

7969-140

06-19-2009

Tack



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:  
7969-140

Date of Issuance:  
JUN 19 2009

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:  
SAN 845H Herbicide

Name and Address of Registrant (include ZIP Code):  
BASF Corporation  
26 Davis Drive  
Research Triangle Park, NC 27709

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

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

This product is reregistered in accordance with FIFRA provided that you:

- 1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
- 2) Change the size of the font of "Keep out of Reach of Children" and "Warning" to comply with 40 CFR 156.10.

Signature of Approving Official:

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

Date:

JUN 19 2009

3) To the Hazards to Humans and Domestic Animals section add "avoid contact with skin" and delete "wear protective eyewear".

4) The following revisions are needed to the handler PPE section:

-The glove statement must be revised to read "Chemical-resistant gloves (except for pilots)."

5) The text in **bold type** below must be added to the following User Safety Requirements:

"...If no such instructions for washables **exist**, use detergent and hot water..."

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

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

7) The text "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" appears both in and above the Agricultural Use Requirements box. The duplicate text appearing in the Agricultural Use Requirements box must be deleted.

8) A Non-Agricultural Use Requirements box must be added to label with the following entry restriction text:

#### "NON-AGRICULTURAL USE REQUIREMENTS

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

9) On page 8, change "recommended" to "specified". On page 9, change "recommendations" to "Directions".

10) On page 28 and 29 the headings "Turf and Lawns" and "Turf and Lawn Tank Mixes" are too broad for directions that specify application to farmstead (noncropland) and sod farms. Delete the headings and specify the exact sites being treated.

A stamped copy of the label is enclosed for your records. You must submit one copy of the final printed label before you release the product for shipment. Products shipped after 12 months from the date of this letter or the next printing of the label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of the product constitutes acceptance of these conditions. If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft.Erik@epa.gov.

Stamped 3-15-07

3  
32



The Chemical Company

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

JUN 19 2009

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

# SAN 845H<sup>®</sup> Herbicide

7969-140

For weed control in asparagus, conservation reserve programs, ~~corn, cotton,~~  
fallow croplands, general farmstead (noncropland), sorghum, grass grown for  
seed, hay, proso millet, pasture, rangeland, small grains, soybean, sugarcane, and  
turf.

### Active Ingredient

Sodium salt of dicamba (3,6-dichloro-2-Methoxybenzoic acid)\* .....83.6%

Inert Ingredients .....16.4%

Total .....100.0%

\* This product contains 70.0% 3,6-dichloro-2-Methoxybenzoic acid (dicamba)

EPA Reg. No. 7969-140

EPA Est. No.

Net Contents:

## KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).	

BASF Corporation  
26 Davis Drive  
Research Triangle Park, NC 27709

4  
32

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### **WARNING**

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed or absorbed through skin. Wear protective eyewear.

#### Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are natural rubber and nitrile rubber. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

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

- Long-sleeved shirt and long pants
- Chemical resistant gloves (except for applicators using groundboom equipment, pilots, and flaggers)
- Shoes plus socks
- Protective eyewear

See engineering controls for additional requirements and exceptions.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering controls statements:**

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

#### **User Safety Recommendations:**

##### **Users should:**

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

### **Environmental Hazards**

Keep out of lakes, streams, or ponds. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

**DO NOT** discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. **DO NOT** discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

### **Ground and Surface Water Protection**

**Point source contamination:** To prevent point source contamination, do not mix, load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below. Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

**Movement by surface runoff or through soil:** Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate recommendations as affected by soil type in the general information section of this label.

**Movement by water erosion of treated soil:** Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

### **Endangered Species Concerns**

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

## 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 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

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

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

- Coveralls worn over short-sleeve shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

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

Before applying **SAN 845H® Herbicide**, read all directions and precautions appearing on the container label and in this booklet. Failure to follow all directions and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

## STORAGE AND DISPOSAL

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

### PESTICIDE STORAGE

Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

### PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

### CONTAINER DISPOSAL

**Nonrefillable Container. DO NOT reuse or refill this container.** Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**Triple rinse containers small enough to shake (capacity ≤ 50 pounds) 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. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Triple rinse containers too large to shake (capacity > 50 pounds) as follows:**

Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or mix tank. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

---

## I. General Information

---

**SAN 845H® herbicide** is formulated as water dispersible granule intended for use in a spray to control and suppression of many annual, biennial, and perennial broadleaf weeds, as well as woody brush and vines listed in **Table 1. General Weed List, Including ALS- and Triazine-Resistant Biotypes. SAN 845H** may be used for control of these weeds in asparagus, corn, cotton, conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (noncropland), small grains, sorghum, sugarcane, and turf.

**Mode of Action**

**SAN 845H** is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. **SAN 845H** interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

**Resistance Management**

Although **SAN 845H** has a low probability of selecting for resistant weed biotypes, tank mixes and rotation with herbicides possessing other modes of action are recommended to avoid weed resistance.

The following directions apply to all uses of **SAN 845H**. Additional precautions and restrictions will be found in each specific use section,

**DO NOT** treat irrigation ditches or water used for crop irrigation or domestic uses.

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

**MIXING AND APPLICATION**

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADINGS OF THIS LABEL, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF **SAN 845H** HERBICIDE. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES AND TIMINGS.

**SAN 845H herbicide** is a water dispersible formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (see **COMPATIBILITY TEST**) should be made prior to tank mixing.

Ground or aerial application equipment which will give good spray coverage of weed foliage should be used. **HOWEVER, DO NOT USE AERIAL APPLICATION EQUIPMENT IF SPRAY PARTICLES CAN BE CARRIED BY WIND INTO AREAS WHERE SENSITIVE CROPS OR PLANTS ARE GROWING.**

Apply 3 to 50 gallons of diluted spray per treated acre when using ground application equipment, or 2 to 10 gallons of diluted spray per treated acre when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays.

Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

**SAN 845H herbicide** should not be applied during periods of gusty wind or when wind is in excess of 15 mph as uneven spray coverage may occur,

Avoid disturbing (e.g. cultivating or mowing) treated areas for at least 7 days following application.

**Cleaning Spray Equipment**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner, according to the manufacturer's directions, and then triple rinsing the equipment before and after applying this product.



**PROCEDURE FOR CLEANING SPRAY EQUIPMENT**

The steps listed below are suggested for thorough cleaning of spray equipment following applications of **SAN 845H® Herbicide** or tank mixes of **SAN 845H Herbicide**.

- 1)Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
- 2)Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3)Flush the solution out of the spray tank through the boom.
- 4)Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply **SAN 845H Herbicide** as a tank mix with wettable powders (WP) emulsifiable concentrates (EC), or other types of water-dispersible formulations. **SAN 845H Herbicide** tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

- 5)Complete step 1.
- 6)Fill tank with water while adding 2 lb of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7)Flush the detergent solution out of the spray tank through the boom.
- 8)Repeat step 1, and follow with steps 2, 3, and 4

**Table 1. General Weed List, Including ALS- and Triazine-Resistant Biotypes**

This is a general list of weeds which may be treated with **SAN 845H® Herbicide** in accordance with this label as recommended under the rates and timing sections of the Individual Use Headings. Proper usage of this product will give control or growth suppression of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species including:

