

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D C 20460

SEP-20 2010

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Julie Butcher Gowan P O Box 5569 Yuma, AZ 85366-5569

Subject

Label Amendment

EPA Reg No 81880-6 / Yukon Herbicide

Dear Ms Butcher

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided you make the following changes to the label

1 Change "General Information" to "Product Information"

You must submit a copy of the final printed label. A stamped copy of the label is enclosed for your records. This label supersedes all previously accepted labels. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of the product constitutes acceptance of these conditions. If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft Erik@epa.gov

Sincerely,

Jim Tompkins

Product Manager 25

Herbicide Branch

Registration Division (7504P)

## YUKON HERBICIDE

WATER SOLUBLE GRANULE

YUKON is a selective herbicide for the control of listed annual broadleaf weeds and nutsedge in field corn field corn grown for seed sugarcane and grain sorghum (milo)

Read the entire label before using this product

ACTIVE INGREDIENT
Halosulfuron methyl
Sodium salt of dicamba
OTHER INGREDIENTS

% BY WT 12 5% 55 0% 32 5% TOTAL 100 0%

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# KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID	ACCEPTED		
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     Call a poison control center or doctor for treatment advice	with COMMENTS In EPA Letter Dated		
IF SWALLOWED	Call poison control center or doctor immediately for treatment advice Remove visible particles from mouth Have person rinse mouth thoroughly with water, spit out rinse water Have person sip a glass of water if able to swallow Do not induce vomiting unless told to do so by the poison control center or doctor Do not give anything by mouth to an unconscious person	Under the Federal Insecticide Fungicide and Rodenticide Ac as amended for the pesticide registered under EPA Reg No		
	HOT LINE NUMBER	010806		
Have the product container or label with you when calling a poison control center or doctor or going for treatment FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL TOLL FREE 1 888-478 0798				

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

CAUSES EYE IRRITATION HARMFUL IF SWALLOWED Avoid contact with eyes or clothing

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are made of any waterproof materials. If you want more option follow the instructions for Category A on an EPA chemical resistance category selection chart

All mixers, loaders applicators and other handlers must wear

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

See engineering controls for additional requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot wate. '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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

#### **ENGINEERING CONTROLS**

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170 240 (d)(6)]

#### **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 wash waters or rinseate

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.

NET CONTENTS \_\_\_\_ OUNCES

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

#### **GENERAL INFORMATION**

The level of weed control following YUKON 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 post emergence treatments are used in corn, sequential applications may be required to control later weed flushes.

Soon after YUKON 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 INSTRUCTIONS**

Applications must 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 YUKON 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

Aerial Applications Apply YUKON 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 YUKON 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 AND THE GROWER 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 % 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 must 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)

#### 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
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage
- Nozzie orientation Orienting nozzles so the spray stream is released backwards parallel to the air stream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzie type Use a nozzie type that is designed for the intended application. With most nozzie types narrower spray angles produce larger droplets. Consider using low-drift nozzies. Solid stream nozzies oriented straight back produce larger droplets than other nozzie types.

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#### 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 must 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 must 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 spray 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 must 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

YUKON Herbicide may cause injury to desirable trees and plants particularly beans cotton flowers fruit trees grapes ornamentals peas potatoes soybeans sunflowers tobacco tomatoes and other broadleaf plants when contacting their roots stems or foliage. These plants are most sensitive to YUKON Herbicide during their reproductive 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 YUKON Herbicide 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 10 mph
- 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 YUKON Herbicide adjacent to sensitive crops when the temperature at the time of application exceeds 85 F as drift is more likely to occur.
- To avoid injury to desirable plants equipment used to apply YUKON Herbicide 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 YUKON Herbicide 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 nozzies 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 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 or crop oil concentrate 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 YUKON 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 YUKON Herbicide use rates.

Nonionic surfactant OR COC are the only additives necessary for YUKON 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 YUKON 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 acré on not use liquid nitrogen fertilizer solutions or suspensions as the total carrier because excessive crop injury may occur. A high quality is 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.

