

# **TO ALLOW AERIAL APPLICATION IN FIELD AND SILAGE CORN, SEED CORN, AND WHITE CORN - SOUTH DAKOTA**

## General Information

### PRODUCT INFORMATION

CAPRENO Herbicide may be used for preemergence or postemergence selective control of annual grasses and broadleaf weeds in field corn, field corn grown for silage, white corn, and seed corn. If CAPRENO Herbicide is applied as a preemergence application, do not apply CAPRENO Herbicide as a postemergence application. Dry weather conditions following the preemergence application of CAPRENO Herbicide may reduce weed control. When CAPRENO Herbicide is applied postemergence, growth of susceptible weeds ceases within hours after application. Symptoms on susceptible weed species progress from stunted growth to yellowing and bleaching to necrosis resulting in eventual plant death generally within 7 to 14 days after application. CAPRENO Herbicide also contains a safener, which greatly reduces or prevents the temporary yellowing or stunting crop response associated with the contained herbicide chemistries when applied postemergence. If symptoms appear, corn quickly outgrows the effect and develops normally.

CAPRENO Herbicide is effective in controlling glyphosate-, triazine-, plant growth regulant-, PPO- or ALS- resistant weed populations.

### APPLICATION METHODS

#### Ground Application:

1. Apply with ground equipment only. DO NOT APPLY BY AIR.
2. DO NOT OVERLAP SPRAY PATTERNS BEYOND EQUIPMENT MANUFACTURERS RECOMMENDATIONS AS EXCESSIVE RATES MAY RESULT IN ADVERSE CROP RESPONSES.
3. Apply CAPRENO Herbicide alone or in tank mixtures in a minimum of 10 gallons of spray mixture per acre. Uniform, thorough spray coverage is important to achieve consistent weed control.

4. Keep the spray boom at the lowest possible spray height above the target surface. Refer to the nozzle manufacturer's recommendations for proper nozzle, pressure setting and sprayer speed for optimum product performance and minimal spray drift.

5. Uneven application, sprayers not properly calibrated, or improper incorporation may decrease the level of weed control and/or increase the level of adverse crop response. Over application or boom overlapping may result in stand loss. Maintain a constant ground speed while applying this product to ensure proper distribution. MAINTAIN ADEQUATE AGITATION AT ALL TIMES, INCLUDING MOMENTARY STOPS.

### Preemergence Applications

Preemergence applications of CAPRENO Herbicide may be made in either conventional, conservation tillage or no-till cropping systems. Grass and broadleaf weeds controlled by a preemergence application of CAPRENO Herbicide are listed in Table 1. Apply CAPRENO Herbicide alone or in tank mixtures in a minimum of 10 gallons of spray mixture per acre.

### Broadcast Postemergence Applications

Apply CAPRENO Herbicide broadcast in a minimum of 10 gallons of water per acre. For weed control in dense weed populations or under adverse growing conditions, apply this product in 15 to 20 gallons of water per acre. Good coverage is essential to achieve optimum weed control. CAPRENO Herbicide is recommended to be applied broadcast postemergence to field corn, corn grown for silage and white corn from the V1 corn growth stage up to 20 inches tall. Do not apply if field corn, corn grown for silage and white corn is more than 20 inches tall or exhibiting seven (7) or more leaf collars (V7), whichever is more restrictive. Broadcast applications for corn grown for seed are recommended from the V1 to V5 growth stages (5 leaf collars).

For Preemergence Applications and Broadcast Postemergence Applications, flat-fan nozzles operated at 30-60 PSI will typically deliver MEDIUM spray droplets, providing optimum spray coverage and canopy penetration. Lower pressure operation and/or higher volume flat fan nozzles typically deliver COARSE sprays. Refer to nozzle manufacturer catalogs.

- Boom height should be based on the height of the crop - at least 15 inches above

the crop canopy.

- Air induction nozzles should be used at or near 80 psi to produce a medium droplet size.
- Proper agitation should be maintained within the tank to keep the product dispersed.
- See the Spray Drift Management section of the label for additional information on proper application of CAPRENO Herbicide.

#### Directed Postemergence Applications

Directed postemergence applications of CAPRENO Herbicide can be made to corn up to and through the seven (7) leaf collar stage of growth (V7, the first leaf has a rounded tip). Do not apply to corn that is more mature than V7 stage of growth (i.e. more than 7 visible leaf collars). Applications of CAPRENO Herbicide on corn that is V6 up through V7 increases the potential for an adverse crop response. The risk may be greatly reduced, but not eliminated, by using drop nozzles properly placed between corn rows to optimize coverage on the weeds and minimize spray contact in the whorl and the leaf axles of the corn stalks. Use drop nozzles and appropriate spacing to direct spray below the corn whorl and upper leaves. The top of the target weed canopy must be sufficiently below the whorl and upper leaves of the crop to permit this application and provide adequate spray coverage. The height differential required between the crop and weed canopy will depend on the specific equipment used.