<u>ANNUALS</u>		<u>PERENNIALS</u>	<u>WOODY SPECIES</u>
Alkanet	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Alfalfa <sup>1</sup>	Alder
Amaranth, Palmer, Powell, Spiny	Pineappleweed	Artichoke, Jerusalem	Ash
Aster, Slender	Poorjoe	Aster, Spiny, Whiteheath	Aspen
Bedstraw, Catchweed	Poppy, Red-horned.	Bedstraw, Smooth	Basswood
Beggarweed, Florida	Puncturevine	Bindweed, Field, Hedge	Beech
Broomweed, Common	Purslane, Common	Blueweed, Texas	Birch
Buckwheat, Tartary, Wild	Pusley, Florida	Bursage, Woollyleaf <sup>1</sup> (Bur Ragweed, Povertyweed)	Blackberry <sup>2</sup>
Buffalobur	Radish, Wild	Buttercup, Tall	Blackgum <sup>2</sup>
Burclover, California	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf	Campion, Bladder	Cedar <sup>2</sup>
Burcucumber	Rocket, London, Yellow	Chickweed, Field, Mouseear	Cherry
Buttercup, Corn, Creeping, Roughseed, Western Field	Rubberweed, Bitter (Bitterweed)	Chicory <sup>1</sup>	Chinquapin
Carpetweed	Salsify	Clover <sup>1</sup> , Hop	Cottonwood
Catchfly, Nightflowering	Senna, Coffee,	Dandelion <sup>1</sup> ,	Creosotebush <sup>2</sup>
Chamomile, Corn	Sesbania, Hemp	Dock <sup>1</sup> , Broadleaf (Bitterdock), Curly	Cucumbertree
Chervil, Bur	Shepherdspurse	Dogbane, Hemp	Dewberry <sup>2</sup>
Chickweed, Common	Sicklepod	Dogfennel <sup>1</sup> (Cypressweed)	Dogwood <sup>2</sup>
Clovers	Sida, Prickly (Teaweed)	Fern, Bracken	Elm
Cockle, Corn, Cow, White	Smartweed, Green, Pennsylvania	Garlic, Wild	Grape
Cocklebur, Common	Sneezeweed, Bitter	Goldenrod, Canada, Missouri	Hawthorn (Thornapple) <sup>2</sup>
Copperleaf, Hophornbeam	Sowthistle, Annual, Spiny	Goldenweed, Common	Hemlock
Cornflower (Bachelor Button)	Spanish Needles	Hawkweed	Hickory
Croton, Tropic, Woolly	Spikeweed, Common	Henbane, Black <sup>1</sup>	Honeylocust
Daisy, English	Spurge, Prostrate, Leafy	Horsenettle, Carolina	Honeysuckle
Dragonhead, American	Spurry, Corn	Ironweed	Hornbeam
Eveningprimrose	Starbur, Bristly	Knapweed, Black, Diffuse, Russian <sup>1</sup> , Spotted	Huckleberry
Falsefax, Smallseed	Starwort, Little	Milkweed, Common, Honeyvine, Western Whorled	Huisache
Fleabane, Annual	Sumpweed, Rough	Nettle, Stinging	Ivy, Poison
Flixweed	Sunflower, Common (Wild), Volunteer	Nightshade, Silverleaf (White Horsenettle)	Kudzu
Fumitory	Thistle, Russian	Onion, Wild	Locust, Black
Goosefoot, Nettleleaf	Velvetleaf	Plantain, Broadleaf, Buckhorn	Maple
Hempnettle	Waterhemp	Pokeweed	Mesquite
Henbit	Waterprimrose, Winged	Ragweed, Western	Oak
Jacobs-Ladder	Wormwood	Redvine	Oak, Poison
Jimsonweed		Sericia Lespedeza	Olive, Russian
Knawel (German Moss)	<b>BIENNIALS</b>	Smartweed, Swamp	Persimmon, Eastern
Knotweed, Prostrate	Burdock, Common	Snakeweed, Broom	Pine
Kochia	Carrot, Wild (Queen Anne's Lace)	Sorrel <sup>1</sup> , Red (Sheep Sorrel)	Plum, Sand (Wild Plum) <sup>2</sup>
Ladysthumb	Cockle, White	Sowthistle <sup>1</sup> , Perennial	Poplar
Lambsquarters, Common	Eveningprimrose, Common	Spurge, Leafy	Rabbitbrush
Lettuce, Miners, Prickly	Geranium, Carolina	Sundrop	Redcedar, Eastern <sup>2</sup>
Mallow, Common, Venice	Gromwell	Thistle, Canada, Scotch	Rose <sup>2</sup> , McCartney, Multiflora
Marestail (Horseweed)	Knapweed, Diffuse, Spotted	Toadflax, Dalmatian	Sagebrush, Fringed <sup>2</sup>
Mayweed	Mallow, Dwarf	Tropical Soda Apple	Sassafras
Morningglory, Ivyleaf, Tall	Plantain, Bracted	Trumpet creeper (Buckvine)	Serviceberry
Mustard, Black, Blue, Tansy,	Ragwort, Tansy	Vetch	Spicebush
Treacle, Tumble, Wild, Yellowtops	Starthistle, Yellow	Waterhemlock, Spotted	Spruce
Nightshade, Black, Cutleaf,	Sweetclover	Waterprimrose, Creeping	Sumac
Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Teasel	Woodsorrel <sup>1</sup> , Creeping, Yellow	Sweetgum <sup>2</sup>
Pepperweed, Virginia (Peppergrass)	Thistle, Bull, Milk, Musk, Plumless	Wormwood, Louisiana	Sycamore
		Yankee weed	Tarbrush
		Yarrow, Common <sup>1</sup>	Willow
			Witchhazel
			Yaupon <sup>2</sup>
			Yucca <sup>2</sup>

<sup>1</sup>. Noted perennials may be controlled using **SAN 845H® Herbicide** at rates lower than those recommended for other listed perennial weeds. (See Rates and Timings for specific use).

<sup>2</sup>. Growth suppression only

---

## II. Application Instructions

---

**SAN 845H® herbicide** can be applied to actively growing weeds as aerial, broadcast, band, or spot spray applications using water or sprayable fertilizer as a carrier. For general **SAN 845H** application rates for control or suppression by weed type and growth stage see **Table 2. General SAN 845H Application Rates for Control or Suppression by Weed Type and Growth Stage**. For crop-specific application timing and other details, refer to section **VI. Crop-Specific Information**. To avoid uneven spray coverage, **SAN 845H** should not be applied during periods of gusty wind or when wind is in excess of 15 mph. Avoid off-target movement. Use extreme care when applying **SAN 845H** to prevent injury to desirable plants and shrubs.

**DO NOT** treat areas where either possible downward movement into the soil or surface washing may cause contact of **SAN 845H Herbicide** with the roots of desirable plants such as trees and shrubs.

To avoid injury to desirable plants, equipment used to apply **SAN 845H Herbicide** should be thoroughly cleaned (see PROCEDURE FOR CLEANING SPRAY EQUIPMENT) before reusing to apply any other chemicals.

All crop uses of **SAN 845H Herbicide** are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in cover crops that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations. Tank mix recommendations are for use only in states where the tank mix product and application site are registered.

### Cultivation

**DO NOT** cultivate within 7 days after applying **SAN 845H**.

### Sensitive Crop Precautions

**SAN 845H** may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to **SAN 845H** during their development or growing stage.

### Recommendations to avoid herbicide drift

- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays (volume median diameter of 400 microns or more) to avoid potential herbicide drift. Select nozzles that are designed to produce minimal amounts of fine spray particles (less than 200 microns). Examples of nozzles designed to produce coarse sprays via ground applications are **Delavan® Raindrops, Spraying Systems XR** (excluding 110° tips) flat fans, **Turbo Teejets®**, **Turbo Floodjets®**, or large capacity flood nozzles such as D10, TK10, or greater capacity tips.
- Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gallons per acre (for ground broadcast applications), unless otherwise required by the manufacturer of drift-reducing nozzles. Consult your spray nozzle supplier concerning the choice of drift-reducing nozzles.
- Do not apply **SAN 845H Herbicide** adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85° F as drift is more likely to occur.
- Agriculturally approved drift-reducing additives may be used.

12  
32

**Aerial Application Methods and Equipment**

**Water Volume:** Use 1 - 10 gallons of water per acre (2 -20 gallons of diluted spray per treated acre for preharvest uses). Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporation and wind. The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling, as well as state and local regulations and ordinances. **DO NOT** use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

**Ground Application (Banding)**

When applying **SAN 845H®** herbicide by banding, determine the amount of herbicide and water volume needed using the following formula:

$$\begin{array}{l} \text{band width} \\ \text{in inches} \\ \text{row width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{RATE} \\ \text{per treated acre} \end{array} = \begin{array}{l} \text{Band RATE} \\ \text{per treated acre} \end{array}$$
  

$$\begin{array}{l} \text{band width} \\ \text{in inches} \\ \text{row width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{VOLUME} \\ \text{per treated acre} \end{array} = \begin{array}{l} \text{Band VOLUME} \\ \text{per treated acre} \end{array}$$

**Ground Application (Broadcast)**

**Water Volume:** Use 3 - 50 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation. **Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

**Ground Application (Wipers)**

**SAN 845H®** herbicide may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush, and vines. Use a solution containing 90 ounces **SAN 845H** per 1 gallon water. **DO NOT** contact desirable vegetation with herbicide solution. Wiper application may be made to crops (including pastures) and non-cropland areas described in this label with the exception of cotton, sorghum, and soybean.

