PRIMERO® 40SC

AGRICULTURAL HERBICIDE

GROUP 2 HERBICIDE

FOR USE ON CORN

Active Ingredient:	**By weight**
Nicosulfuron*: 2-[[(4,6-dimethoxypyrimidin-2-yl)aminocarbonyl]aminosulfonyl] - N,N-dimethyl-3-pyridinecarboxamide	4.18%
Other Ingredients:	95.82%
TOTAL	**100.00%**

Contains 0.33 pounds active ingredient per gallon of formulated product.

*CASRN: 111991-09-4

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION

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

See additional Precautionary Statements on Inside Booklet and Back Panel of Container and Directions for Use in Inside Booklet.

EPA Reg. No.: 83100-11-83979 **EPA EST. No.: 069821-CHN-003**

Net Contents: 1 Gallon

Manufactured for:
Rotam North America, Inc.
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PRODUCT OF CHINA

ROTAM

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed or inhaled. Avoid breathing spray mist. Avoid contact with skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN	
No specific antidote. Treat symptomatically. For Emergency Medical treatment call your local poison control center. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

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 rinse water. Do not apply where/when conditions favor runoff.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 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

Primero 40SC herbicide must be used only in accordance with directions on this label. ROTAM NORTH AMERICA, INC. will not be responsible for losses or damage resulting from use of this product in any matter not specifically directed by ROTAM NORTH AMERICA, INC.

PRODUCT USE INFORMATION

Primero 40SC herbicide is a suspension concentrate used at the rate of 6 – 24 fl. oz. per acre for selective postemergence grass weed control in field corn grown for seed or grain, popcorn, and sweet corn.

Do not make more than two applications of Primero 40SC herbicide per cropping season. The combined dosage of sequential applications cannot exceed 24 fl. oz. per acre of Primero 40SC herbicide.

When to Apply

Primero 40SC herbicide may be used on field corn, high lysine, waxy, white or other food grade corn hybrids. Primero 40SC herbicide may be broadcast to corn up to 20” tall (free standing), or that is exhibiting up to and including 6 leaf collars (V6), whichever is more restrictive.

While Primero 40SC herbicide has a wide application window, research has shown best results are obtained when applications are made early postemergence when corn and weeds are small. Target applications to corn that is less than 12” tall for best overall performance.

Application Timing

Apply Primero 40SC herbicide when grasses are young and actively growing, but before they exceed the sizes indicated in Table 1. Treat heavy infestations of weeds before they become too competitive with the crop, especially where soil moisture and/or fertility are limited. Primero 40SC herbicide provides weed control via foliar absorption. Primero 40SC herbicide only controls those weeds that have emerged. For later-emerging weeds, a second application or a timely cultivation is required. Applications made to weeds larger than the size indicated on this label or to weeds under stress may result in unsatisfactory control. (See **Late or Rescue Applications** below.)

Late or Rescue Applications

Primero 40SC herbicide may be applied to field corn as a rescue treatment for the control of escaped grasses, or as a directed postemergence application on corn that is taller than 20” or which has more than 6 collars whichever comes first.

For corn 20” - 36” tall, apply Primero 40SC herbicide with drop nozzles only, and avoid spraying into the whorl of corn stalks. Do not apply to corn that is taller than 36” or that exhibits 10 or more collars (V10), whichever is most restrictive.

Applications made to weeds larger than those listed on this label may vary from complete control to suppression. Level of control will depend on the weed species, stage of growth, and environmental conditions.

Due to the unplanned nature of rescue applications, choices must be made between the risks that arise from applications made beyond the proper time for Primero 40SC herbicide use, and the effects of season long grass competition and/or harvest complications. These choices must balance risks from improperly timed Primero 40SC herbicide use that include, but are not limited to:

- Yield loss due to competition: Research indicates competition from foxtail exceeding 4 inches in height may reduce corn yields. Applications to foxtail and other annual grasses that exceed the sizes stated on the label increases the risk of yield losses due to prolonged competition with the crop even though control may be acceptable.
- Incomplete control of grasses beyond labeled size: Applications to grasses that exceed the labeled sizes can result in reduced control. This incomplete control may reduce corn yield.
- Incomplete grass control due to herbicide stress: Grasses under stress from previous herbicide applications may not be actively growing and susceptible to Primero 40SC herbicide. This stress may reduce grass control in “rescue” situations.
- Ear malformation: Applications of Primero 40SC herbicide on corn that has 7 to 10 collars (V7 to V10) increases the potential for ear malformation (pinching). This risk may be greatly reduced, but not eliminated, by using drop nozzles properly adjusted so as to not apply Primero 40SC herbicide into the corn whorl.

