

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (HTS15C) 401 "M" St., S.W. Washington, D.C. 20441

NOTICE OF PESTICIDE:

\_x Registration

Reregistration

(under FIFRA, as amended)

EPA Reg. Number:

33906-11

Date of Issuance: FEB - 4 2002

Term of Issuance:

Conditional

Name of Pesticide Product:

NC-398 WG

Name and Address of Registrant (include ZIP Code):

Nissan-Chemical Industries. Ltd Kowa-Hitotsubashi Building 7-1, 3 Chome Kanda-Nishiki-Cho Chiyoda-Ku, Tokoyo 101-0054, Japan

Note: Charges 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 conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

- 1. Submit the results of the one-year storage stability(830.6717 and corrosion characteristics (830.6320) studies once they are completed.
- 2. Submit/cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
- 3.Make the labeling changes listed below before you release the product for shipment.
- a. Add the phrase "EPA Registration No. 33906-11."
- b. Place your active ingredient statement on the front panel of your label.
- c. Revise "Causes Eye Irritation" to read "Causes Moderate Eye Irritation".
- 41. Submit three (3) copies of your final printed before you release the product for shipment.

Signature	of Approving Official:
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103 F 2053	,

Date:

2-4-02

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of labeling is enclosed for your records.



## NC-398 WG

#### **Complete Directions For Use Pamphlet**

EPA Reg. No. 33906-new RR

# ACCEPTED FEB - A 2002 Under the Federal Insecticide, Fungloide, and Rudenticide Act, as amended, for the pesticide registered under FPA Reg. No 33906-11

#### WATER DISPERSIBLE GRANULE

NC-398 is a selective herbicide for the control of listed annual broadleaf weeds and nutsedge in field corn, field corn grown for seed and grain sorghum (milo).

Read the entire label before using this product.

Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. NISSAN DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.

#### LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label pamphlet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

#### PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

#### **CAUTION!**

CAUSES EYE IRRITATION. HARMFUL IF SWALLOWED.

Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

	FIRST AID	
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF SWALLOWED	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Remove visible particles from mouth.</li> <li>Have person rinse mouth thoroughly with water, spit out rinse water.</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 the 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 call collect, day or night, (314) 694-4000 for emergency medical treatment information.

#### Personal Protective Equipment (PPE)

**Applicators and other handlers must wear:** long-sleeved shirt and long pants and shoes plus socks. 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.

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

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

#### Users should:

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

#### **Environmental Hazards**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is known to leach through the soil into the ground water under certain conditions as a result of agricultural use. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination. Consult with the local agricultural agencies for information regarding soil permeability and aquifer vulnerability in your area.

#### **DIRECTIONS FOR USE**

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

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

#### AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, shoes plus socks, and chemical resistant gloves greater than 14 mils in thickness and composed of materials such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber.

For more product information, call toll-free 1-800-332-3111.

#### Storage and Disposal

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

**STORAGE**: Store under cool, dry conditions (below 120° F). Do not store under moist conditions.

Keep container TIGHTLY sealed to prevent moisture from damaging any unused product.

**DISPOSAL**: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal in accordance with applicable Federal, state or local procedures, or in such other method as is approved under those procedures.

Empty container retains vapor and product residue. Observe all labeled safeguards until container is destroyed.

Do not reuse container. Triple rinse container, recycle if available or puncture and dispose of in a sanitary landfill, or by incineration, or by burning, if allowed by state and local authorities. If burned, stay out of smoke.

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

#### **GENERAL INFORMATION**

The level of weed control following NC-398 herbicide application is dependent upon application rate, weed species and size at application time, and growing conditions. For best results, applications should be made to actively growing weeds at the heights defined in the "USE RATE GUIDE" sections of this label. Heavy infestations should be treated early before the weeds become too competitive with the crop. When early postemergence treatments are used in corn, sequential applications may be required to control later weed flushes.