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

Corn Growth Stage When used alone YUKON Herbicide can be applied over the-top or with drop nozzles from spike stage through 36 inch field corn To maximize efficacy apply from spike stage through 20 inch field corn Drop nozzles are recommended for corn greater than 20 inches to ensure proper coverage of weeds

YUKON Herbicide may be applied up to 2 applications per growing season with the total amount applied per acre 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 YUKON HERBICIDE CORN USE RATE GUIDE

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

	Size Range	
Weed Species	Height (inches)	
Produced 1	440.0	
Bindweed 1	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 <sup>2</sup>	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 <sup>2</sup>	1 to 12	
Ragweed grant <sup>2</sup>	1 to 6	
Radish wild	1 to 6 *	
Smartweed Pennsylvania	1 to 3	
Sunflower common	1 to 15	
Thistle Canada 1	1 to 6	
Velvetleaf	1 to 12	
Waterhemp <sup>2</sup>	1 to 6	

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 tail or if soybeans are more than 10 tall or if soybeans have begun to bloom

#### **GRAIN SORGHUM (MILO)**

Grain Sorghum Growth Stage YUKON Herbicide alone can be applied from the 2 leaf through 15 inch tall sorghum. Use drop nozzles if sorghum is taller than 8 inches. 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 YUKON Herbicide if the grain sorghum is under stress. This effect will be most evident 7 to days after application. The crop will quickly recover under normal growing conditions.

Only apply YUKON 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 apply to sorghum grown for seed production. After application to sorghum observe the following pre harvest intervals. 30 days for grain and fodder and 20 days for forage.

<sup>&</sup>lt;sup>2</sup> Biotypes of these weeds are known to exist that are resistant to ALS inhibitor herbicides. Reduced control with YUKON Herbicide may be seen from these populations. The use of higher rates of YUKON Herbicide or tank mixing with additional modes of herbicide action may be necessary to achieve complete control.

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

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## WEEDS CONTROLLED YUKON HERBICIDE SORGHUM USE RATE GUIDE

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

	Size Range	
Weed Species	Height (inches)	
Bindweed 1	1 to 6	
Burcucumber <sup>1</sup>	4 to 12	
Cocklebur common	1 to 12	
Dogbane hemp <sup>1</sup>	1 to 6	
Fleabane Philadelphia	1 to 3	
Horsenettie	1 to 8	
Kochia <sup>2</sup>	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 <sup>2</sup>	1 to 12	
Ragweed giant <sup>2</sup>	1 to 6	
Smartweed Pennsylvania	1 to 3	
Sunflower common	1 to 12	
Thistle Canada 1	1 to 6	
Velvetleaf	1 to 12	
Waterhemp <sup>2</sup>	1 to 6	

<sup>&</sup>lt;sup>1</sup>Suppression

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 dispersible 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.

YUKON Herbicide Tank Mixture Options in Corn

Tank Mix Partners	Rate per Acre	Additives	Application Method	Comments
Atrazine 4L	1 5 to 3 pt	COC	Broadcast to corn 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>
Atrazine 90DF	0 83 – 1 67 lb	COC	Broadcast to corn up to 12 tall	Control is best when weeds are small     Effective for burndown of grass weed escapes     Antagonism may occur on larger broadleaf weeds
Accen <sup>®</sup> Herbicide	0 67 oz	COC or NIS	Broadcast or apply with drop nozzles to corn up to 24 tail     For corn 24 to 36 tail apply with drop nozzles only	Ammonium nitrogen fertilizer (e.g. 28%) is also recommended as an additive     Avoid spraying directly into whorls of larger cornstalks     Refer to Accent label for soil insecticide interaction information
Beacon <sup>®</sup> Herbicide	0 76 oz 1/2 packet	COC or NIS	Broadcast or apply with drop nozzles to corn up to 20 tall     For corn 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 whorls of larger corn</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>
Callisto <sup>©</sup> 4L Herbicide	3 oz	coc	Broadcast or apply with drop nozzles to field or seed corn up to 30 tall or 8 leaf collars	<ul> <li>Ammonium nitrogen fertilizer (e.g. 28% is also recommended as an additive</li> <li>Refer to Callisto<sup>®</sup> label for soil insecticide interaction restrictions</li> </ul>

<sup>&</sup>lt;sup>2</sup> Biotypes of these weeds are known to exist that are resistant to ALS inhibitor herbicides. Reduced control with YUKON Herbicide may be seen from these populations. The use of higher rates of YUKON Herbicide or tank mixing with additional modes of herbicide action may be necessary to achieve complete control.