IMPORTANT RESTRICTIONS AND PRECAUTIONS

Injury to or loss of desirable vegetation may result from failure to observe the following:

- Do not apply Primero 40SC herbicide or drain or flush application equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Prevent drift of spray to desirable plants.
- Do not contaminate any body of water.
- Thoroughly clean application equipment immediately after use. (See the Sprayer Cleanup section of this label for instructions.)
- Do not graze or feed forage, hay, or straw from treated areas to livestock within 30 days of Primero 40SC herbicide application.

Rate

Optimum control of the weeds listed can be achieved with 12 fl. oz. of Primero 40SC herbicide. Weeds that exceed the listed weed sizes by up to 50% may be partially controlled with rates between 12 and 24 fl. oz. of Primero 40SC herbicide per acre.

Primero 40SC herbicide may be applied at 6 – 12 fl. oz. for limited control of certain small grass weeds. (See Table 2, under **Additional Directions** for details.)

As weeds mature, their sensitivity to Primero 40SC herbicide decreases.

As grassy weeds become mature (more than 3 tillers), they may not reach the size listed below, due to drought or other environmental factors. Grassy weeds that are maturing rapidly should be treated before they reach the stages listed below.

When applied as directed, Primero 40SC herbicide will control the following weeds:

Table 1. Weeds Controlled with 12 fl. oz. Primero 40SC herbicide

Grasses	Maximum Height or Diameter (inches)
Barnyardgrass	4
Broadleaf signalgrass	2
Foxtails (bristly, giant, green, yellow)	4
Itchgrass	6
Johnsongrass Seedling Rhizome	 12 18
Panicum (Texas, browntop) Fall	3 4
Quackgrass*	10
Ryegrass (Italian, perennial)	6
Sandbur (field, longspine)*	3
Shattercane	12
Sorghum almum	12
Timothy	6
Volunteer cereals (barley, oats, rye, triticale, wheat)	6**
Wild oats	4
Wild proso millet	4
Wirestem muhly*	8
Witchgrass	6
Wooly Cupgrass*	4

*Requires the use of COC plus ammonium nitrogen fertilizer. Cultivation or re-treatment may be required. (See **For Additonal Control of Later Emerging Grasses**.)
10 inches in the states of WA, OR, ID, and MT, where the use of MSO adjuvants are preferred. (See **Spray Adjuvants.)

Table 1. Weeds Controlled with 12 fl. oz. Primero 40SC herbicide *Continued*

Broadleaves	Maximum Height or Diameter (inches)
Burcucumber	3
Dandelion	6
Hemp dogbane*	4
Jimsonweed	3
Morningglory (ivyleaf, pitted) tall	3 2
Pigweed (redroot, smooth)	4
Smartweeds (ladysthumb, PA)	4
Thistle, Canada*	4

*Suppression

Popcorn, Field Corn Grown for Seed, and Sweet Corn

Primero 40SC herbicide may be broadcast or applied with drop nozzles to popcorn or field corn grown for seed that is less than 20" tall (free-standing) or that exhibits up to and including 5 leaf-collars (V5), whichever is more restrictive. Do not apply to corn that is taller than 20" or that exhibits more than 5 leaf-collars (V5), whichever is more restrictive. Many seed companies have tested seed corn inbreds or yellow corn hybrids for sensitivity to Primero 40SC herbicide and have reported excellent safety. Do not apply Primero 40SC herbicide to any white popcorn inbred, or white popcorn hybrid unless specifically approved by the seed company. This includes "White Dynamite" popcorn.