Soon after NC-398 is applied, growth of susceptible weeds is inhibited, and susceptible weeds are no longer competitive with the crop. Following growth inhibition, the leaves and growing point begin to discolor. Complete control typically occurs within 7-14 days depending on the weed size, species and growing conditions.

#### APPLICATION EQUIPMENT AND INSTRUCTION

Applications should be made by ground or aerial equipment to healthy, actively growing weeds. For best results, avoid applications when weeds are under drought stress, disease, or insect damage. Rainfall or irrigation occurring within 4 hours after application may also reduce effectiveness.

**Ground Applications:** Apply NC-398 herbicide uniformly with properly calibrated ground equipment in 10 or more gallons of water per acre. Other water based spray carriers may be used for directed applications, avoiding contact with crop foliage. Select spray volumes that ensure thorough and uniform weed coverage. Choose nozzles that provide optimum spray distribution and coverage at the appropriate pressure (psi). Use only ground application equipment. Thoroughly clean equipment prior to mixing spray solution. Avoid streaking, skips, overlaps, and spray drift during applications.

Do not apply this product through any type of irrigation system.

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

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Aerial Applications: Apply NC-398 herbicide uniformly with properly calibrated equipment in 5 to 15 gallons of water per acre. Thoroughly clean equipment prior to mixing spray solution. Avoid streaking, skips, overlaps, and spray drift during applications. This product should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

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

Thoroughly clean application equipment immediately after the use of NC-398 herbicide, following the directions under Procedure for Cleaning Spray Equipment.

#### Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

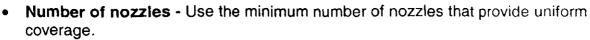
- 1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

#### The importance of spray droplet size:

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

#### Controlling initial droplet size:

- **Volume** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher flow rates produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.



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- Nozzle orientation Orienting nozzles so the spray stream is released backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle type Use a nozzle type that is designed for the intended application.
   With most nozzle types, narrower spray angles produce larger droplets.
   Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

#### Controlling placement of spray droplets:

- Boom length For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.
- Application height Applications should not be greater than 10 feet above the
  top of the tallest plants unless a greater height is required for aircraft safety.
  Greater application heights result in greater droplet size reduction through
  evaporation and greater movement in air currents. Making applications at the
  lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Application speed Slower aircraft speeds within a safe range will produce less air turbulence and fewer small droplets.
- Swath adjustment When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (wind speed, droplet size, etc.).

#### Key environmental factors:

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

conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.



#### SENSITIVE CROP PRECAUTIONS

NC-398 may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamental, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to NC-398 during their development stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING THIS PRODUCT.

- Do not treat areas where either downward movement into the soil or surface washing may cause contact of NC-398 with the roots of sensitive plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing, when temperature inversions exist, or if the 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.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles that are
  designed to produce minimal amounts of fine spray particles. Examples of
  nozzles designed to produce coarse sprays via ground application are large
  capacity flood nozzles. Keep the spray pressure at or below 20 psi and the spray
  volume at or above 20 gpa, unless otherwise required by the manufacturer of
  drift-reducing nozzles. Consult your spray nozzle supplier concerning the choice
  of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.
- Do not apply NC-398 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.
- To avoid injury to desirable plants, equipment used to apply NC-398 should be thoroughly cleaned (See PROCEDURE FOR CLEANING SPRAY EQUIPMENT) before reusing to apply any other chemicals.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations.

#### PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of this product, which contains dicamba. NC-398, as a WG, requires the use of a water/detergent rinse.

 Hose down the inside and outside surfaces of equipment thoroughly while filling the spray tank half full of water. Flush by operating sprayer until the rinse water is purged.

- 2) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Circulate the detergent solution through the sprayer system for 5 to 10 minutes and spray a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the detergent solution out through the boom until empty.
- 4) Repeat step 1, and follow with steps 5,6 and 7.
- 5) Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Circulate the ammonia solution through the sprayer system for 15 to 20 minutes and spray a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 6) Flush the solution out through the boom until empty.
- 7) Remove the nozzles and screens and flush the system with two full tanks of water.