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

Tarak Miss Bouts	D-4	A al aliabata	_	andingtion Mother		Commonto
Tank Mix Partners Glyphosate (various formulations)	Rate per Acre 0 56 – 1 125 lb/acid/a i	Additives NIS	•	Broadcast or apply with drop nozzles to field corn up to 30 36 tall corn dependent on formulation Consult individual product label Drop nozzles are recommended for applications made to GT corn between 24 tall	•	Comments  The addition of spray grade ammonium sulfate (AMS) at 8 5 17 lb/100 gal spray mix is also required as an additive For use on corn hybrids tolerant to glyphosate herbicide ONLY
Herbicide	0 5 – 0 75 oz	NIS or COC	•	Broadcast or apply with drop nozzles to field or seed corn up to 36 tall	•	NIS is recommended Ammonium nitrogen fertilizer (e.g. 28%) is also recommended as an additive
Liberty <sup>®</sup> 1 67L Herbicide	28 – 34 oz	AMS	•	Broadcast or apply with drop nozzles to field corn up to 24 tall Applications can further be made with drop nozzles only up to 36 tall corn	•	AMS (17 lb/100 gallons of spray mix Do not add NIS or COC For use on corn hybrids tolerant to Liberty® Herbicide ONLY
Option® 35WDG Corn Herbicide	1 5 – 1 75 oz	coc	•	Broadcast or apply with drop nozzles to field corn between V1 and V6 stage of growth Applications can further be made with drop nozzles only from 16 36 tall corn	•	Ammonium nitrogen fertilizer (e.g. 28%) or spray grade AMS (17 lb/100 gal) is also recommended as an additive Avoid spraying directly into the whorls of larger cornstalks Refer to Option® label for soil insecticide interaction restrictions  Do not apply Option to seed corn
Steadfast <sup>®</sup> 75 DF Herbicide	0 75 oz	COC or NIS	•	Broadcast or apply with drop nozzles to field corn up to 20 tall or 6 leaf collars Drop nozzles are recommended if the crop canopy prevents adequate coverage	•	COC is recommended Ammonium nitrogen fertilizer (e.g. 28%) or spray grade AMS (17 lb/100 gal) is also recommended as an additive Avoid spraying directly into the whorls of larger cornstalks Refer to the Steadfast® label for tank mix and soil insecticide interaction restrictions Do not apply Steadfast to seed corn

NIS = Nonionic surfactant COC = Crop oil concentrate

Refer to the specific product labels and observe all precautions mixing and application instructions and follow crop intervals for all products used in tank mixtures Be sure to follow the specifications listed on the most restrictive label when planning and making applications

## TANK MIXTURES CORN AND GRAIN SORGHUM

YUKON HERBICIDE plus ATRAZINE YUKON Herbicide may be applied in combination with atrazine for post emergence 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 YUKON Herbicide plus Atrazine 4L at 1 1/2 to 3 pints per acre (0 75 to 1 1/2 pounds active ingredient per acre) or Atrazine 90DF at 0 83 to 1 67 lbs per acre. The addition of crop oil concentrate (COC) is recommended for this mixture.

Refer to Atrazine product labels for use instructions additive requirements weeds controlled and application restrictions

## TANK MIXTURES CORN ONLY

YUKON HERBICIDE plus ACCENT plus NONIONIC SURFACTANT A tank mixture of YUKON Herbicide plus Accent may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON 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

YUKON HERBICIDE plus BEACON plus NONIONIC SURFACTANT A tank mixture of YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual grasses in corn only YUKON Herbicide plus Beacon may be applied over the top of the post emergence control of annual grasses in corn only YUKON Herbicide plus Beacon may be used for the post emergence control of annual grasses in corn only YUKON Herbicide plus Beacon may be applied over the post emergence control of the pos

YUKON HERBICIDE plus CALLISTO plus CROP OIL CONCENTRATE YUKON Herbicide plus Callisto may be used to control annual broadleaf weeds in corn only YUKON Herbicide plus Callisto can be applied over the top or with drop nozzles to field or seed corn up to 30 inches tall (or 8 leaf collars whichever is more restrictive)

YUKON HERBICIDE plus GLYPHOSATE plus NONIONIC SURFACTANT A tank mixture of YUKON Herbicide plus glyphosate may be used for Glyphosate Tolerant (GT) corn hybrids ONLY for control of grasses and broadleaves YUKON Herbicide plus glyphosate may be applied over the top or with drop nozzles to field corn up to 30 inches tall (or 8 leaf collars whichever is more restrictive) drop nozzles are recommended for applications made to

GT corn between 24 30 inches) Note Certain yphosate formulations allow applications over the top with drops to GT corn up to 36 inches tall using these formulations drop nozzles are still recommended for applications to GT corn from 24 36 inches

YUKON HERBICIDE plus IMPACT plus NONIONIC SURFACTANT or CROP OIL CONCENTRATE A tank mixture of YUKON Herbicide plus Impact® may be used for control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Impact can be applied over the top or with drop nozzles to field or seed corn up to 36 inches tall Drop nozzles are recommended if the crop canopy prevents adequate coverage Refer to the Impact® label for use instructions additive requirements weeds controlled insecticide restrictions and applicable precautions