#### USE RESTRICTIONS

1. DO NOT apply this product by air or through any type of irrigation system.
2. DO NOT apply more than two applications of CAPRENO Herbicide to field corn in one growing season.
3. Do not apply CAPRENO Herbicide to corn that exhibits injury from previous herbicides applications.
4. DO NOT apply CAPRENO Herbicide within 45 days of grazing livestock or harvesting corn forage.

5. A 25 foot buffer for ground applications must be maintained between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrub lands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

## USE PRECAUTIONS

1. Plant corn at least 1 1/2 inches deep. Corn seed must be completely covered with soil and furrow firmed.
2. Apply CAPRENO Herbicide spray mixtures within 24 hours of mixing to avoid product degradation.
3. CAPRENO Herbicide is rain fast 1 hour after application to most weed species.
4. Allow at least 14 days between applications of CAPRENO Herbicide.
5. If CAPRENO Herbicide is applied as a preemergence application, do not apply CAPRENO HERBICIDE as a postemergence application.
6. Weed control may be reduced if the application is made when weeds are dust covered or in the presence of heavy dew, fog, and mist/rain or when weeds are under stress due to drought.
7. Avoid spray drift from treated areas. Refer to the Spray Drift Management section of the label for additional information.
8. Tank contamination can cause severe damage to other crops. Careful management of tank clean out is required. See Tank Cleanout section for complete instructions.
9. Field corn (yellow dent) can be planted immediately after an application of CAPRENO Herbicide. Other rotational crops can be planted as instructed in the rotational crop restrictions portion of the label.
10. Postemergence applications of CAPRENO Herbicide should be made in water as the carrier.

Sprayable fluid fertilizer as a herbicide carrier for postemergence applications in corn can typically cause corn injury up to and including tissue burn (necrosis). Sprayable fluid fertilizer as a carrier is not recommended for use with CAPRENO Herbicide after crop emergence unless typical fertilizer burn symptoms on the crop are acceptable.

11. If a preplant/preemergence HPPD containing product has been applied, do not apply a solo application of CAPRENO Herbicide in the same season; always include an additional effective mode of action herbicide(s) as a tank mix partner.

### Cover Crops

Use of cover crops as a means of soil improvement, erosion control, weed and/or insect suppression, etc., following harvest of corn in the fall is increasing. Planting of cover crops in fields treated with CAPRENO Herbicide is allowed as long as these cover crops are not grazed by livestock nor harvested for food. Cover crops are to be tilled under or chemically controlled with burndown herbicides in the spring. Cover crops can be planted within 90-120 days after application of CAPRENO Herbicide. However, all potential cover crops have not been evaluated for tolerance to CAPRENO Herbicide and significant injury may occur. Prior to seeding a cover crop, complete a successful field/ small scale bioassay to provide an indication of the level of tolerance to the prior CAPRENO Herbicide application. Refer to the "Field/ Small Scale Bioassay" section. If used in tank mixtures with other herbicides, always follow the most restrictive label.

### Field/Small Scale Bioassay

A field/ small scale bioassay must be completed before rotating to a cover crops other than those specified in the "Rotational Crop Restrictions" section of the label. To conduct an effective field bioassay, grow strips of the crop(s) you intend to grow the following season in a field previously treated with CAPRENO Herbicide. The test strip should be placed in a controlled area and should include low areas and knolls, and include variations in soil such as type and pH. Crop response to the bioassay will determine if the crop(s) grown in the test strips can be grown safely in the areas previously treated with CAPRENO Herbicide. For an effective small scale bioassay, collect uniform samples of all soil types from the CAPRENO Herbicide - treated field (see example above for types of soil in the sample) and place the soil into a sturdy container. Plant the desired cover crop into the soil, apply water and place the

container in a warm, sunny area to allow germination and growth of the crop. Monitor growth of the cover crop over a three to four week period. If the cover crop emerges and grows normally, the risk to establish and grow the cover crop in the CAPRENO Herbicide -treated field should be tolerable.

## WEEDS CONTROLLED BY CAPRENO HERBICIDE

### PREEMERGENCE BROADLEAF AND GRASS WEED CONTROL

CAPRENO Herbicide effectively controls the following grass and broadleaf weeds when applied at 3-6 fl oz/A. In most cases, CAPRENO Herbicide alone will not provide season-long residual weed control and should be either tankmixed with additional registered residual preemergence herbicide(s) or be followed by a planned postemergence herbicide application program.

### POSTEMERGENCE BROADLEAF WEED CONTROL

CAPRENO Herbicide effectively controls the following broadleaf weeds including biotypes resistant to glyphosate, triazines plant growth regulant, PPO and ALS herbicides when applied at 3 fl oz of product/A along with the recommended adjuvant system. Best control of broadleaf weeds is achieved when weeds are less than 6" in height and actively growing. The addition of atrazine at a minimum of 0.5 lb ai/A will enhance the speed of control, weed spectrum, and consistency of control of many broadleaf weeds, and improve control of weeds larger than 6" in height.

### Cultivation

Cultivation can help remove partially controlled weeds or multiple flushing weeds. Cultivation can be made at least 7 days before, or after, an application of CAPRENO Herbicide.