#### MIXING INSTRUCTIONS

Fill the spray tank to about three-fourths of the desired volume. Add the recommended amount of this product as listed in the "WEEDS CONTROLLED" sections. Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source. Add non-ionic surfactant and other adjuvants as the last ingredients in the tank.

Spray solutions should be applied within 24 hours after mixing.

Adjuvants: A nonionic surfactant (NIS) is the only adjuvant required in the spray solution. Use only nonionic surfactants which are approved by EPA for use on food crops and which contain at least 80 percent active ingredient. Use 0.25 to 0.5 percent nonionic surfactant concentration (1 to 2 quarts per 100 gallons of spray solution).

Crop oil concentrate (COC) may be used with NC-398 herbicide instead of nonionic surfactants. Do not use both NIS and COC in the spray mixture. Add COC to the spray mixture at 1 percent vol./vol. (1 gallon per 100 gallons of spray mixture). Use only good quality petroleum- or vegetable-based crop oil concentrates which contain at least 14 percent emulsifiers. Crop oil may cause injury at higher NC-398 use rates.

Nonionic surfactant **OR** COC are the only additives necessary for NC-398 herbicide applications. Liquid nitrogen fertilizer solution (e.g., 28-0-0) may be added to the spray solution to improve the control of certain species, particularly if NC-398 herbicide is being tank mixed with a companion herbicide which requires use of a liquid nitrogen additive. However, a nonionic surfactant **OR** COC will still be necessary. Refer to the companion product label for specific additive requirements. Otherwise, add liquid nitrogen fertilizer at a rate of 2 to 4 quarts per acre. Do not use

liquid nitrogen fertilizer solutions or suspensions as the total carrier because excessive crop injury may occur. A high quality, spray grade ammonium sulfate (e.g. 21-0-0) may be applied at a rate of 2 to 4 pounds per acre in place of the liquid nitrogen fertilizer.

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#### FIELD CORN AND FIELD CORN GROWN FOR SEED

Corn Growth Stage: When used alone, NC-398 herbicide can be applied over-the-top or with drop nozzles from the spike through 36 inch field corn.

NC-398 herbicide may be applied up to 2 applications with a total application not to exceed 8 ounces of product by weight. Allow at least 2 weeks between applications.

Following application to foliage, corn may be grazed or harvested for feed after the crop reaches the ensilage (milk) stage, at least 30 days after foliar application.



#### WEEDS CONTROLLED - NC-398 HERBICIDE CORN USE RATE GUIDE

Use Rate - 4 to 8 ounces of product by weight per acre

Weed Species	Size Range Height (inches)
Bindweed <sup>1</sup>	1 to 0
	1 to 6
Burcucumber <sup>1</sup>	4 to 12
Cocklebur, common	1 to 14
Dogbane, hemp 1	1 to 6
Fleabane, Philadelphia	1 to 3
Horsenettle	1 to 8
Kochia	1 to 6
Jimsonweed	1 to 4
Lambsquarters, common	1 to 6
Mallow, Venice	1 to 12 *
Milkweed, common	1 to 6
Milkweed, honeyvine	1 to 6 *
Morningglory, ivyleaf	1 to 6
Morningglory, tall	1 to 6
Mustard	1 to 6 *
Nightshade, black	1 to 6
Nutsedge, yellow	1 to 12 *
Nutsedge, purple	1 to 12 *
Passionflower	1 to 3
Pigweed, redroot	1 to 12
Pokeweed	1 to 18
Ragweed, common	1 to 12
Ragweed, giant	1 to 6
Radish, wild	1 to 6 *
Smartweed, Pennsylvania	1 to 3
Sunflower, common	1 to 15
Thistle, Canada <sup>1</sup>	1 to 6
Velvetleaf	1 to 12
Waterhemp	1 to 6
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<sup>&</sup>lt;sup>1</sup> Suppression

Use the higher rates for heavy weed infestations or weeds close to the maximum height for control.