YUKON HERBICIDE plus LiBERTY A tank mixture of YUKON Herbicide plus Liberty may be used for Liberty Tolerant corn hybrids ONLY for control of broadleaf weeds and grasses YUKON Herbicide plus Liberty can be applied over the top or with drop nozzles to field corn up to 24 inches tall (or 7 leaf collars, whichever is more restrictive), applications can further be made with drop nozzles only up to 36 inch tall corn

YUKON HERBICIDE plus OPTION plus CROP OIL CONCENTRATE YUKON Herbicide plus Option may be used to control annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Option® can be applied over-the top or with drop nozzles to field corn between V1 and V6 stage of growth applications can further be made with drop nozzles only from 16 36 inch tall corn DO NOT apply Option to seed corn

YUKON HERBICIDE plus STEADFAST plus NONIONIC SURFACTANT or CROP OIL CONCENTRATE A tank mixture of YUKON Herbicide plus Steadfast may be used for control of annual broadleaf weeds and annual grasses in corn only YUKON Herbicide plus Steadfast can be applied over the top or with drop nozzles to field corn up to 20 inches tall (or 6 collars, whichever is more restrictive). Drop nozzles are recommended if the crop canopy prevents adequate coverage DO NOT apply Steadfast® to seed corn

Refer to the specific product labels and observe all precautions mixing and application instructions and follow crop intervals for all products used in tank mixtures

#### USE RATE GUIDE AND WEED HEIGHT DIRECTIONS FOR CONTROL OF SELECT GRASSES WITH YUKON TANK MIXES

(See Weeds Controlled Section for YUKON Herbicide for broadleaf weed heights and rates) YUKON Herbicide Use Rate 4 to 8 ounces of product by weight per acre Accent Use Rate - 0 67 ounce by weight per acre Beacon Use Rate 0 76 ounce product by weight per acre Option Use Rate - 1 5 to 1 75 ounces of product by weight per acre Steadfast Use Rate - 0.75 ounces of product by weight per acre Follow individual labels for use specifics and precautions

#### WEED HEIGHT (INCHES) AT TIME OF APPLICATION

	YUKON +	YUKON +	YUKON +	YUKON +	
8	Accent	Beacon	Option	Steadfast	<del> </del>
Barnyardgrass	up to 4		up to 4	up to 4	
Bromegrass downy			up to 8	*****	
smooth	******		up to 8		
Cupgrass woolly	up to 4		up to 2	up to 3	
Fescue tall	*******		up to 8		
Foxtails giant	up to 4	1 to 2	up to 6	up to 4	
yellow	up to 4	1 to 2	up to 3	up to 4	
green	up to 4	1 to 2	up to 3	up to 4	
bristly	up to 4	1 to 2	up to 3	up to 4	
Goosegrass	-		up to 4	up to 2	
Johnsongrass rhizome	up to 18	8 to 16	up to 16	8 to 12	
seedling	up to 12	4 to 12	up to 16	8 to 12	
Millet wild proso	up to 4		up to 3	up to 4	
Oats wild	up to 4		up to 6	up to 2	
Orchardgrass	-		up to 8	-	
Panicum fall	up to 4	Less than 2	up to 3	up to 4	
Panicum Texas	up to 3		up to 2	up to 4	
Quackgrass	up to 10	4 to 8	up to 10	up to 8	
Ryegrass Italian	up to 6	1 to 4	up to 8	up to 4	
Sandbur field	up to 3	1 to 4	up to 2	up to 2	
Shattercane	up to 12	4 to 12	up to 12	up to 6	
Signalgrass broadleaf	1 to 2		up to 2	up to 2	
Wirestem muhly	up to 8		up to 10	up to 4	
Volunteer cereals	up to 6		up to 4	up to 2	

#### YUKON plus ACCENT. OPTION or STEADFAST plus SOIL RESIDUALS

Acetochlor metolachlor and dimethenamid may be tank mixed with Yukon and Accent Option or Steadfast for early post emergence and residual control of foxtails and other grass weeds in field corn (including seed corn) Refer to individual product labels for rates These tank mixtures will control emerged foxtails and other grasses as well as provide residual control or reduced competition of annual grasses and certain broadleaf weeds listed in the WEEDS CONTROLLED section of the specific herbicide labels

Apply these tank mixtures to small emerged annual grasses (target heights listed in the USE RATE GUIDE AND WEED HEIGHT DIRECTIONS FOR CONTROL OF SELECT GRASSES WITH TUKON TANK MIXES section above) 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 Follow all label directions and restrictions on maximum corn height for post applications

#### SUGARCANE

YUKON Herbicide may be applied up to 2 applications per growing season with the total amount applied per acre not to exceed 8 ounces of product by weight. When used alone this product may be applied prior to planting prior to emergence or after the emergence of the sugarcane and until row closure. Mechanical cultivation may be required to control weed species not on the label. If so a sequential treatment may be required to control weeds in areas of disturbed soil. Do not apply within 87 days of harvest.