Primero 40SC herbicide may be applied to certain sweet corn hybrids grown for fresh markets or under contract for processing. Applications of Primero 40SC herbicide may be applied broadcast or with drop nozzles (post-directed) on sweet corn up to 12 inches tall or up to and including 5 leaf-collars (V5). For sweet corn 12 – 18 inches tall, apply only with drop nozzles. Do not apply to sweet corn taller than 18 inches or those which exhibit 6 or more leaf-collars (V6), and make only one application of Primero 40SC herbicide per year. Sweet corn hybrid sensitivity to Primero 40SC herbicide is highly variable, and not all hybrids have been tested for crop tolerance. Contact your Rotam Sales Representative for information on local sweet corn hybrids that have been evaluated with Primero 40SC herbicide.

Not all seed corn inbreds, popcorn or sweet corn hybrids have been tested, nor does ROTAM NORTH AMERICA, INC. have access to all seed company data. Consequently, ROTAM NORTH AMERICA, INC. is not responsible for any crop injury arising from the use of Primero 40SC herbicide on field corn grown for seed, popcorn or sweet corn. When tank mixing, check the tank mix partner label for tolerances and instructions for use.

(See **Soil Insecticide Interaction Information** regarding the use of Primero 40SC herbicide on popcorn, sweet corn or field corn grown for seed that has been previously treated with soil insecticide.)

SPRAY ADJUVANTS

Applications of Primero 40SC herbicide must include either a crop oil concentrate or a nonionic surfactant. In addition, an ammonium nitrogen fertilizer must be used unless specifically prohibited by tank mix partner labeling. Crop oil concentrate plus ammonium nitrogen fertilizer is the preferred adjuvant system for activity on difficult to control species such as woolly cupgrass, quackgrass, sandbur, and wirestem muhly. Consult your local Rotam Sales Representative prior to using other adjuvant systems. If another herbicide is tank mixed with Primero 40SC herbicide, select adjuvants authorized for use with both products. Products must contain only EPA exempt ingredients.

Crop Oil Concentrate (COC) – Petroleum or Modified Seed Oil (MSO)

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.
- MSO adjuvants may be used at 0.5% v/v (0.5 gallons per 100 gallons spray solution) if specifically noted on adjuvant product labeling.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

Nonionic Surfactant (NIS)

- Apply at 0.25% v/v (1 quart per 100 gallons spray solution) or 0.5% under arid conditions.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

Ammonium Nitrogen Fertilizer

- Use 2 quarts/acre of high – quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 pounds/acre of a spray-grade ammonium sulfate (AMS). Use 4 quarts/acre UAN or 4 pounds/acre AMS under arid conditions.
- Do not use liquid nitrogen fertilizer as the total carrier solution.

Special Adjuvant Types

- Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.
- In addition to the adjuvants specified above, other adjuvant types may be used if they provide the same functionality. Note: Not all adjuvant types have been tested with this product. Consult your local Extension Agent or your Rotam Representative if you have questions concerning use of a specific adjuvant product.

MIXING INSTRUCTIONS

1. Fill the tank ¼ to ⅓ full of water.
2. While agitating, add the required amount of Primero 40SC herbicide.
3. Continue agitation until the Primero 40SC herbicide is fully dispersed, at least 5 minutes.
4. Once the Primero 40SC herbicide is fully dispersed, maintain agitation and continue filling tank with water. Thoroughly mix Primero 40SC herbicide with water before adding any other material.
5. As the tank is filling, add the required spray adjuvants (crop oil concentrate, nonionic surfactant, or ammonium nitrogen fertilizer).
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply Primero 40SC herbicide spray mixture within 24 hours of mixing to avoid product degradation.

8. If Primero 40SC herbicide and a tank mix partner are to be applied in multiple loads, pre-slurry the Primero 40SC herbicide in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the Primero 40SC herbicide.

WHEN TO APPLY – SEQUENTIAL APPLICATIONS FOLLOWING REDUCED RATES OF PREEMERGENCE HERBICIDES

Primero 40SC herbicide may be used as a sequential application in a planned postemergence weed control program in corn following a reduced rate of a preemergence herbicide.