## RESISTANCE MANAGEMENT

CAPRENO Herbicide contains two modes of action, an HPPD inhibitor (Group 27) and ALS/AHAS enzyme inhibitor (Group 2). Naturally occurring biotypes of certain weed species with resistance to a variety of herbicide modes of actions (triazine, ALS, PPO, glyphosate, auxin, HPPD, etc.) are known to exist. Repeated use of herbicides having similar modes of action allow resistant weed species to be selected for and spread. To manage the selection and spread of resistant weed populations, it is important to use herbicides with different modes of action in tank mixture, rotation

or in conjunction with alternate cultural practices. Performance of CAPRENO Herbicide is not affected by the presence of weed biotypes resistant to glyphosate-, triazine-, PPO-, or growthregulant herbicide modes of action.

To help prevent or delay the development of resistance to CAPRENO Herbicide, always use the full labeled rates as shown on the label. If a preplant/preemergence HPPD-containing product has been applied, do not apply a solo postemergence application of CAPRENO Herbicide; always include an additional effective mode of action herbicide(s) as a tank mix partner.

### Integrated Pest (Weed) Management

CAPRENO Herbicide may be integrated into an overall weed and pest management strategy whenever the use of a herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

Refer in the label for tank mix information.

### Limitations, Restrictions, and Exceptions

#### APPLICATION DIRECTIONS FOR AERIAL APPLICATION

This SLN label allows for the application of Capreno Herbicide by aerial application as long as the below criteria and directions are met and followed. All other directions for use, precautions, and restrictions on the Federal label must be followed. The user must have in their possession, as reference, the Federal Section 3 label for Capreno Herbicide. For tankmix applications follow all other directions for use, rate limitations, precautions, and restrictions on the respective Federal labels. Do not apply over water. Aerial applications may be made only if the wind speed is less than 10 mph; do not apply if wind speed is over 10 mph. Applying Capreno Herbicide by air within 50 feet of sensitive plant species (e.g., small grain and broadleaf crops) may result in injury. It is recommended that the user establish a buffer zone between the area to be sprayed and the sensitive plant species. Do not apply within 200 feet of water. Do not apply within 200 feet of field's edge. Consult your local Bayer CropScience representative and/or other knowledgeable agricultural professionals for input on the sensitivity of non-target crops to Capreno

Herbicide.

It is the responsibility of the aerial applicator to insure that drift to non-target crops and nontarget areas does not occur.

#### SPECIFIC CROP USE DIRECTIONS

Capreno Herbicide can be applied postemergence on all types of corn. Best results are obtained when it is applied to young, actively growing weeds. Capreno Herbicide will affect weeds that are larger than the recommended height; however it may result in incomplete weed control.

- Apply Capreno Herbicide at 3 fl oz/A per application. Always add the appropriate adjuvants to the spray tank (see SPRAY ADDITIVES information in the APPLICATION INFORMATION portion of Federal section 3 label).
- Applications of Capreno Herbicide at rates less than 3 fl oz/A postemergence may result in incomplete weed control and reduction in residual activity.
- Broadcast applications of Capreno Herbicide must be made to field corn, corn grown for silage and white corn from the 1 leaf collar stage (V1) up to 20 inches tall. Do not apply if field corn, corn grown for silage and white corn is more than 20 inches tall or exhibiting seven (7) or more leaf collars (V7), whichever is more restrictive.
- Broadcast applications for corn grown for seed are recommended from V1 to V5 growth stages (5 leaf collars).
- A second postemergence application may be made to field corn. Applications of this product must be made a minimum of 14 days apart.

#### Crop-Specific Precautions and Restrictions

- Aerial Applications must be made with enclosed cockpits.
- DO NOT apply Capreno Herbicide to corn that exhibits injury from previous herbicides applications.
- Do NOT exceed a total of 6 fl oz/A of Capreno Herbicide per growing season on field corn or popcorn, or 3 fl oz/A per growing season on sweet corn.
- Do NOT apply more than two applications of Capreno Herbicide for all corn types per 365 days.
- If a second application of Capreno Herbicide is made (field corn and popcorn only), the application must be made a minimum of 14 days after the first application.
- Do NOT graze livestock or harvest corn forage within 45 days of application.
- If Capreno Herbicide is applied as a preemergence application, do not apply Capreno Herbicide as a postemergence application



- Corn hybrids and certain male pollinators within blended corn varieties vary in their response to Capreno Herbicide. Not all hybrids or male pollinators within blended corn varieties have been tested for sensitivity to Capreno Herbicide. You should consult with your seed provider, your local Bayer CropScience representative and/or other knowledgeable agricultural professionals for advice on tolerance of hybrids or varieties containing male pollinator lines before applying Capreno Herbicide. If the tolerance of a hybrid or variety containing male pollinator lines is not known, you should apply Capreno Herbicide to a small area to first determine if the hybrid is tolerant prior to spraying large acreages of that hybrid.

#### Method

[Broadcast/Foliar Air](#)

#### Rates

[field\\_rates 0](#)

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#### Restricted Entry Interval

12 hours

#### Timings

[Postemergence \(Crop\)](#)

[Postemergence \(Weed\)](#)