**Table 2. General SAN 845H Application Rates for Control or Suppression by Weed Type And Growth Stage**

Use rate limitations are given in sections **V.** and **VI. Crop-Specific Information.**

Weed Type and Stage	Rate Per Acre (ounces)	Weed Type and Stage	Rate Per Acre (ounces)
<b>Annual</b> <sup>1</sup> Small, actively growing Established weed growth	6 - 12 ounces 12 - 17 ounces	<b>Perennial</b> Top growth suppression Top growth control and root suppression Noted perennials (footnote 1 in Table 1) Other perennials <sup>3</sup>	6 - 12 ounces 12 - 24 ounces 24 ounces 24 ounces
<b>Biennial</b> Rosette diameter 1 - 3" Rosette diameter 3" or more Bolting	6 - 12 ounces 12 - 24 ounces 24 ounces	<b>Woody Brush &amp; Vines</b> <sup>4</sup> Top growth suppression Top growth control <sup>2,3</sup> Stems and stem suppression <sup>3</sup>	11.5 - 24 ounces 24 ounces 24 ounces

1. Rates below 6 ounces per acre may provide control or suppression but should typically be applied with other herbicides that are effective on the same species and biotype.
2. Species noted with footnote 2 in Table 2 will require tank mixes for adequate control.
3. **DO NOT** broadcast apply more than 24 ounces per acre per application. Use the higher level of listed rate ranges when treating dense vegetative growth or perennial weeds with well established root growth.
4. Retreatment or tank mixtures may be necessary for best control. However, do not exceed a total of 48 ounces of **SAN 845H** per acre per year.

### III. Additives

To improve postemergence weed control, agriculturally approved surfactants, sprayable fertilizers (urea ammonium nitrate, or ammonium sulfate), or crop oil concentrate may be added, particularly in dry growing conditions. (Refer to **Table 3. Additive Rate Per Acre.**)

#### Nitrogen Source

• **Urea ammonium nitrate (UAN):** Use 2 - 4 quarts of UAN (commonly referred to as 28%, 30%, or 32% nitrogen solution) per acre. **DO NOT** use brass or aluminum nozzles when spraying UAN.

• **Ammonium sulfate (AMS):** AMS at 2.5 pounds per acre may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. BASF does not recommend applying AMS, if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.

#### Nonionic Surfactant

The standard label recommendation is 1 pint of an 80% active nonionic spray surfactant per 100 gallons of water. For certain weeds, a higher spray surfactant rate is recommended.

#### Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be nonphytotoxic,
- contain only EPA-exempt ingredients,
- provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils.

For additional information, see **Compatibility Test for Mix Components.**

Adjuvants containing crop oil concentrates may be used in preplant, preemergence, and preharvest application, as well as in pastures and noncropland. **DO NOT** use crop oil concentrate for postemergence in-crop applications unless specifically allowed in section **VI. Crop-Specific Information** of this label.

**Table 3. Additive Rate Per Acre**

Additive	Rate Per Acre
Nonionic Surfactant	1 - 2 pints per 100 gallons
AMS	2.5 pounds
UAN Solution	2 - 4 quarts
Crop Oil Concentrate	1 quart*

\*see manufacturer's label for specific rate recommendations.

**Compatibility Test for Mix Components**

Before mixing components, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

**Mixing Order**

- 1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2) **Agitation.** Maintain constant agitation throughout mixing and application.
- 3) **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
- 4) **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 5) **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates, or suspensions).
- 6) **Water-soluble products.** (such as **SAN 845H® Herbicide**)
- 7) **Emulsifiable concentrates** (such as oil concentrate when applicable).
- 8) **Water-soluble additives** (such as AMS or UAN when applicable).
- 9) **Remaining quantity of water.** Maintain constant agitation during application.

### IV. GENERAL TANK MIXING INFORMATION

#### Tank Mix Partners/Components

The herbicide products listed may be applied with **SAN 845H® herbicide** according to the specific tank mixing instructions in this label and respective product labels. **SAN 845H** may also be tank mixed with other suitable registered herbicides.

See section **Crop-Specific Information** for more details. Read and follow the applicable **Restrictions and Limitations and Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes. **SAN 845H** may also be used in tank mixtures with foliar applied insecticides including synthetic pyrethroids such as **Ambush®**, **Asana®**, **Pounce®** and **Warrior®** or with the carbamate insecticide **Furadan®**. **DO NOT** apply **SAN 845H** in tank mixtures with **Lorsban®** insecticide.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **SAN 845H** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend using tank mixes other than those specifically listed on BASF labeling. Local agricultural authorities may be a source of information when using other than BASF recommended tank mixes.

- Accent® (nicosulfuron)
- Acquire™ (glyphosate)
- Ally® (metsulfuron methyl)
- Amber® (triasulfuron)
- Asulox® (asulam)
- Atrazine
- Axiom™ (flufenacet + metribuzin)
- Basagran® (bentazon)
- Beacon® (primisulfuron-methyl)
- Bicep II Magnum® (s-metolachlor + atrazine)
- Bronate® (bromoxynil + MCPA)
- Bronco® (alachlor + glyphosate)
- Buctril® (bromoxynil)
- Bullet® (alachlor + atrazine)
- Canvas® (thifensulfuron + tribenuron + metsulfuron)
- Caparol® (promethyn)
- Crossbow® (2,4-D + triclopyr)
- Curtail® (clopyralid + 2,4-D)
- Cyclone® (paraquat)
- Dakota® (fenoxaprop + MCPA)
- Degree™ (acetochlor)
- Degree Xtra™ (acetochlor + atrazine)
- DoublePlay® (acetochlor + EPTC)
- Dual Magnum® (s-metolachlor)
- Eradicane® (EPTC)
- Evik® (amethyn)
- Exceed® (primisulfuron + prosulfuron)
- Express® (thifensulfuron + tribenuron-methyl)
- Fallow Master® (glyphosate + dicamba)
- Field Master™ (acetochlor + atrazine + glyphosate)
- Finesse® (chlorsulfuron + metsulfuron-methyl)
- FullTime™ (acetochlor + atrazine)
- Garlon® (triclopyr)
- Glean™ (chlorsulfuron)
- Gramoxone® Extra (paraquat)
- Guardsman® (dimethenamid + atrazine)
- G-Max Lite™ (dimethenamid-P + atrazine)
- Harmony® Extra (thifensulfuron + tribenuron-methyl)
- Harness™ (acetochlor)
- Harness® Xtra (acetochlor + atrazine)
- Hornet® (flumetsalam + clopyralid)
- Karmex® (diuron)
- Kerb® (pronamide)
- Laddok® S-12 (bentazon + atrazine)
- Landmaster® BW (glyphosate + 2,4-D)
- Lariat® (alachlor + atrazine)
- Lasso® (alachlor)
- Lexone® (metribuzin)
- Liberty® (glufosinate)
- Lightning® (imazethapyr + imazapyr)
- Marksman® (dicamba + atrazine)
- MCPA
- Outlook™ (dimethenamid-P)
- Paramount® (quinclorac)
- Partner® (alachlor)
- Peak® (prosulfuron)
- Permit® (halosulfuron)
- Princep® (simazine)
- Prowl® (pendimethalin)
- Prowl® H<sub>2</sub>O (pendimethalin)
- Python® (flumetsulam)
- Ramrod® (propachlor)
- Roundup Ultra® (glyphosate)
- Roundup Ultra® RT (glyphosate)
- Sencor® (metribuzin)
- Spirit® (primisulfuron + prosulfuron)
- Stinger® (clopyralid)
- Surpass® (acetochlor)
- Sutan®+ (butylate)
- Tiller® (fenoxaprop ethyl + MCPA + 2,4-D)
- TopNotch™ (acetochlor)
- Tordon® 22K (picloram)
- Touchdown® (sulfosate)
- 2,4-D

16  
32

---

## V. RESTRICTIONS AND LIMITATIONS

---

- **Maximum seasonal use rate:** Refer to table for crop-specific maximum seasonal use rates.
- **DO NOT** exceed 48 ounces of SAN 845H® herbicide (2 lbs acid equivalent) per acre, per year.
- **Preharvest Interval (PHI):** Refer to **Crop-Specific Information** for preharvest intervals.
- **Restricted-Entry Interval (REI): 24 hours**

### Crop Rotational Restrictions:

The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

- **Planting/replanting restrictions for SAN 845H applications of 17 ounces per acre or less:** No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including corn, cotton, sorghum, and soybean, follow the preplant use directions in Crop Specific Information. For barley, oat, wheat, and other grass seedings, the interval between application and planting is 15 days per 6 ounces per acre applied east of the Mississippi River and 22 days per 6 ounces per acre west of the Mississippi River.