Do not apply when soybeans are grown nearby if corn is more than 24" tall, or if soybeans are more than 10" tall, or if soybeans have begun to bloom.

<sup>\*</sup> Use 6 to 8 ounces for best results.

#### Grain Sorghum (Milo)

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Grain Sorghum Growth Stage: NC-398, alone, can be applied from the 2-leaf through 15 inch tall sorghum. Use drop nozzles if sorghum is taller than 8 inches. Crop injury will be minimized if the spray solution does not contact leaves or the whorl. Application made when the sorghum is in the 3 to 5 leaf stage and weeds are small will result in best performance. Temporary stature reduction may occur to the crop following application of NC-398 herbicide if the grain sorghum is under stress. This effect will be most evident 7-10 days after application. The crop will quickly recover under normal growing conditions.

Only apply NC-398 herbicide in a single application with the total application rate not to exceed 6 ounces of product by weight per acre per use season. Do not graze or feed treated sorghum forage or silage prior to mature grain stage. Do not apply to sorgum grown for seed production.

## WEEDS CONTROLLED - NC-398 HERBICIDE SORGHUM USE RATE GUIDE

Use Rate - 4 to 6 ounces of product by weight per acre

Weed Species	Size Range Height (inches)	
Bindweed 1	1 to 6	
Burcucumber 1	4 to 12	
Cocklebur, common	1 to 12	
Dogbane, hemp <sup>1</sup>	1 to 6	
Fleabane, Philadelphia	1 to 3	
Horsenettle	1 to 8	
Kochia	1 to 6	
Jimsonweed	1 to 4	
Lambsquarters, common	1 to 6	
Mallow, Venice	1 to 3	
Milkweed, common	1 to 6	
Milkweed, honeyvine 1	1 to 3*	
Morningglory, ivyleaf	1 to 6	
Morningglory, tall	1 to 6	
Nightshade, black	1 to 6	
Nutsedge, yellow	1 to 12*	
Nutsedge, purple	1 to 12*	
Passionflower	1 to 3	
Pigweed, redroot	1 to 12	
Pokeweed	1 to 18	
Ragweed, common	1 to 12	
Ragweed, giant	1 to 6	
Smartweed, Pennsylvania	1 to 3	
Sunflower, common	1 to 12	
Thistle, Canada <sup>1</sup>	1 to 6	
Velvetleaf	1 to 12	
Waterhemp	1 to 6	



<sup>1</sup> Suppression

\* Use 6 ounces for best results.

Use the higher rates for heavy weed infestations or weeds close to the maximum height for control.

#### TANK MIXTURES

Before mixing in the spray tank, it is recommended that compatibility be tested by mixing all components in a small container in proportionate quantities as listed below. For tank mixtures, add individual formulations to the spray tank in the following sequence: water dispersable granules, dry flowables, emulsifiable concentrates, drift control additive, water soluble liquids followed by nonionic surfactant.

Tank mixtures should not be applied if the crop is under severe stress due to drought, water-saturated soils, poor fertility (especially low nitrogen levels), hail, frost, insects or when the maximum daytime temperature is above 92°F. Tank mix applications under these conditions may cause temporary crop injury.

Ensure that spray equipment is set up to avoid applying an excessive rate directly over the rows and into the whorl of the cornstalk. To insure good spray coverage of weeds and to reduce the risk of spraying directly into the whorl, tank-mix applications made after corn is 24 inches tall should be directed or semi-directed using drop nozzles.