## WEEDS CONTROLLED YUKON HERBICIDE SUGARCANE USE RATE GUIDE

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

	Size Range	
Weed Species	Height (inches)	
<b>-</b>	44.	
Bindweed 1	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 <sup>2</sup>	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 <sup>2</sup>	1 to 12	
Ragweed giant <sup>2</sup>	1 to 6	
Radish wild	1 to 6 *	
Smartweed Pennsylvania	1 to 3	
Sunflower common	1 to 15	
Thistle Canada 1	1 to 6	
Velvetleaf	1 to 12	
Waterhemp <sup>2</sup>	1 to 6	

Suppression

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

## TANK MIXTURES SUGARCANE ONLY

YUKON Herbicide may be tank mixed with Asulam (Asulox®) Atrazine Ametryn (Evik®) or 2 4 D for application in sugarcane

YUKON plus GLYPHOSATE AGRICULTURAL HERBICIDES plus NONIONIC SURFACTANT YUKON Herbicide may be applied at 4 to 8 ounces by weight per acre in combination with specified rates of glyphosate agricultural herbicides for pre plant burn down of emerged annual grasses broadleaf weeds and nutsedge in sugarcane

YUKON plus ASULAM plus NONIONIC SURFACTANT or CROP OIL CONCENTRATE YUKON Herbicide may be applied in tank mixtures with asulam for the control of labeled grasses. A YUKON Herbicide tank mixture with asulam may be applied to sugarcane before crop emergence or post emergence until 90 days before harvest. Up to 2 applications per year may be made in accordance with label specifications. Use rate specified is 4 –8 ounces YUKON Herbicide plus 6 to 8 pints asulam (only 2 treatments of asulam per year may be applied) per acre

YUKON plus ATRAZINE plus NONIONIC SURFACTANT or CROP OIL CONCENTRATE YUKON Herbicide may be applied in combination with atrazine for post-emergence control of labeled broadleaf weeds in sugarcane. The addition of atrazine will also aid in the burn down and control of many grass weeds (1.5 inches or less) which have escaped pre-emergence 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 rate specified is 4 to 8 ounces YUKON Herbicide plus 4 to 8 pints atrazine per acre. Follow the specific directions on an atrazine label for number and timing of applications and for maximum number of applications per year.

YUKON plus AMETRYN plus NONIONIC SURFACTANT YUKON Herbicide may be applied in tank mixtures with ametryn for the control of additional broadleaf weeds and grasses. A YUKON herbicide tank mixture with ametryn may be applied to sugarcane before crop emergence or post-emergence until row closure. Use rate specified is 4 to 8 ounces Yukon plus 1/2 to 1 1/2 pounds of ametryn per acre. Efficacy may be reduced if temperatures exceed 85 degrees during application. Follow the specific directions on an ametryn label for number and timing of applications and for maximum number of applications per year.

YUKON plus 2 4 D AMINE plus NONIONIC SURFACTANT YUKON Herbicide may be applied in tank mixtures with 2 4-D amine for the control of additional broadleaf weeds. A YUKON tank mixture with 2 4 D may be applied to sugarcane before crop emergence or post emergence until 6 weeks before harvest. Use rate specified is 4 to 8 ounces of Yukon plus 1 to 4 pints per acre (1/2 to 2 pounds active ingredient per acre) 2 4 D. Up to 4 treatments per year of 2 4 D may be applied.

Refer to the companion product labels for use rates restrictions and other important application information. See the companion labels for additional weeds controlled by these tank mixtures. Always follow the directions for use provided on the companion product label, including any state restrictions.

<sup>&</sup>lt;sup>2</sup> Biotypes of these weeds are known to exist that are resistant to ALS inhibitor herbicides. Reduced control with YUKON Herbicide may be seen from these populations. The use of higher rates of YUKON Herbicide or tank mixing with additional modes of herbicide action may be necessary to achieve complete control.