- **Planting/replanting restrictions for applications of more than 17 ounces and up to 48 ounces of SAN 845H per acre:** Corn, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat, and other grass seedings, may be planted if the interval from application to planting is 30 days per 12 ounces per acre east of the Mississippi River and 45 days per 12 ounces per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

- **Rainfast period:** Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of **SAN 845H**.
- **Stress: DO NOT** apply to crops under stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, insects, or widely fluctuating temperatures as injury may result.
- **DO NOT** apply through any type of irrigation equipment.
- **DO NOT** treat irrigation ditches or water used for crop irrigation or domestic purposes.



17  
32

**Table 4. Crop-Specific Information<sup>1</sup>**

Crop	Maximum Rate Per Acre Per Application	Maximum In-Crop Rate Per Acre Per Season
Asparagus	12 ounces	12 ounces
Barley, Fall , Spring	6 ounces	8.5 ounces
	6 ounces	8 ounces
Corn	12 ounces	17 ounces
Cotton	6 ounces	6 ounces
Fallow Ground	24 ounces	24 ounces
Grass grown for seed	24 ounces	48 ounces
Proso Millet	3 ounces	3 ounces
Pastureland	24 ounces	24 ounces
Conservation Reserve Program (CRP)	24 ounces	48 ounces
Oats	3 ounces	3 ounces
Sorghum	6 ounces	12 ounces
Soybeans	24 ounces	48 ounces
Sugarcane	24 ounces	48 ounces
Turf	24 ounces	24 ounces
Triticale	3 ounces	3 ounces
Wheat	6 ounces	12 ounces
<sup>1</sup> Refer to section <b>Crop-Specific Information</b> for more details.		

---

---

## VI. Crop-Specific Information

---

---

### Asparagus

Apply **SAN 845H® herbicide** to emerged and actively growing weeds in 40 - 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting. Multiple applications may be made per growing season.

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

**Rates:** Apply 6 - 12 ounces of **SAN 845H** to control annual sowthistle, black mustard, Canada and Russian thistle, and redroot pigweed, (carelessweed).

Apply 12 ounces of **SAN 845H** to control common chickweed, field bindweed, nettleleaf goosefoot, and wild radish.

Multiple applications may be made per growing season. **DO NOT** exceed a total of 12 ounces of **SAN 845H** per treated acre, per crop year.

**DO NOT** harvest prior to 24 hours after treatment.

**DO NOT** use in the Coachella Valley of California.

---

---

### Asparagus Tank Mixes

---

---

Apply 6 - 12 ounces of **SAN 845H** with glyphosate (Roundup® Ultra herbicide) or 2,4-D to improve control of Canada thistle and field bindweed.

---

---

### Between Crop Applications

---

---

#### **PREPLANT DIRECTIONS (POSTHARVEST, FALLOW, CROP STUBBLE, SET-ASIDE) FOR BROADLEAF WEED CONTROL:**

**SAN 845H** can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply **SAN 845H** as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See **Crop-Rotational Restrictions** in section **V. General Restrictions and Limitations** for the recommended interval between application and planting to prevent crop injury.

#### **Rates and Timings:**

Apply 3 - 24 ounces of **SAN 845H** per acre. Refer to **Table 2** to determine use rates for specific targeted weed species. For best performance, apply **SAN 845H** when annual weeds are less than 6" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if **SAN 845H** is applied when the majority of weeds have at least 4 - 6" of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulbets, after the effective period for **SAN 845H**. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of **SAN 845H**, refer to the small grain section for details.

19  
32

**Between Crop Tank Mixes**

In tank mixes with other suitable registered herbicides, including one or more of the following herbicides, apply 3 – 12 ounces of **SAN 845H® herbicide** per acre for control of annual weeds, or 12 - 24 fluid ounces of **SAN 845H** per acre for control of biennial and perennial weeds:

<ul style="list-style-type: none"> <li>• Acquire™</li> <li>• Ally®</li> <li>• Amber®</li> <li>• Atrazine</li> <li>• Curtail®</li> <li>• Cyclone®</li> <li>• Fallow Master®</li> <li>• Finesse®</li> <li>• glyphosate (e.g. Roundup Ultra)</li> </ul>	<ul style="list-style-type: none"> <li>• Gramoxone® Extra</li> <li>• Kerb®</li> <li>• Landmaster® BW</li> <li>• Paramount®</li> <li>• Sencor®</li> <li>• Tordon® 22K</li> <li>• Touchdown®</li> <li>o 2,4-D</li> </ul>
--	--

**Corn**  
**(Field, Pop, Seed, and Silage)**

Direct contact of **SAN 845H** with corn seed must be avoided. If corn seeds are less than 1.5" below the soil surface, delay application until corn has emerged.

Applications of **SAN 845H** to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 - 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

Up to 2 applications of **SAN 845H** may be made during a growing season. Sequential applications must be separated by 2 weeks or more. **DO NOT** exceed a total of 17 ounces of **SAN 845H** per acre per crop year. **DO NOT** apply **SAN 845H** to seed corn or popcorn without first verifying with your local seed corn company (supplier) the selectivity of **SAN 845H** on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Avoid using crop oil concentrates after crop emergence as crop injury may result. Use of crop oil concentrates is recommended only in dry conditions when corn is less than 5" tall and when applying **SAN 845H** alone or tank mixed with atrazine.

Use of sprayable fluid fertilizer as the carrier is not recommended for applications of **SAN 845H** made after corn emergence.

**SAN 845H** is not registered for use on sweet corn.

**PREPLANT AND PREEMERGENCE APPLICATION IN NO TILLAGE CORN:**

**Rates:** Apply 12 ounces of **SAN 845H** per acre on medium-or fine-textured soils containing 2.5% or greater organic matter. Use 6 fluid ounces of **SAN 845H** per acre on coarse soils (sand, loamy sand, and sandy loam) or medium- and fine-textured soils with less than 2.5% organic matter.

**Timing:** **SAN 845H** can be applied to emerged weeds before, during, or after planting a corn crop. When planting into a legume sod (e.g. alfalfa or clover), apply **SAN 845H** after 4 - 6" of regrowth has occurred.

**PREEMERGENCE APPLICATION IN CONVENTIONALOR REDUCED TILLAGE CORN:**

**Rates:** Apply 12 ounces of **SAN 845H** per treated acre to medium- or fine-textured soils that contain 2.5% organic matter or more. **DO NOT** apply to coarse-textured soils (sand, loamy sand, or sandy loam) or any soil with less than 2.5% organic matter until after corn emergence (see **Early Postemergence** uses below).

**Timing:** **SAN 845H** may be applied after planting and prior to corn emergence. Preemergence application of **SAN 845H** does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if the application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g. drags, harrows) that concentrate treated soil over seed furrow, as seed damage could result.

Preemergence control of cocklebur, jimsonweed, and velvetleaf may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

**EARLY POSTEMERGENCE APPLICATION IN ALL TILLAGE SYSTEMS:**

**Rates:** Apply 12 ounces of **SAN 845H®** herbicide per treated acre. Reduce the rate to 6 ounces of **SAN 845H** per treated acre for corn grown on coarse-textured soils (sand, loamysand, and sandy loam).

**Timing:** Apply between corn emergence and the 5-leaf stage or 8" tall, whichever occurs first. Refer to **Late Postemergence Application** if the sixth true leaf is emerging from whorl or the corn is greater than 8" tall.

**LATE POSTEMERGENCE APPLICATION:**

**Rate:** Apply 6 ounces of **SAN 845H** per treated acre.

**Timing:** Apply **SAN 845H** from 8 - 36" tall corn or 15 days before tassel emergence, whichever comes first. For best performance, apply when weeds are less than 3" tall.

Apply directed spray when corn leaves prevent proper spray coverage, sensitive crops are growing nearby, or tank mixing with 2,4-D.