#### NC-398 Herbicide Tank-Mixture Options in Corn

Tank Mix Partners	Rate per Acro	Additives	Application 'Jethod	Comments
Atrazine 4L	1 1/2 to 3 pints	coc	Broadcast to com up to 12" tall.	<ul> <li>Control is best when weeds are small.</li> <li>Effective for burndown of grass weed escapes.</li> <li>Antagonism may occur on larger broadleaf weeds.</li> </ul>
Accentm	2/3 ounce	COC or NIS	Broadcast or apply with drop nozzles to corn up to 24" tall. For corn 24 to 36" tall, apply with drop nozzles only.	<ul> <li>Ammonium nitrogen fertilizer (e.g. 28%) is also recommended as an additive.</li> <li>Avoid spraying directly into whorts of larger comstalks.</li> <li>Refer to Accent label for soil insecticide interaction information.</li> </ul>
Beacon™	0.76 ounce 1/2 packet	COC or NIS	Broadcast or apply with drop nozzles to com up to 20" tall.     For com 20" to pretassel, apply with drop nozzles only.	<ul> <li>Ammonium nitrogen fertilizer (e.g. 28%) is also recommended as an additive.</li> <li>Avoid spraying directly into whorts of larger com.</li> <li>Refer to Beacon label for soil insecticide interaction restrictions.</li> <li>Consult your dealer, seed supplier, or Syngenta representative for a list of susceptible hybrids.</li> </ul>

NIS = Nonionic surfactant. COC = Crop oil concentrate.

Refer to "MIXING INSTRUCTIONS", "TANK MIXTURES" and "USE RATE GUIDES" sections of this label for detailed information.

Refer to the specific product labels and observe all precautions, mixing and application instructions for all products used in tank mixtures.

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## TANK MIXTURES CORN AND GRAIN SORGHUM

#### NC-398 HERBICIDE plus ATRAZINE

NC-398 herbicide may be applied in combination with atrazine for postemergence control of labeled broadleaf weeds. The addition of atrazine will also aid in the burndown and control of many grass weeds (1.5 inches or less) which have escaped preemergence herbicide treatments. Applications should be made when broadleaf weeds are small (3 inches or less).

Mixtures with atrazine may result in reduced control (antagonism) of larger broadleaf weeds. Use the labeled rate for NC-398 herbicide plus atrazine 4L at 1 1/2 to 3 pints per acre (0.75 to 1 1/2 pounds active ingredient per acre). The addition of crop oil concentrate (COC) is recommended for this mixture.

Refer to the Atrazine 4L label for use instructions, additive requirements, weeds controlled and application restrictions.

### TANK MIXTURES CORN ONLY

# NC-398 HERBICIDE plus ACCENT™ plus NONIONIC SURFACTANT NC-398 HERBICIDE plus BEACON™ plus NONIONIC SURFACTANT

A tank mixture of NC-398 herbicide plus Accent or Beacon may be used for the postemergence control of annual broadleaf weeds and annual grasses in corn only.

NC-398 herbicide plus Accent may be applied over-the-top or with drop nozzles to field corn up to 24 inches tall (free standing). For corn 24 to 36 inches tall, refer to the Accent label for application restrictions. NC-398 herbicide plus Beacon may be applied over-the-top or directed to field corn when corn height is between 4 and 20 inches tall. Drop nozzles are required with the Beacon mixture when corn is between 20 inches and 36 inches tall.

Refer to Accent and Beacon labels for use instructions and restrictions on corn varieties and insecticides.

#### **USE RATE GUIDE FOR CONTROL OF GRASSES AND BROADLEAF WEEDS**

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(See Weeds Controlled Section for NC-398 for broadleaf weed heights and rates)

NC-398 Use Rate - 4 to 8 ounces of product by weight per acre Accent Use Rate - 2/3 ounce by weight per acre Beacon Use Rate - 1/2 packet per treated acre (0.76 ounce product per acre)

	NC-398 + Accent	NC-398 + Beacon
Barnyardgrass	2 to 4	
Cupgrass, woolly	2 to 4	
Foxtails: giant, yellow,	2 to 4	
green, bristly	2 to 4	
Itchgrass	2 to 6	
Johnsongrass, rhizome	8 to 18	8 to 16
seedling	4 to 12	4 to 12
Millet, wild proso	1 to 4	
Oats, wild	2 to 4	
Panicum, browntop	1 to 3	
Panicum, fall	2 to 4	Less than 2
Panicum, Texas	1 to 3	
Quackgrass	4 to 10	4 to 8
Ryegrass, Italian	2 to 6	
Sandbur	1 to 3	
Shattercane	4 to 12	4 to 12
Signalgrass, broadleaf	1 to 2	
Sorghum-almum	4 to 12	4 to 12

#### NC-398 plus ACCENT™ plus SOIL RESIDUALS

Harness™ brands, Degree™ brands, Micro-Tech, Bullet and Partner may be tankmixed with NC-398 plus Accent for early postemergence control of foxtails and other grass weeds in field corn (including seed corn).