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

#### **TURFGRASS SOD**

Apply YUKON Herbicide as a post emergence control at the rate of 4 – 8 ounces to weeds commonly found in turf Use the lower rate in light infestations and the higher rate in heavy infestation. Do not exceed 2 applications per growing season with the total amount applied per acre not to exceed 8 ounces of product by weight For optimum results do not mow turf for 2 days before or after application. Avoid application of Yukon Herbicide when turfgrass is under stress since turf injury may result

#### **ROTATIONAL CROP INFORMATION**

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

TIME INTERVAL BEFORE PLANTING (Months after treatment with YUKON)

IRJIMAT Field corm   0	Crop	Months	Exceptions
IT Field com	IR/IMR Field corn	0	
IT Field com	Sugarcane	0	
Barley (winter)         2           Cots         2           Cats         2           Proso Millet         2           Rye (winter)         2           Seed com         2           Sorghums         2           Sorghums         2           Spring cereal crops         2           Wheat (winter)         2           Rice         2           Popcom Sweet com         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Affalfa         9         2           Clovers         9         2           Dry Beans         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast and southeast and Suntheast a		1	
Forage Grasses	Normal Field corn	1	
Forage Grasses	Barley (winter)	2	
Proso Millet         2           Rye (wnter)         2           Seed corn         2           Sorghums         2           Spring cereal crops         2           Wheat (wnter)         2           Rice         2           Popcorn Sweet corn         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9         2           Dy Beans         9         2 months in the northeast southeast and TX           Field Peas         9         2           Posa         9         2           Potatose         9         2           Cucumbers Pumpkins Squash         9         2 months in the southeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Egiglant         12         4 months for FL transplants and 3 months in TX           <		2	
Rye (winter)         2           Seed corn         2           Sorghums         2           Spring cereal crops         2           Wheat (winter)         2           Rice         2           Popcorn Sweet corn         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Dry Beans         9         2 months in the northeast southeast and TX           Field Peas         9           Potatoes         9           Potatoes         9           Cucumbers Pumpkins Squash         9         2 months in the northeast southeast and TX           Snap Beans         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Egglant         12         4 months for FL transplants and 3 months in TX           Egglant         12         3 months in the muck soil areas of FL only </td <td>Oats</td> <td>2</td> <td></td>	Oats	2	
Seed corn         2           Sorghums         2           Spring cereal crops         2           Wheat (winter)         2           Rice         2           Popcorn Sweet com         3           Cotton         4           Peanuts         6           Contrasplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the southeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the southeast           9         2 months in the southeast         3 months in TX           Sopbeans         9         2 months in the northeast and southeast and 3 months in TX           Sopbeans         9         2 months in the northeast and southeast and 3 months in TX           Eggplant         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants and 3 months in TX           Eggplant	Proso Millet	2	
Sorphums         2           Spring cereal crops         2           Wheat (winter)         2           Rice         2           Popcorn Sweet com         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Affalfa         9           Clovers         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the southeast and Sutheast and TX           Field Peas         9         2 months in the southeast and Sutheast and Sut	Rye (winter)	2	
Spring cereal crops   2	Seed corn	2	
Wheat (winter)         2           Rice         2           Popcorn Sweet corn         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast and southeast and TX           Field Peas         9         2 months in the northeast and southeast and TX           Field Peas         9         2 months in the northeast and southeast and TX           Field Peas         9         2 months in the northeast and southeast and TX </td <td>Sorghums</td> <td>2</td> <td></td>	Sorghums	2	
Rice         2           Oppcorn Sweet corn         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the southeast southeast and TX           Peas         9         2 months in the southeast southeast and TX           Field Peas         9         2 months in the southeast and Switheast and TX           Peas         9         2 months in the southeast           Potatoes         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Eggplant         12         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants and 3 months in TX           Eggplant         12         3 months in the muck soil areas of FL only           Cabage	Spring cereal crops	2	
Popcorn Sweet corn         3           Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9           Dry Beans         9         2 months in the northeast southeast and TX           Field Peas         9           Peas         9           Potatoes         9           Cucumbers Pumpkins Squash         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Carrot         15         3 months in the muck soil areas of FL only           Carrot         15         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only <td>Wheat (winter)</td> <td>2</td> <td></td>	Wheat (winter)	2	
Cotton         4           Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Field Peas         9         9           Peas         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the southeast           Peas         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX           Soybeans         9         2 months in the northeast and 3 months in TX	Rice	2	
Peanuts         6           Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9         2           Clovers         9         2 months in the northeast southeast and TX           Field Peas         9         2 months in the northeast southeast and TX           Flead Peas         9         2 months in the southeast and S	Popcorn Sweet corn	3	
Tomato (transplant)         8         2 months in the northeast and southeast and 3 months in TX           Alfalfa         9           Clovers         9           Dry Beans         9           Pelas         9           Peas         9           Potatoes         9           Cucumbers Pumpkins Squash         9           Snap Beans         9           Soybeans         9           Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants and 3 months in TX           Eggplant         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Canola         15         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24	Cotton	4	