Apply a reduced rate of a preemergence grass herbicide prior to corn emergence and then follow with a postemergence application of Primero 40SC herbicide. Apply products such as Cinch®, Cinch® ATZ, Balance PRO, Axiom, Dual II Magnum, Surpass, Outlook, and Harness XTRA at as low as ¼ to ½ of the full labeled use rate and follow with a sequential postemergence application of Primero 40SC herbicide. Refer to the preemergence grass herbicide label for use restrictions, application information, rotational crop guidelines, and follow any caution statements prior to applying Primero 40SC herbicide.

Do not apply Primero 40SC herbicide to corn that exhibits herbicide injury from previous applications made to the current or preceding crop.

TANK MIX APPLICATIONS

For Additional Control of Broadleaf Weeds

Primero 40SC herbicide may be tank mixed with full or reduced rates of many herbicides registered for postemergence application in corn for additional control of broadleaf weeds.

See the tank mix partner label for weeds controlled, precautions, use restrictions, adjuvant, and crop rotation information. The most restrictive language on either label shall apply.

ADDITIONAL DIRECTIONS FOR SPECIFIC WEED PROBLEMS

Reduced Rate of Primero 40SC herbicide may be applied at 6 – 12 fl. oz./acre for control of the small grass weeds noted in the table below. Always use a crop oil concentrate plus ammonium nitrogen fertilizer when applying reduced rates of Primero 40SC herbicide.

Table 2. Weeds Controlled with Reduced Rates of Primero 40SC herbicide

Grasses	Maximum Height or Diameter (inches) Rate Primero 40SC		
	6 fl. oz.	9 fl. oz.	12 fl. oz.
Barnyardgrass	2	3	4
Foxtails (bristly, giant green)	2	3	4
yellow	--	2	4
Itchgrass	2	4	6

Table 2. Weeds Controlled with Reduced Rates of Primero 40SC herbicide *Continued*

Grasses	Maximum Height or Diameter (inches) Rate Primero 40SC herbicide		
	6 fl. oz.	9 fl. oz.	12 fl. oz.
Johnsongrass seedling	--	8	12
Rhizome	--	8	18
Panicum (Texas, browntop)	1	2	3
fall	1	2	4
Sandbur (field, longspine)	--	1	3
Shattercane	3	6	12
Sorghum almum	3	6	12
Timothy	2	4	6
Volunteer Cereals	--	2	6
Wild oats	2	3	4
Wild proso millet	--	2	4
Witchgrass	2	4	6
Wooly cupgrass	--	--	4

Other Tank Mixtures

Other than the exceptions noted, and in addition to the tank mix partners and rates indicated above, Primero 40SC herbicide may be tank mixed or followed with sequential applications of other products registered for use in field corn. Applications of full or reduced rates of other products registered for use on corn can be made provided:

- The tank mix product is labeled for the same timing, method of application, and use restrictions as Primero 40SC herbicide.
- The tank mixture is not specifically prohibited on the label of the tank mix product.
- The tank mix combination is compatible as determined by a "jar test" described in the **TANK MIX COMPATIBILITY TESTING** section below.

Weed control and crop response with tank mixtures not specifically recommended in this label are the responsibility of the user and manufacturer of the tank mix product.

TANK MIXING PRECAUTIONS

A corn plant's predisposition to develop fused tissue emerging from the whorl (rattail) after the V-11 stage may increase when a product containing dicamba (i.e., "Clarity", "Marksman") is applied to small corn under early stressful conditions. Be aware of this when applying tank mixes with dicamba to small corn (V-3 stage or smaller) under stressful conditions. (See **ENVIRONMENTAL CONDITIONS** for a description of these stressful conditions.)

To avoid crop injury or antagonism, apply the products indicated below at least seven days before or three days after the application of Primero 40SC herbicide.

- Do not tank mix Primero 40SC herbicide with “Basagran” and “Laddok” or severe crop injury may occur.
- Do not tank mix Primero 40SC herbicide with 2,4-D containing products as severe grass control antagonism may occur.
- Do not tank mix Primero 40SC herbicide with foliar-applied organophosphate insecticides such as “Lorsban”, malathion, parathion, etc., as severe crop injury may occur.

Do not exceed labeled application rates. Do not tank mix Primero 40SC herbicide with other products that contain the same active ingredients as Primero 40SC herbicide (nicosulfuron) unless the label of either tank mix partner specifies the maximum rate that may be used.