**DO NOT** apply **SAN 845H** when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24" tall
- soybean are more than 10" tall
- soybean have begun to bloom

---

**Corn Tank Mixes or Sequential Uses**

---

When using tank mix or sequential applications with **SAN 845H**, always follow the companion product label to determine specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

Apply **SAN 845H** prior to, in tank mix with, or after other suitable registered herbicides, including one or more of the following herbicides:

<ul style="list-style-type: none"> <li>• Accent®<sup>1</sup></li> <li>• Acquire™</li> <li>• Atrazine</li> <li>• Axiom™</li> <li>• <b>Banvel®</b><sup>1</sup></li> <li>• Beacon®<sup>1</sup></li> <li>• Bicep®</li> <li>• Bullet®</li> <li>• <b>Clarity®</b><sup>1</sup></li> <li>• Degree™</li> <li>• Degree Xtra™</li> <li>• DoublePlay®<sup>2</sup></li> <li>• Dual Magnum™</li> <li>• Dual II Magnum®</li> <li>• Eradicane®</li> <li>• Exceed®<sup>1</sup></li> <li>• Field Master®</li> <li>• FulTime®</li> <li>• Gramoxone® Extra</li> <li>• <b>Guardman® Max</b></li> <li>• <b>G-Max Lite™</b></li> </ul>	<ul style="list-style-type: none"> <li>• Harness®</li> <li>• Harness® Xtra</li> <li>• Hornet™<sup>1</sup></li> <li>• <b>Laddok® S-12</b></li> <li>• Lasso®</li> <li>• Liberty®<sup>3</sup></li> <li>• <b>Lightning®</b><sup>5</sup></li> <li>• <b>Marksman®</b><sup>1</sup></li> <li>• <b>Outlook®</b></li> <li>• Permit®<sup>1</sup></li> <li>• Princep®</li> <li>• <b>Prowl®</b></li> <li>• Python™</li> <li>• Roundup Ultra®<sup>4</sup></li> <li>• Roundup Ultra® RT</li> <li>• Spirit™<sup>1</sup></li> <li>• Stinger®<sup>1</sup></li> <li>• Surpass®</li> <li>• Sutan® +<sup>2</sup></li> <li>• TopNotch™</li> <li>• Touchdown®</li> <li>• 2,4-D<sup>1</sup></li> </ul>
---	--

<sup>1</sup> See Table 5. **Specific Guidelines for Tank Mixes or Sequential Use Programs** for additional limitations or restrictions that apply for tank mix or sequential use programs with these products.

<sup>2</sup> Sequential use only.

<sup>3</sup> Use only on Liberty Link® (glufosinate tolerant) corn hybrids.

<sup>4</sup> Includes postemergence use on Roundup Ready® (glyphosate tolerant) corn hybrids.

<sup>5</sup> Use only **CLEARFIELD®** (imidazolinone tolerant) corn hybrids.

Table 5. Specific Guidelines for Tank Mixes or Sequential Use Programs	
Tank Mix Partner	Rate Per Acre
Accent® or Beacon®	When tank mixing, applications immediately following extreme day or night temperature fluctuations or applications when daytime temperatures do not exceed 50° F may result in decreased weed control or crop injury. Delay application until the temperatures warm and both weeds and crop resume normal growth.
2,4-D	To provide maximum crop safety after corn emergence, use this tank mix only after corn is greater than 8" tall and when application can be made with drop pipes that direct spray beneath corn leaves and away from the whorl of the corn. The maximum rate of 2,4-D recommended in this tank mix is 0.25 pints per acre (0.125 pounds of acid equivalent per acre).
Banvel®, Clarity® or Marksman® herbicide	Tank mixes with these products that contain dicamba must not exceed a total combined rate of 0.50 pounds of dicamba acid equivalent per acre (0.25 pound on coarse-textured soils or on any soil when corn is greater than 8" tall). Sequential applications of these products must be separated by a minimum of 2 weeks (unless the combined rate is less than 0.5 pounds of dicamba acid equivalent and corn is 8" tall or less) and must not exceed a combined total of 0.75 pounds dicamba acid equivalent per acre for in-crop use.
Exceed®, Spirit™, Stinger®, Hornet™, or Permit®	For improved control of velvetleaf, tank mix 0.25 - 0.5 ounce of Exceed, 0.5 ounce of Spirit, or 0.17 - 0.33 ounce Permit per acre with <b>SAN 845H® herbicide</b> . For improved control of Canada thistle, Stinger at 1.5 - 3 fluid ounces per acre or Hornet at 0.6 - 1.2 ounces per acre may be tank mixed with <b>SAN 845H</b> . Use the higher rate in the range for heavier infestations of these weeds.

**Cotton**

**PREPLANT APPLICATION:**

Apply up to 6 ounces of **SAN 845H** per acre to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems. For best performance, apply **SAN 845H** when weeds are in the 2 - 4 leaf stage and rosettes are less than 2" across.

Following application of **SAN 845H** and a minimum accumulation of 1" of rainfall or overhead irrigation, a waiting interval of 21 days is required per 6 ounces per acre or less. These intervals must be observed prior to planting cotton.

**DO NOT** apply preplant to cotton west of the Rockies.

**DO NOT** make **SAN 845H** preplant applications to cotton in geographic areas with average annual rainfall less than 25".

If applying a spring preplant treatment following application of a fall preplant (postharvest) treatment, then the combination of both treatments may not exceed 48 ounces per acre.

**Cotton Tank Mixes**

For control of grasses or additional broadleaf weeds, **SAN 845H** may be tank mixed with Bladex®, Caparol®, Gramoxone® Extra, and Roundup® Ultra RT herbicides.

**Grass Grown for Seed**

Apply 6 – 12 ounces of **SAN 845H** per treated acre on seedling grass after the crop reaches the 3 - 5 leaf stage. Apply up to 24 ounces of **SAN 845H** on well-established perennial grass. For best performance, apply **SAN 845H** when weeds are in the 2 - 4 leaf stage and rosettes are less than 2" across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

To suppress annual grasses such as brome (downy and ripgut), rattail fescue, and windgrass, apply up to 24 ounces of **SAN 845H** per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

**DO NOT** apply **SAN 845H** after the grass seed crop begins to joint.

Refer to the **Pasture, Hay, Rangeland, and General Farmstead** section for grazing and feeding restrictions.

**Grass Seed Tank Mixes**

**SAN 845H** may be applied in tank mixes with one or more of the following herbicides:

- Buctril®
- Curtail®
- Express®
- Karmex®
- MCPA amine
- Sencor®
- Stinger®
- 2,4-D amine or ester

**Proso Millet**

**For use only within Colorado, Nebraska, North Dakota, South Dakota, and Wyoming.**

**SAN 845H herbicide** combined with 2,4-D will provide control or suppression of the annual broadleaf weeds listed in **Table 1**.

Apply 3 ounces of **SAN 845H** with 0.375 pounds a.i. of 2,4-D. Apply the tank mix of **Clarity** + 2,4-D as a broadcast or spot treatment to emerged and actively growing weeds and when proso millet is in the 2 - 5 leaf stage. Use directions for 2,4-D products vary with manufacturers. Refer to a 2,4-D product with labeling consistent with the crop stage timing for **Clarity**. Some types of proso millet may be affected adversely by a tank mix of **Clarity** + 2,4-D.

**DO NOT** apply unless possible proso millet crop injury will be acceptable.

Restrictions for proso millet that is grazed or cut for hay are indicated in **Table 6. Timing Restrictions for Lactating Dairy Animals Following Treatment in Pasture, Hay, Rangeland, and General Farmstead** section of this label.

**Pasture, Hay, Rangeland, and General Farmstead (noncropland)**

**SAN 845H® herbicide** is recommended for use on pasture, hay, rangeland, and general farmstead (non-cropland) (including fencerows and non-irrigation ditchbanks) for control or suppression of broadleaf weed and brush species listed in **Table 1**.

**SAN 845H** may also be applied to non-cropland areas to control broadleaf weeds in noxious weed control programs, districts, or areas including broadcast or spot treatment of roadsides and highways, utilities, railroad, and pipeline rights-of-way. Noxious weeds must be recognized at the state level, but programs may be administered at state, county, or other level.

**SAN 845H** uses described in this section also pertain to small grains (forage sorghum, rye, sudangrass, or wheat) grown for pasture use only.

Some perennial weeds may be controlled with lower rates of either **SAN 845H** or **SAN 845H** plus 2,4-D (refer to **Table 2**).

**Rates and Timings**

Refer to **Table 2** for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

**DO NOT** broadcast apply more than 24 ounces per acre.

Retreatments may be made as needed; however, **DO NOT** exceed a total of 24 ounces of **SAN 845H** per treated acre during a growing season.

**Crop-Specific Restrictions and Limitations**

**DO NOT** apply more than 12 ounces of **SAN 845H** per acre to small grains grown for pasture. Newly seeded areas may be severely injured if more than 12 ounces of **SAN 845H** is applied per acre. Established grass crops growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, carpetgrass, buffalograss, and St. Augustinegrass may be injured if more than 12 ounces of **SAN 845H** is applied per acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

There are no grazing restrictions for animals other than lactating dairy animals. **Table 6** lists the timing restrictions for grazing or harvesting hay from treated fields.