These tank mixtures will provide postemergence control of emerged foxtails as well as residual preemergence control or reduced competition of annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of the specific herbicide labels.

Follow all label direction and restrictions on maximum corn height for post applications. Generally, spray the mixture when grasses are less than 2 inches tall. You may include 28 percent nitrogen fertilizer at a rate of 4 gallons per 100 gallons of spray solution plus NIS at 1 quart per 100 gallons of spray solution in 15 to 30 gallons of water per acre.

#### **RECOMMENDED RATES/ACRE:**

Residual Products

Plus

NC-398 (Ounces) Plus

Accent (Ounces)

Follow label rates

4 to 8

1/3 to ½

#### NC-398 plus ROUNDUP® BRAND HERBICIDES plus NONIONIC SURFACTANT

NC-398 herbicide may be applied at 4 ounce by weight per acre in combination with Roundup brand herbicides for preplant burndown of emerged annual grasses, broadleaf weeds and nutsedge with **Pioneer IR** corn hybrids only. **Pioneer IR** hybrids are required to ensure crop safety due to the preplant application.

Refer to the Roundup brands labels for use instructions, weeds controlled, and application restrictions.

#### **ROTATIONAL CROP INFORMATION**

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Labeled crops may be planted at specified time intervals following application of approved rates of NC-398 herbicide. Use the time intervals listed below to determine the required time interval before planting.

## TIME INTERVAL BEFORE PLANTING (Months after treatment with NC-398)

Crop	Months
IR/IMR Field corn	0
IT Field corn	1
Normal Field corn	1
Barley (winter)	2
Forage Grasses	2
Oats	2
Proso Millet	2 2 2 2 2 2 2 3
Rye (winter)	2
Seed corn	2
Sorghums	2
Spring cereal crops	2
Wheat (winter)	2
Popcorn, Sweetcorn	3
Rice	3
Cotton	4
Peanuts	6
Tomato (transplant)	8
Alfalfa	9
Clovers	9
Dry Beans	9
Field Peas	9
Peas	9
Potatoes	9
Cucumbers, Pumpkins, Squash	9
Snap Beans	9
Soybeans	9
Peppers	10
Eggplant	12
Radish	12
Cabbage	15
Canola	15 45
Carrot	15
Mint	15
Broccoli, Cauliflower, Collards	18
Leeks, Onions	18 18
Lettuce crops Sunflowers	18
	21
Sugarbeet (Michigan only) Sugarbeet and Red Beet	24
Spinach	24 24
Sugarbeet	2 <del>4</del> 36
Ougaineet	30

(ND, MN, Red River Valley)\*

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\*Also includes other regions where rainfall is sparse or irrigation is required.

Refer to individual product labels to determine rotational crop restrictions when tank mixtures are used.

#### **ACTIVE INGREDIENT:**

Halosulfuron-methyl	. 12.5%
Sodium salt of dicamba	
OTHER INGREDIENTS:	32.5%
	100.0%

Micro-Tech, Partner and Roundup are registered trademarks of Monsanto Technology LLC.

Pioneer is a registered trademark of Pioneer Hi-Bred International, Inc.

Accent is a trademark of E. I. duPont de Nemours & Co., Inc.

Beacon is a trademark of a Syngenta Group Company.

In case of emergency involving this product, Call Collect, day or night, (314) 694-4000.

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Formulated in the United States, contains the Active Ingredient halosulfuron-methyl which is made in Japan.