TANK MIX COMPATIBILTY TESTING

Perform a jar test prior to tank mixing to ensure compatibility of Primero 40SC herbicide and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately ½ hour. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

SEQUENTIAL PRIMERO 40SC APPLICATIONS

Annual grasses may have more than one flush of emerging seedlings. Also, regrowth of treated annual grasses may occur due to environmental conditions following application. Perennial grasses may regrow from underground stems or roots, depending upon environmental conditions. To control grasses under these conditions, a sequential application of Primero 40SC herbicide may be necessary. The combined dosage of the sequential applications must not exceed 24 fl. oz. per acre of Primero 40SC herbicide.

CULTIVATION

A timely cultivation may be necessary to control suppressed weeds, or weeds that emerge after an application of Primero 40SC herbicide. Optimum timing for cultivation is 7-14 days after Primero 40SC herbicide application or upon seeing the establishment of new weeds.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

Primero 40SC herbicide provides best results when applied to young, actively growing weeds. Applications made during warm, moist conditions (70°F or more) and adequate soil moisture both before and after application maximizes performance. The degree and duration of control depend on spray coverage, weed spectrum, weed size, growing conditions before and after treatment, soil moisture, and adjuvant selection.

Primero 40SC herbicide is rainfast in 4 hours.

Treating weeds that exceed maximum label height or that are under stress may result in incomplete control. Poor weed control or crop injury may result from applications made to plants under stress from:

- Abnormally hot or cold weather;
- Environmental conditions such as drought, water-saturated soils, hail damage, or frost;
- Disease, insect, or nematode injury;
- Prior herbicide, or carryover from a previous year’s herbicide application.

Severe stress from conditions preceding or immediately following application may also result in crop injury or poor weed control. Stress affects all weeds, but especially weeds such as woolly cupgrass, green and yellow foxtail, and wild proso millet.

If the corn or grass weeds are under stress, delay application until stress passes and both weeds and corn resume active growth.

Primero 40SC herbicide rapidly inhibits the growth of susceptible weeds, reducing weed competition within as little as 6 hours after application. Susceptible plants are controlled in 7-21 days.

SOIL INSECTICIDE INTERACTION INFORMATION

Before using Primero 40SC herbicide, ensure that it is compatible with any insecticides previously applied to the corn crop.

Primero 40SC herbicide may interact with certain insecticides previously applied to the crop. Crop response varies with field corn type, insecticide used, insecticide application method, and soil type. Primero 40SC herbicide may be applied to corn previously treated with 'Fortress', 'Aztec', or 'Force' insecticides or nonorganophosate (OP) soil insecticides regardless of soil type.

- DO NOT APPLY Primero 40SC herbicide to corn previously treated with "Counter 15G" or to corn treated with "Counter 20CR" in-furrow or over the row at cultivation.
- Applications of Primero 40SC herbicide to corn previously treated with "Counter 20CR", "Lorsban", or "Thimet" may cause unacceptable crop injury, especially on soils of less than 4% organic matter.

CROP ROTATION

Rotational crops vary in their response to low concentrations of Primero 40SC herbicide remaining in the soil. Primero 40SC herbicide dissipates rapidly in warm, acidic, microbiologically active soils.

The amount of Primero 40SC herbicide which may be present in the soil depends on application rate, soil pH and organic matter content, elapsed time since application, crop production practices, and environmental factors.

Injury to rotational crops may occur in high-pH, cold soils if dry weather prevails between application and rotational crop planting.

Soil pH should be determined by laboratory analysis using the 1-1 soil:water suspension method on representative soil samples taken at 0-4" depth. Soil pH varies within fields; therefore, re-cropping should be based on the highest soil pH within each field. Consult local extension publications for recommended soil sampling procedures.