**Table 6. Timing Restrictions for Lactating Dairy Animals Following Treatment**

SAN 845H herbicide Rate per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 12 ounces	7 days	37 days
Up to 24 ounces	21 days	51 days
Up to 48 ounces	40 days	70 days

**SAN 845H** can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier (refer to the **Compatibility Test for Mix Components**).

To prepare oil in water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil) or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers. **SAN 845H** may be applied broadcast using either ground or aerial application equipment.

**Aerial Application:**

- **Spray Volume:** Use 2 - 40 gallons of diluted spray per treated acre in a water-based carrier.

**Ground Application:**

- **Spray Volume:** Use 3 - 600 gallons of diluted spray per treated acre. The volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used.
- **Spot Treatments:** **SAN 845H** may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.

**Cut Surface Treatments:**

**SAN 845H® herbicide** may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees.

**Rate:** Mix 30 – 90 ounces **SAN 845H** with 1 gallon water to create the application solution. Use the lower dilution rate when treating difficult-to-control species.

• **For Frill or Girdle Treatments:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with the solution.

• **For Stump Treatments:** Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

**Note:** For more rapid foliar effects, 2,4-D may be added to the solution.

**Applications For Control of Dormant Multiflora Rose:**

**SAN 845H** can be applied when plants are dormant as a spot treatment to the soil or as a Lo-Oil basal bark treatment using an oil-water emulsion solution.

• **Spot treatments:** Spot treatment applications of **SAN 845H** should be applied directly to the soil as close as possible to the root crown but within 6 - 8" of the crown. On sloping terrain, apply **SAN 845H** to the uphill side of the crown. **DO NOT** apply when snow or water prevents applying **SAN 845H** directly to the soil. The use rate of **SAN 845H** depends on the canopy diameter of the multiflora rose.

**Examples:** Use 0.18, 0.72, or 1.7 ounces of **SAN 845H** respectively, for 5, 10, or 15 feet canopy diameters.

• **Lo-Oil basal bark treatments:** For Lo-Oil basal bark treatments, apply **SAN 845H** to the basal stem region from the ground line to a height of 12 - 18". Spray until runoff, with special emphasis on covering the root crown. For best results, apply **SAN 845H** when plants are dormant. **DO NOT** apply after bud break or when plants are showing signs of active growth. **DO NOT** apply when snow or water prevents applying **SAN 845H** to the ground line.

To prepare approximately 2 gallons of a Lo-Oil spray solution:

- 1) Combine 1.5 gallons of water, 1 ounce of emulsifier, 12 ounces of **SAN 845H**, and 2.5 pints of No. 2 diesel fuel.
- 2) Adjust the amounts of materials used proportionately to the amount of final spray solution desired. **DO NOT** exceed 8 gallons of spray solution mix applied per acre, per year.

---

**Pasture Tank Mixes**

---

**SAN 845H** may be applied in tank mixes with other suitable registered herbicides, including one or more of the following herbicides:

- |             |                     |
|-------------|---------------------|
| • Acquire™  | • Gramoxone® Extra  |
| • Ally®     | • Roundup Ultra® RT |
| • Amber®    | • Stinger®          |
| • Crossbow® | • Tordon® 22K       |
| • Curtail®  | • 2,4-D             |
| • Garlon®   |                     |

---

**Conservation Reserve Program (CRP)**

---

**SAN 845H** is recommended for use on both newly seeded and established grasses grown in Conservation Reserve or federal Set-Aside Programs. Treatments of **SAN 845H** will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

**NEWLY SEEDED AREAS**

**SAN 845H** may be applied either preplant or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop.

Postemergence applications may be made after seedling grasses exceed the 3-leaf stage. Rates of **SAN 845H** greater than 12 ounces per treated acre may severely injure newly seeded grasses.

Preplant applications may injure new seedlings if the interval between application and grass planting is less than 45 days per 12 ounces of **SAN 845H** applied per treated acre west of the Mississippi River or 20 days per 12 ounces applied east of the Mississippi River.

**ESTABLISHED GRASS STANDS:**

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species (bentgrass, carpetgrass, smooth brome, buffalograss, or St. Augustine grass) may be injured when treated with more than 12 ounces of **SAN 845H** per treated acre. When applied at recommended rates, **SAN 845H** will control many annual and biennial weeds and provide control or suppression of many perennial weeds.

**Rates and Timings:** Apply 3 - 24 ounces of **SAN 845H** per acre. Refer to **Table 2** for rates based on target weed species. **SAN 845H** may be tank mixed or applied sequentially with other products labeled for use in Conservation Reserve Programs such as atrazine, Cyclone®, glyphosate (Acquire™, Roundup Ultra®), Gramoxone® Extra, Touchdown®, or 2,4-D.



25  
32

Retreatments may be made as needed; however, **DO NOT** exceed a total of 48 ounces of **SAN 845H** per acre.

**Small Grains**  
**Not underseeded to legumes (fall- and spring-seeded barley, oat, triticale and wheat)**

**SAN 845H** combinations with listed tank mix partners will provide control or suppression of the annual broadleaf weeds listed in **Table 1**. For improved control of listed weeds, tank mix **SAN 845H** with one or more of the herbicides listed. **SAN 845H** used in a tank mix with other herbicides offers the best spectrum of weed control and herbicide tolerant or resistant weed management. Refer to the specific section crop for **SAN 845H** application rate and timing.

For applications prior to weed emergence or when sulfonylurea- resistant weeds are present or suspected, tank mix a minimum of 2 ounces of **SAN 845H** per treated acre with a non-sulfonylurea herbicide such as 2,4-D or MCPA. Tank mixing **SAN 845H** with these products will offer more consistent control of sulfonylurea-resistant weeds.

**Additives:** When tank mixing **SAN 845H** with sulfonylurea herbicides (such as Ally®, Amber®, Canvas®, Express®, Finesse®, Glean®, Harmony® Extra, and Peak®), use 1 - 4 pints of an agriculturally approved surfactant (containing at least 80% active ingredient) per 100 gallons of spray or not more than 0.25 - 0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix or when treating more mature and difficult to control weeds or dense vegetative growth. Refer to the specific crop sections below for use rates. When treating difficult to control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce or when dense vegetative growth occurs, use the 2 – 3 ounces of **SAN 845H** per acre.

**Timings:** Apply **SAN 845H** before, during, or after planting small grains. See specific small grain crop uses below for maximum crop stage. For best performance, apply **SAN 845H** when weeds are in the 2 - 3 leaf stage and rosettes are less than 2" across. Applying **SAN 845H** to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Applications to small grains may be made with aerial applications with 1 gallon of water or more per acre. Where dense foliage is present, 2 - 3 gallons of water per acre should be used.

Restrictions for small grain areas that are grazed or cut for hay are indicated in **Table 6** in **Pasture, Hay, Rangeland, and General Farmstead** section of this label.

**Small Grains: Barley**  
**(fall- and spring-seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 1.5 – 3 ounces of **SAN 845H**® herbicide to fall-seeded barley prior to the jointing stage. Apply 1.5 – 2 ounces of **SAN 845H** before spring-seeded barley exceeds the 4-leaf stage.

**Note:** For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for spring-seeded barley.

**DO NOT** tank mix **SAN 845H** with 2,4-D in early season applications on spring-seeded barley.

**PREHARVEST APPLICATIONS:**

**SAN 845H** can be used to control weeds that may interfere with harvest of fall- and spring-seeded barley. Apply 6 ounces of **SAN 845H** per acre as a broadcast or spot treatment to annual broadleaf weeds when barley is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing, but before weeds canopy.

A waiting interval of 7 days is required before harvest.

**DO NOT** use preharvest-treated barley for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

26  
32

For control of additional broadleaf weeds or grasses, **SAN 845H** may be tank mixed with other herbicides, such as 2,4-D, that are labeled for preharvest uses in barley. **DO NOT** make preharvest applications in California.