Alfalfa       9         Clovers       9         Dry Beans       9       2 months in the northeast southeast and TX         Field Peas       9         Peas       9         Potatoes       9         Cucumbers Pumpkins Squash       9       2 months in the southeast         Snap Beans       9       2 months in the northeast and southeast and 3 months in TX         Soybeans       9         Melons       9         Peppers       10       4 months for FL transplants and 3 months in TX         Eggplant       12       4 months for FL transplants and 3 months in TX         Eggplant       12       3 months in the muck soil areas of FL only         Cabbage       15       3 months in the muck soil areas of FL only         Canola       15         Carrot       15         Mint       15         Broccoli Cauliflower Collards       18       3 months in the muck soil areas of FL only         Leeks Onions       18       3 months in the muck soil areas of FL only         Sunafboert (Michigan only)       21         Sugarbeet and Red Beet       24         Spinach       24	Peanuts	6	
Clovers         9           Dry Beans         9           Field Peas         9           Peas         9           Potatoes         9           Cucumbers Pumpkins Squash         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9           Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Canola         15         3 months in the muck soil areas of FL only           Mint         15         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24		8	2 months in the northeast and southeast and 3 months in TX
Dry Beans         9         2 months in the northeast southeast and TX           Field Peas         9           Peas         9           Potatoes         9           Cucumbers Pumpkins Squash         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9         4 months for FL transplants and 3 months in TX           Soybeans         9         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabage         15         3 months in the muck soil areas of FL only           Canola         15         3 months in the muck soil areas of FL only           Mint         15         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			
Field Peas   9	Clovers		
Peas         9           Potatoes         9           Cucumbers Pumpkins Squash         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9           Metons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Carrot         15         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24	Dry Beans		2 months in the northeast southeast and TX
Potatoes         9           Cucumbers Pumpkins Squash         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9           Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Canola         15           Carrot         15           Mint         15           Broccoli Cauliflower Collards         18           Leeks Onions         18           Lettuce crops         18           Sunflowers         18           Sugarbeet (Michigan only)         21           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24	Field Peas		
Cucumbers Pumpkins Squash         9         2 months in the southeast           Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9           Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabage         15         3 months in the muck soil areas of FL only           Carrot         15         5           Mint         15         5           Broccoli Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			
Snap Beans         9         2 months in the northeast and southeast and 3 months in TX           Soybeans         9           Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Carrot         15         5           Mint         15         5           Broccoli Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			
Soybeans         9           Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Canola         15         4           Carrot         15         5           Mint         15         5           Broccoli Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			
Melons         9           Peppers         10         4 months for FL transplants and 3 months in TX           Eggplant         12         4 months for FL transplants           Radish         12         3 months in the muck soil areas of FL only           Cabbage         15         3 months in the muck soil areas of FL only           Carrot         15         4           Mint         15         5           Broccoli Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			2 months in the northeast and southeast and 3 months in TX
Peppers       10       4 months for FL transplants and 3 months in TX         Eggplant       12       4 months for FL transplants         Radish       12       3 months in the muck soil areas of FL only         Cabbage       15       3 months in the muck soil areas of FL only         Canola       15         Carrot       15         Mint       15         Broccoli Cauliflower Collards       18       3 months in the muck soil areas of FL only         Leeks Onions       18       3 months in the muck soil areas of FL only         Sunflowers       18       3 months in the muck soil areas of FL only         Sugarbeet (Michigan only)       21         Sugarbeet and Red Beet       24         Spinach       24			
Eggplant       12       4 months for FL transplants         Radish       12       3 months in the muck soil areas of FL only         Cabbage       15       3 months in the muck soil areas of FL only         Canola       15         Carrot       15         Mint       15         Broccoli Cauliflower Collards       18         Leeks Onions       18         Lettuce crops       18         Sunflowers       18         Sugarbeet (Michigan only)       21         Sugarbeet and Red Beet       24         Spinach       24			
Radish       12       3 months in the muck soil areas of FL only         Cabbage       15       3 months in the muck soil areas of FL only         Canola       15         Carrot       15         Mint       15         Broccoli Cauliflower Collards       18       3 months in the muck soil areas of FL only         Leeks Onions       18       3 months in the muck soil areas of FL only         Lettuce crops       18       3 months in the muck soil areas of FL only         Sunflowers       18       3 months in the muck soil areas of FL only         Sugarbeet (Michigan only)       21         Sugarbeet and Red Beet       24         Spinach       24			
Cabbage         15         3 months in the muck soil areas of FL only           Canola         15           Carrot         15           Mint         15           Broccoli Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			
Canola         15           Carrot         15           Mint         15           Broccoli Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Lettuce crops         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			
Carrot         15           Mint         15           Broccol: Cauliflower Collards         18         3 months in the muck soil areas of FL only           Leeks Onions         18         3 months in the muck soil areas of FL only           Sunflowers         18         3 months in the muck soil areas of FL only           Sugarbeet (Michigan only)         21           Sugarbeet and Red Beet         24           Spinach         24			3 months in the muck soil areas of FL only
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Sugarbeet and Red Beet 24 Spinach 24			
Spinach 24			
Observito anno a Companida des entires El transmission			
	Strawberries	36	6 months for annual FL transplants
Sugarbeet 36		36	
(ND MN Red River Valley)*  *Also includes other regions where rainfall is sparse or irrigation is required			