The following rotational intervals must be observed when using Primero 40SC herbicide at a maximum of 24 fl. oz.:

Primero 40SC ROTATIONAL CROP GUILDELINE 1 – No soil pH Restrictions

Crop	Rotational Interval in Months
Corn (field, seed)	Anytime
Corn (pop, sweet)*	10
Soybeans	0.5 (15 days)
Cereals, spring (barley, oats, rye, wheat)	8
Cereals, winter (barley, oats, rye, wheat)	4
Cotton	10
Dry Beans, Peas, Snap Beans	10
Alfalfa**	12
Red Clover**	12
Other crops	See Rotational Crop Guidelines 2 and 3

*Except the sweet corn varieties “Merit”, “Carnival”, and “Sweet Success”, for which the minimum time interval is 15 months.
**Except for the state of Kansas east of Highway 75, for Minnesota east and south of the Red River Valley, and for the states east of the line formed by the western borders of Iowa, Missouri, Arkansas, and Louisiana, where the minimum time interval is 10 months.

Primero 40SC ROTATIONAL CROP GUILDELINE 2 – Soil ≤7.5 pH Restrictions

Crop	Rotational Interval in Months	
	pH 7.5	pH >7.5
Sorghum	10	18*
Sunflowers	11**	18
All other crops not listed in Rotational Guidelines 1 or 2	See Rotational Guideline 3	

*Except in Texas and Oklahoma east of Highway 281, where the rotational interval is 10 months, regardless of pH.
**Precipitation following application must exceed 14” prior to planting sunflowers.

Primero 40SC ROTATIONAL CROP GUILDELINE 3 – With Soil ≤6.5 pH Restrictions

Crop	Rotational Interval in Months	
	pH 6.5	pH >6.5
Sugarbeets*, potatoes**	10	18***
All other crops not listed in Rotational Guidelines 1 or 2	10	18

*Except in irrigated sites in Colorado, Wyoming, Nebraska, Texas, Michigan, and Ohio, where precipitation following application must exceed 25" prior to planting beets, where the interval is 10 months on soils with pH < 7.5. Sites in Minnesota east and south of the Red River Valley may follow these guidelines provided maximum rates of Primero 40SC herbicide do not exceed 12 fl. oz.

**Irrigated potatoes following irrigated corn treated in the States of Washington, Oregon, Idaho, or Utah can be planted 10 months after using Primero 40SC herbicide on sprinkler irrigated corn with no soil pH restrictions, providing the maximum use rate on corn does not exceed 18 fl. oz. product per season. Corn treated with Primero 40SC herbicide must be grown to maturity and receive a minimum of 18 inches of irrigation water before potatoes can be planted at this rotation interval. Injury to potatoes may occur if less than 18 inches of irrigation is used on the previous corn crop. Primero 40SC herbicide may not be used in a tank mix or sequential application program with ALS-inhibiting herbicides such as "Exceed" or "Beacon".

***In North Dakota and northwest Minnesota, the cumulative precipitation in the 18 months following application must exceed 28" in order to rotate to sugarbeets or potatoes.

Rotational Crop Guideline 4 may be observed when using a single application of Primero 40SC herbicide per cropping season with a maximum use rate of 12 fl. oz. product. Rotational intervals should be extended to 12 months if drought conditions prevail after application and before the rotational crop is planted, unless sprinkler irrigation has been applied and totals greater than 15" during the growing season.

Primero 40SC ROTATIONAL CROP GUILDELINE 4 With 12 fl. oz. Maximum Use Rate

Crop	Rotational Interval in Months
Alfalfa*	10
Canola	10
Flax**	10
Potato	10
Red Clover	10
Sunflower	10

*On sprinkler-irrigated fields in Idaho, Utah, and Northern Nevada, it is best to use deep fall tillage such as plowing prior to planting alfalfa. Product degradation may be less on furrow-irrigated soils and may result in some crop injury.

**Rotational intervals should be expended to 18 months if drought conditions prevail after application and before the rotational crop is planted, unless sprinkler irrigation had been applied and totals greater than 15" during the growing season.

APPLICATION INFORMATION

Many crops are highly sensitive to Primero 40SC herbicide. All direct or indirect contact (such as spray drift) with crops other than field corn should be avoided (see also **SPRAY DRIFT MANAGEMENT**). For all application systems, use 50-mesh or larger strainer screens.

Do not apply Primero 40SC herbicide through any type of irrigation system.

