a U.S. quarter, or smaller, and before stem elongation or runner formation.<br><br>Tank mixing SANDEA with pyraflufen ethyl, pyrasulfotole, or saflufenacil and/or other herbicides will improve weed control.<br><br>It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture. |
| | | **PRECAUTIONS:**<br>• 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.<br>• Avoid application of SANDEA when grass seed crops or weeds are under stress since crop injury and poor weed control may result.<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** apply as an over the top spray to desirable shrubs or trees.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 2/3 oz/A (0.125 lb ai/A) per year.<br>• Minimum of 14 days between applications.<br>• **DO NOT** apply by rope-wick wiper application. |
| **FENCE ROWS, FUEL STORAGE AREAS, LUMBERYARDS, TANK FARMS, RIGHT-OF WAY AND ROADSIDES** | 2/3 – 1 1/3 | **Broadcast Applications:** Apply SANDEA as a postemergence spray at 2/3 - 1 1/3 oz/A(0.031 to 0.062 lb ai/A) to roadsides and other industrial sites.<br><br>A second treatment can be applied 4 to 6 weeks after the initial treatment.<br><br>**Spot Treatments:**<br>Mix 1/4 oz to 1 oz of SANDEA per 1 gal of water. For best results, when using a hand held applicator, spray the desired target weeds in a back and forth motion to ensure proper contact and coverage.<br><br>This product will control purple and yellow nutsedge and control and/or suppress listed broadleaf weeds (see weeds controlled chart for additional information).<br><br>**NOTE:** This product can be tank mixed with Glyphosate herbicide. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. |
| | | **PRECAUTIONS:**<br>• For best results, 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% nonionic-type surfactant concentration (1 to 2 quarts per 100 gal of spray solution).<br>• Refer to "Mixing Instructions", "Use Precautions", and "For Optimum Results" for detailed and important use information on the application of SANDEA.<br>**RESTRICTIONS:**<br>• **DO NOT** apply by rope-wick wiper application.<br>• **DO NOT** exceed the Maximum Single Application Rate of 1 1/3 oz/A (0.062 lb ai/A).<br>• **DO NOT** make more than 2 applications of SANDEA per year.<br>• **DO NOT** apply more than 2 2/3 oz/A (0.125 lb ai/A) per year.<br>• Minimum of 4 - 6 weeks between applications. |

**ROTATIONAL CROP RESTRICTIONS**

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. Gowan Company, LLC recommends that the end user test this product in order to determine its suitability for such intended use. 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.

**TIME INTERVAL BEFORE PLANTING**

| CROP | MONTHS | EXCEPTIONS |
|---|---|---|
| **CROPS NOT SPECIFICALLY LISTED** | 36 | |
| Alfalfa | 9 | |
| Apples* | 9 | |
| Barley (winter) | 2 | |
| Beans, Dry | 0 | |
| Beans, Snap | 9 | 2 months in the Northeast, Midwest, and Southeast, 3 months in TX |
| Blueberry* | 9 | |

| CROP | MONTHS | EXCEPTIONS |
|---|---|---|
| Broccoli | 18 | 3 months for muck soils in FL |
| Caneberry* | 9 | |
| Cabbage | 15 | 3 months for muck soils in FL |
| Canola | 15 | |
| Carrot | 15 | |
| Cauliflower | 18 | 3 months for muck soils in FL |
| Cereal crops, Spring | 2 | |
| Clovers | 9 | |
| Collards | 18 | |
| Corn, IR/IMR Field | 0 | |
| Corn, Normal Field and IT Field | 1 | |
| Corn, Seed | 2 | |
| Corn, Sweet and Pop | 3 | |
| Cotton | 4 | |
| Cucumbers | 9 | 2 months in the Northeast, Midwest, and Southeast, 3 months in TX |
| Eggplant | 12 | 4 months for FL Transplants |
| Forage Grasses | 2 | |
| Grapes* | 9 | |
| Lettuce crops | 18 | 3 months for muck soils in FL |
| Melons | 9 | 2 months in the Southeast and TX |
| Mint | 15 | |
| Oats | 2 | |
| Onions and Leeks | 18 | |
| Peanuts | 6 | |
| Pears* | 9 | |
| Peas | 9 | |
| Peas, Field | 9 | |
| Peppers | 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 | |
| Sorghums | 2 | |
| Soybeans | 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 |
| Tree Nut* | 9 | |
| Wheat (winter) | 2 | |

* After a SANDEA application, the soil must be plowed and cross disked.

## 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:**

For plastic containers less than or equal to 50 pounds: 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 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® (800) 424-9300.**
For other product information, contact Gowan Company, LLC or see Safety Data Sheet.

**NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY 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 Gowan Company, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

Gowan Company, LLC warrants that this product conforms to the specifications on the label when used in strict conformance with Directions for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY, LLC'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY, LLC'S SOLE DISCRETION.

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