\*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

Southeast LA MS AL FL GA NC SC TN Puerto Rico

Northeast PA DE MA MD NY ME NJ CT RI VA NH VT WV

MI WI MN IA IL IN OH MO KY ND SD NE

#### STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage and disposal

PESTICIDE 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

PESTICIDE DISPOSAL Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility

CONTAINER HANDLING Nonrefillable container Do not reuse or refill this container Completely empty bag into application equipment for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or if allowed by state and local authorities by burning stay out of smoke

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

#### FOR 24 HOUR EMERGENCY ASSISTANCE (SPILL LEAK OR FIRE) CALL CHEMTREC® (800) 424 9300

For other product information contact Gowan Company or see Material Safety Data Sheet

#### NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILTY LIMITATIONS

Important Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions off target movement presence of other materials, method of use or application, and other factors, all of which are beyond the control of Canyon Group LLC. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

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

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Formulated in the United States contains the Active Ingredient Halosulfuron methyl which is made in Japan

# READ THE ENTIRE LABEL FOR YUKON HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING

### YUKON HERBICIDE

WATER SOLUBLE GRANULE

YUKON is a selective herbicide for the control of listed annual broadleaf weeds and nutsedge in field corn field corn grown for seed sugarcane and grain sorghum (milo)

Read the entire label before using this product

ACTIVE INGREDIENT
Halosulfuron methyl
Sodium salt of dicamba
OTHER INGREDIENTS

% BY WT 12 5% 55 0% 32 5% TOTAL 100 0%

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### **AERIAL APPLICATIONS IN CALIFORNIA ONLY**

Label as used in this supplemental labeling refers to the table booklet for YUKON Herbicide and this supplemental DIRECTIONS FOR USE

it is a violation of Federal Law to use this product in any manner inconsistent with its labeling

- This labeling must be in the possession of the user at the time of pesticide application.
- · It is a violation of Federal Law to use this product in a manner inconsistent with its labeling
- All applicable directions restrictions and precautions on the EPA registered label are to be followed

#### **APPLICATION EQUIPMENT AND INSTRUCTIONS**

Applications must 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 applications may also reduce effectiveness.

Aerial Applications Apply YUKON 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 YUKON 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 AND THE GROWER The interaction of many equipment and weather related factors determine the potential for spray drift. The applicators 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 Each operating nozzle shall produce a droplet size not less than 500 microns volume median diameter with no more than 10 percent of the diameter by volume less than 200 microns
- 2 The distance of the outer most nozzles on the boom must not exceed 2/3 the length of the wingspan or rotor
- 3 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 must be observed
- 4 Application should not be made at a height greater than 10 feet above the top of the target plants unless greater height is required for aircraft safety

#### 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 no prevent drift if applications are made improperly or under unfavorable environmental conditions (see the following "Wind Temperature and Humidity" and Temperature Inversion sections)

#### 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
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage
- Nozzie orientation Orienting nozzles so the spray stream is released backwards parallel to the air stream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzles type Use a nozzles type that is designed for the intended application. With most nozzles 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 2/3 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 droplets
- Swath adjustment When applications are made with a cross wind the swath will be displaced downward. 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 the drift potential (wind speed droplet size etc.)

#### Key environmental factors

- Wind Drift potential is lowest between wind speeds of 3 to 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 3 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 Application 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 Areas Pesticides must 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 sensitive areas)

#### **Sensitive Crops**

Cotton Prunes

#### **Buffer zones**

Aerial applications must not be made closer than four miles from sensitive crops

Read the 'LIMIT OF WARRANTY AND LIABILITY statement in the label booklet for YUKON Herbicide before using These terms apply to this SUPPLEMENTAL LABELING and if these terms are not acceptable return the product unopened at once

Formulated in the United States contains the Active Ingredient halosulfuron methyl which is made in Japan by Nissan Chemical Industries Ltd Product protected by U.S. Patent No. 4 668227