**Barley Tank Mixes**

**SAN 845H**® herbicide may be applied in tank mixes with other suitable registered herbicides, including one or more of the following herbicides:

**Table 7.**

Tank Mix Partner	Rate Per Acre
Ally®	0.05 - 0.1 ounce <sup>1</sup>
Amber®	0.14 - 0.28 ounce <sup>1</sup>
Bronate®	0.75 - 1.5 pints
Buctril®	1 - 1.5 pints
Canvas®	0.2 - 0.4 ounce <sup>1</sup>
Express®	0.083 - 0.167 ounce <sup>1</sup>
Finesse®	0.167 - 0.33 ounce <sup>1</sup>
Glean®	0.167 ounce <sup>1</sup>
Harmony® Extra	0.167 - 0.33 ounce <sup>1</sup>
MCPA amine or ester	8 - 12 fluid ounces <sup>2</sup> (0.25 - 0.375 pound a.e.)
Metribuzin (Sencor®, Lexone®)	0.125 - 0.47 pound a.i.
2,4-D amine or ester	8 fluid ounces <sup>2,3</sup> (0.25 pound a.e.)

- 1 **DO NOT** use low rates of sulfonylureas (Ally, Amber, Canvas, Express, Finesse, Glean, and Harmony Extra) on more mature weeds or on dense vegetative growth.
- 2 When using formulations other than 4 pounds per gallon use pounds of a.e. per acre listed.
- 3 This tank mix is for fall-seeded barley only

**Small Grains: Oat  
(fall- and spring-seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 1.5 – 3 ounces of **SAN 845H** per acre to fall-seeded oat prior to the jointing stage. Apply 1.5 – 3 ounces of **SAN 845H** before spring-seeded oat exceeds the 5-leaf stage.

**SAN 845H** may be tank mixed with other suitable registered herbicides, such as MCPA amine or ester, for applications in oat.

**DO NOT** tank mix **SAN 845H** with 2,4-D in oat.

**Small Grains: Triticale  
(fall- and spring-seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 1.5 – 3 ounces of **SAN 845H** to triticale. Early season applications to fall-seeded triticale must be made prior to the jointing stage.

Early season applications to spring-seeded triticale must be made before triticale reaches the 6-leaf stage.

**Triticale Tank Mixes:** For best performance, should be used in tank mix combination with bromoxynil (Buctril, Moxy™ 2E) herbicide.

**Small Grains: Wheat  
(fall- and spring-seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 1.5 – 3 ounces of **SAN 845H** to wheat unless using one of the fall-seeded wheat specific programs below.

Early season applications to fall-seeded wheat must be made prior to the jointing stage.

Early season applications to spring-seeded wheat must be made before wheat exceeds the 6-leaf stage.

Early developing wheat varieties such as TAM 107, Madison, or Wakefield must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

To improve control of Russian thistle, flixweed, gromwell, or mayweed, add 2,4-D amine or ester to a tank mix with other suitable registered herbicides such as one of the following herbicides: Ally®, Amber®, Canvas®, Express®, Finesse®, Glean®, Harmony® Extra, or Peak®.

**SPECIFIC USE PROGRAMS FOR FALL-SEEDED WHEAT ONLY:**

**SAN 845H** may be used at 4 ounces on fall-seeded wheat in Western Oregon as a spring application only. In Colorado, Kansas, New Mexico, Oklahoma, and Texas, up to 6 ounces of **SAN 845H** may be applied on fall-seeded wheat after it exceeds the 3-leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. **SAN 845H** may be tank mixed with 2,4-D amine at 6 ounces after wheat begins to tiller. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, **DO NOT** use if the potential for crop injury is not acceptable.

**PREHARVEST APPLICATIONS:**

**SAN 845H** can be used to control weeds that may interfere with harvest of wheat. Apply 6 ounces **SAN 845H** per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

A waiting interval of 7 days is required before harvest.

**DO NOT** use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

For control of additional broadleaf weeds or grasses, **SAN 845H** may be tank mixed with other herbicides such as Ally, Roundup® Ultra, and 2,4-D.

**DO NOT** make preharvest applications in California.

28  
32

**Wheat Tank Mixes**

**SAN 845H @ herbicide** may be applied in tank mixes with other suitable registered herbicides, including one or more of the following herbicides:

**Table 8.**

Tank Mix Partner	Rate Per Acre
Ally®	0.05 - 0.1 ounce <sup>1</sup>
Amber®	0.14 - 0.28 ounce <sup>1</sup>
Bronate®	0.75 - 1.5 pints
Buctril®	1 - 1.5 pints
Canvas®	0.2 - 0.4 ounce <sup>1</sup>
Curtail®	2 - 2.67 pints
Dakota® <sup>2</sup>	16 fluid ounces
Express®	0.083 - 0.167 ounce <sup>1</sup>
Finesse®	0.167 - 0.33 ounce <sup>1</sup>
Glean®	0.167 ounce <sup>1</sup>
Harmony® Extra	0.167 - 0.33 ounce <sup>1</sup>
Karmex® <sup>3</sup>	0.5 - 1.5 pounds
Glyphosate (RoundupUltra® RT) <sup>4</sup>	12 - 16 fluid ounces
MCPA amine or ester <sup>5</sup>	8 - 12 fluid ounces (0.25 - 0.375 pound a.e.)
Metribuzin <sup>3</sup> (Sencor®, Lexone®)	0.25 - 0.375 pound a.i.
Peak® <sup>1</sup>	0.25 - 0.38 ounce
Stinger®	4 - 5.33 fluid ounces
Tiller® <sup>2</sup>	1 - 1.7 pints
2,4-D amine or ester <sup>5</sup>	8 - 12 fluid ounces (0.25 - 0.375 pound a.e.)

<sup>1</sup> **DO NOT** use low rates of sulfonyleurea herbicides, such as Ally, Amber, Canvas, Express, Finesse, Glean, Harmony Extra, and Peak on more mature weeds or on dense vegetative growth.

<sup>2</sup> **DO NOT** use Clarity as a tank mix treatment with Dakota or Tiller on Durum wheat. **DO NOT** tank mix with Tiller if wild oat is the target weed.

<sup>3</sup> Tank mixes with Karmex and metribuzin are for use in fall-seeded wheat only.

<sup>4</sup> A tank mix of up to 3 ounces of **SAN 845H** with Roundup Ultra RT or any glyphosate formulation labeled for use as a preplant application to small grains may be applied with no waiting period prior to planting.

<sup>5</sup> Up to 32 fluid ounces of (1.0 pound a.e.) may be used on fall-seeded wheat if crop injury is acceptable. When using formulations other than 4 pounds per gallon, use the pounds of a.e. per acre listed.

**Sorghum**

**SAN 845H** may be applied preplant, postemergence, or preharvest in sorghum to control many annual broadleaf weeds and to reduce competition from established perennial broadleaf weeds, as well as control their seedlings.

**DO NOT** graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to **Pasture, Hay, Rangeland, and General Farmstead** section of this label for specific grazing and feeding restrictions.

**DO NOT** apply **SAN 845H** to sorghum grown for seed production.

**PREPLANT APPLICATION:**

Up to 6 ounces of **SAN 845H** may be applied per acre if applied at least 15 days before sorghum planting.

**POSTEMERGENCE APPLICATION:**

Up to 6 ounces of **SAN 845H** per acre may be applied after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15" tall. For best performance, apply **SAN 845H** when the sorghum crop is in the 3 - 5 leaf stage and weeds are small (less than 3" tall). Use drop pipes (drop nozzles) if sorghum

is taller than 8". Keep the spray off the sorghum leaves and out of the whorl to reduce the likelihood of crop injury and to improve spray coverage of weed foliage.

Applying **SAN 845H® herbicide** to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 - 14 days.

**Preharvest uses in Texas and Oklahoma only:** Up to 6 ounces of **SAN 845H** per acre may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications, use at least 2 gallons of water-based carrier per treated acre. Delay harvest until 30 days after a preharvest treatment.

**SPLIT APPLICATION:**

**SAN 845H** may be applied in split applications: preplant followed by postemergence or preharvest; or postemergence followed by preharvest. **DO NOT** exceed 6 ounces per acre, per application or a total of 12 ounces per acre, per season.