GROUND APPLICATION

Broadcast Application

- Use a minimum of 15 gallons of water per acre (15 GPA) for best performance. Use a minimum of 10 gallons of water per acre (GPA) for light, scattered stands of weeds.
- For best performance, select nozzles and pressure that deliver MEDIUM spray droplets, for example, as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard S572. Nozzles that deliver COARSE spray droplets may be used to reduce drift, provided spray volume is increased to maintain coverage on small weeds. For optimal product performance and minimal spray drift, adjust the spray boom to the lowest possible spray height recommended in manufacturer's specifications.
- Ensure that equipment is set up to avoid applying an excessive rate directly over the rows and into the corn plan whorl. This is most likely to occur when a nozzle is positioned directly above the row.
- Overlaps or starting, stopping, slowing, and turning while spraying may result in crop injury.

Band Application

For band applications, use proportionately less spray mixture, and carefully calibrate the band applicator to not exceed the labeled rate. Carefully follow the manufacturer's instructions for nozzle type (flat fans), orientation, distance of nozzles from the crop and weeds, spray volumes, calibration, and spray pressure.

AERIAL APPLICATIONS

In New York State and California aerial application is prohibited. Use nozzle types and arrangements that will provide optimum spray distribution and maximum coverage at a minimum of 3 GPA.

Do not apply during a temperature inversion, when winds are gusty, or when conditions favor poor coverage and/or off-target spray movement.

SPRAYER PREPARATIONS/CLEANUP

It is important that spray equipment is clean and free of previous pesticide deposits before using Primero 40SC herbicide and then properly cleaned out following application. Clean all application equipment before applying Primero 40SC herbicide. Follow the cleanup procedures specified on the label of the product previously sprayed. If no cleanup procedure is provided, use the procedure that follows. Immediately following applications of Primero 40SC herbicide, thoroughly clean all mixing and spray equipment to avoid subsequent crop injury.

Note:

- When cleaning spray equipment before applying Primero 40SC herbicide, read and follow label directions for proper rinsate disposal of the product previously sprayed.
- Steam cleaning of aerial spray tanks will help to dislodge any visible pesticide deposits.
- When spraying or mixing equipment will be used over an extended period to apply multiple loads of Primero 40SC herbicide, partially fill the tank with fresh water at the end of each day of spraying, flush the boom and hoses, and allow to sit overnight.

Cleanup Procedure

1. Drain the tank and thoroughly hose down the interior surfaces. Flush the tank, hoses, and boom with clean water for a minimum of 5 minutes.
2. Partially fill the tank with clean water and add one gallon of household ammonia* (containing 3% active) for every 100 gallons of water. Finish filling the tank with water, then flush the cleaning solution through the hoses, boom, and nozzles. Add more water to completely fill the tank and allow to agitate or recirculate for at least 15 minutes. Again, flush the hoses, boom, and nozzles with the cleaning solution, then drain the tank.
3. Repeat Step 2.
4. Remove the nozzles and screens and clean separately in a bucket containing the cleaning agent and water.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes flushing the water through the hoses and boom.

*Equivalent amounts of an alternate strength ammonia solution or a tank cleaner may be used.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF 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. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS. (See **Wind, Temperature and Humidity, and Temperature Inversions** sections of this label.)

Controlling Droplet Size - General Techniques

- **Volume -** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows 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 A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- **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.

Controlling Droplet Size - Aircraft

- **Number of Nozzles -** Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation -** Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type -** Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length -** The boom length should not exceed ¾ of the wing or rotor length - longer booms increase drift potential.
- **Application Height -** Application more than 10 ft. above the canopy increases the potential for spray drift.

BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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 generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage disposal.

Pesticide Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Pesticide Disposal: Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal (Nonrefillable Container): Do not reuse this container to hold materials other than pesticides or diluted pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinstate or other pesticide-related material in this container. Contact you state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. 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.

SPILLS: For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the CHEMTREC Emergency Response for decontamination procedures.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC AT 1-800-424-9300

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying this product. If the terms are not acceptable. Return the product at once, unopened and the purchase price will be returned.

The Directions of Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ROTAM NORTH AMERICA, INC. or Seller. To the extent consistent with applicable law, all such risk shall be assumed by Buyer and User, and Buyer and User agree to hold ROTAM NORTH AMERICA, INC. and Seller harmless for any claims relating to such factors.

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