---

**Sorghum Tank Mixes and Sequential Treatments**

---

**SAN 845H** may be applied prior to, in a tank mix with, or after one or more of the following herbicides:

- |                   |                 |
|-------------------|-----------------|
| •Acquire™         | •Guardman®      |
| •Atrazine         | •Laddok® S-12   |
| •Basagran®        | •Landmaster®    |
| •Bicep II Magnum® | •Lasso®         |
| •Buctril®         | •Outlook®       |
| •Cyclone®         | •Paramount®     |
| •Dual Magnum™     | •Peak®          |
| •Dual II Magnum®  | •Permit®        |
| •Fallow Master®   | •Ramrod®        |
| •Frontier®        | •Roundup Ultra® |
| •Gramoxone® Extra |                 |

**Soybean**

**PREPLANT APPLICATIONS:**

Apply 3 - 12 ounces of **SAN 845H** per acre to control emerged broadleaf weeds prior to planting soybeans. **DO NOT** exceed 12 ounces of **SAN 845H** per acre in a spring application prior to planting soybeans. Following application of **SAN 845H** and a minimum accumulation of 1" rainfall or overhead irrigation, a waiting interval of 14 days is required for 6 ounces per acre or less, and 28 days for 12 ounces per acre. These intervals must be observed prior to planting soybeans or crop injury may occur. **DO NOT** make **SAN 845H** preplant applications to soybeans in geographic areas with average annual rainfall less than 25".

**PREHARVEST APPLICATIONS:**

**SAN 845H** can be used to control many annual and perennial broadleaf weeds and control or suppress many biennial and perennial broadleaf weeds in soybean prior to harvest (refer to **Table 1**). Apply 6 - 24 fluid ounces of **SAN 845H** per acre as a broadcast or spot treatment to emerged and actively growing weeds after soybean pods have reached mature brown color and at least 75% leaf drop has occurred. Soybeans may be harvested 14 days or more after a preharvest application. Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for **SAN 845H**. For seedling control, a follow-up program or other cultural practice could be instituted.

**DO NOT** use preharvest-treated soybean for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

**DO NOT** feed soybean fodder or hay following a preharvest application of **SAN 845H**.

**DO NOT** make preharvest applications in California.

30  
32

---

### Soybean Tank Mixes

---

#### PREPLANT TANK MIXES:

**SAN 845H® herbicide** may be tank mixed with other herbicides registered for early preplant use in soybeans including burndown herbicides such as glyphosate (Acquire™, Roundup Ultra®) and 2,4-D or residual herbicides such as **Outlook®**, **Frontier®** or Dual Magnum™.

#### PREHARVEST TANK MIXES:

**SAN 845H** may be tank mixed with other herbicides registered for preharvest use in soybeans such as glyphosate (Roundup Ultra) and Gramoxone® Extra.

### Sugarcane

Apply **SAN 845H** for control of annual, biennial, or perennial broadleaf weeds listed in **Table 1**. Apply 6 – 17 ounces of **SAN 845H** per acre for control of annual weeds, 12 - 24 ounces for control of biennial weeds, and 24 ounces for control or suppression of perennial weeds.

Use the higher level of listed rate ranges when treating dense vegetative growth. Retreatments may be made as needed, however, **DO NOT** exceed a total of 48 ounces of **SAN 845H** per treated acre during a growing season.

**Timing:** **SAN 845H** may be applied to sugarcane any time after weeds have emerged, but before the close-in stage of sugarcane. Applications of 24 ounces of **SAN 845H** per acre made over the top of actively growing sugarcane may result in crop injury.

When possible, direct the spray beneath the sugarcane canopy to minimize the likelihood of crop injury. Using directed sprays will also help maximize the spray coverage of weed foliage.

---

### Sugarcane Tank Mixes

---

**SAN 845H** may be tank mixed with other products registered for use in sugarcane such as Asulox®, atrazine, Evik®, and 2,4-D.

### Turf and Lawns

For use in general farmstead (noncropland) and sod farms, apply 2 - 24 ounces of **SAN 845H® herbicide** per acre to control or suppress growth of many annual, biennial, and some perennial broadleaf weeds commonly found in turf. **SAN 845H** will also suppress many other listed perennial broadleaf weeds and woody brush and vine species. Refer to **Table 2** for rate recommendations based on targeted weed or brush species and growth stage. Some weed species will require tank mixes for adequate control. Repeat treatments may be made as needed; however, **DO NOT** exceed 24 ounces of **SAN 845H** per acre, per growing season.

Apply 30 - 200 gallons of diluted spray per treated acre (3 - 17 quarts of water per 1,000 square feet), depending on density or height of weeds treated and on the type of equipment used.

To avoid injury to newly seeded grasses, delay application of **SAN 845H** until after the second mowing. Furthermore, applying more than 12 ounces of **SAN 845H** per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustinegrass.

In areas where roots of sensitive plants extend, **DO NOT** apply more than 3 ounces of **SAN 845H** per treated acre on coarse-textured (sandy-type) soils, or in excess of 6 ounces per treated acre on fine-textured soils. **DO NOT** make repeat applications in these areas for 30 days and until previous applications of **SAN 845H** have been activated in the soil by rain or irrigation.

3)  
32

**Turf and Lawn Tank Mixes**

Apply 3 - 6 ounces of **SAN 845H® herbicide** per acre in a tank mix with one of the products in **Table 9** at the rates listed. Use the higher rates when treating established weeds.

**Table 9**

Tank Mix Partner	Rate Per Acre
bromoxynil (Buctril®)	0.375 - 0.5 pound a.i.
MCPA	0.5 - 1.5 pounds a.e.
MCPP	0.5 - 1.5 pounds a.e.
2,4-D	0.5 - 1.5 pounds a.e.

**Crops**

This product can be used on the following crops:

- Asparagus
- Conservation Reserve Program (CRP)
- Corn
- Cotton
- Fallow Systems (Between Crop Applications)
- Proso Millet
- Pastures, Rangeland, General Farmstead
- Small Grains (Barley, Oat, Triticale and Wheat)
- Sorghum
- Soybean
- Sugarcane
- Turf

Look inside for complete **Restrictions and Limitations and Application Instructions.**

**Conditions of Sale and Warranty**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer. BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT PERMITTED BY LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

32  
32

### REGISTERED TRADEMARKS

**Banvel, Banvel SGF, Basagran, Clarity, CLEARFIELD, Frontier, Guardsman, Laddok, Lightning, Marksman, Paramount, Prowl and Outlook** are registered trademarks of BASF.

**Acquire** is a trademark of BASF.

**Accent, Ally, Asana, Bladex, Canvas, Express, Extrazine, Finesse, Glean, Harmony, Karmex, and Lexone** are registered trademarks of E. I. du Pont de Nemours & Company.

**Amber, Beacon, Bicep II Magnum, Caparol, Dual II Magnum, Evik, Exceed, Peak, Princep, and Tough** are registered trademarks and **Dual Magnum** is a trademark of Novartis AG.

**Spirit** is a trademark of Novartis Corporation.

**Buctril** is a registered trademark of Rhône-Poulenc Ag Company.

**Asulox** is a registered trademark of Rhône-Poulenc Agriculture Ltd.

**Bronate** is a registered trademark of Rhône-Poulenc Agrochemie.

**Sencor** is a registered trademark of Bayer AG.

**Crossbow, Curtail, FirstRate, Garlon, Lorsban, Stinger, and Tordon** are registered trademarks and **Hornet** is a trademark of Dow AgroSciences LLC.

**Bronco, Bullet, Fallow Master, Harness, Landmaster, Lariat, Lasso, Partner, Ramrod, Roundup Ultra, and Roundup Ready** are registered trademarks and **Degree, Degree Xtra and Field Master** are trademarks of Monsanto Company.

**Ambush, Cyclone, DoublePlay, Eradicane, Gramoxone, Surpass, Touchdown, Sutan and Warrior** are registered trademarks and **FulTime, Topnotch and Touchdown** are trademarks of Zeneca Inc. and **Gramoxone** is a registered trademark of Zeneca Ltd.

**Dakota** is a registered trademark of AgrEvo USA Company.

**Liberty, Liberty Link and Tiller** are registered trademarks of Hoechst Schering AgrEvo GmbH.

**Kerb** is a registered trademark of Rohm and Haas Company.

**Permit** is a registered trademark of Nissan Chemical Industries, Ltd.

**Select** is a registered trademark of Valent U.S.A. Corporation.

**Furadan and Pounce** are registered trademarks of FMC Corp.

**Axiom** is a registered trademark of Bayer Corporation.

**Moxy** is a trademark of Riverside.

**Turbo Teejet and Turbo Floodjet** are registered trademarks of Spraying Systems, Inc.

**Delavan** is a registered trademark of Garlock International, Inc.

© 2008 BASF Corporation  
All Rights Reserved

007969-00140.20090206.NVA 2008-04-193-0303  
Supersedes: NVA 2006-04-193-0149

BASF Corporation  
26 Davis Drive  
Research Triangle Park, NC 27709

  
The Chemical Company