66222-49

03-22-2910

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

March 22, 2010

Ms. P. Leanne Pruett Makhteshim-Agan of North America, Inc. 4515 Falls of Neuse Rd., Suite 300 Raleigh, NC 27609

RE: ADMINISTRATIVE LETTER DATED NOVEMBER 13, 2009; VALURON® 60DF; EPA REG. NO. 66222-49; AMEMDED LABEL ADDING WINTER WHEAT TO BE GRAZED OUT

Your amended label request is approved only with the following label changes:

1. On page 5, move both tables "WINTER WHEAT TO BE GRAZED OUT IN THE STATES OF TEXAS, OKLAHOMA, NEW MEXICO AND KANSAS" and "HARVEST AID" under use directions for wheat, barley, and triticale at the top of page 4 before the table for "PASTURES AND RANGELAND".

2. At the end of all the use directions for wheat, barley, and triticale, add the section labeled "WHEAT, BARLEY, AND TRITICALE PRECAUTIONS AND RESTRICTIONS", and add the following restrictions:

(a) Use only on barley grown for grain and straw. Do not use on barley grown for grazing by livestock, or grown for forage/silage

(b) Do not harvest wheat, barley, or triticale grain and straw within 10 days after VALURON® 60DF application.

(c) Apply only one application at 0.1 oz/acre of VALURON® 60DF per use season. A rate of 0.05 oz/acre is allowed for Winter wheat which will be grazed out in TX, OK, NM, and KS for suppression of henbit and mustard.

Note to registrant: There is no established tolerance for barley forage

3. On page 6, change "Precautionary Statements" to "Sorghum Precautions and Restrictions". Change the third bullet to "Do not harvest for forage or silage within 30 days after application". 4. On page 7, add the heading, "WEEDS SUPPRESSED", before the first table starting with "Weeds Suppressed". In the table for "Winter wheat to grazed out in, etc.", change "Winter annual broadleaf weeds such as henbit and mustard" to "henbit and mustard". If the Registrant wishes, add the specific name of any other winter broadleaf weed that is supported by efficacy data.

5. On page 8, move the tank mix recommendations for wheat, barley and triticale under the use directions for wheat, barley and triticale. Change "TANK MIXTURES IN CEREALS (WHEAT, BARLEY AND TRITICALE)" to "TANK MIXTURES IN WHEAT, BARLEY AND TRITICALE".

Add the restriction to the end of the first paragraph, "Do not use on barley grown for grazing by livestock, or grown for forage/silage."

For the recommended tank mix partner "With Starane" and "BANVEL" state which Starane and Banvel product name is being recommended. Our files show products with just the name "Starane" or Banvel are cancelled.

For the recommended tank mix partners "With Assert herbicide or Avenge herbicide", add "Use only on wheat, barley, or triticale grown for grain and straw. Not for use on wheat, barley, or triticale grown for forage or hay". The active ingredients in these tank mix partners have no established tolerances for these crops.

For the recommended tank mix partner "With Puma" change the sentence to "Valuron 60DF can be tank mixed with Puma herbicide for improved control of weeds in wheat and barley grown for grain and straw only." Triticale can be added, efficacy considerations permitting, if the Registrant wishes. The established tolerances on wheat grain and straw will cover use on triticale grain and straw.

6. On page 11, move all the paragraphs pertaining to the heading "TANK MIXTURES IN HARVEST AID" to a location under use directions for wheat, barley and triticale.

7. On page 13, add "Triticale" to table title in "Rotation Intervals for Crops in Non-Irrigated Land, etc.", plant phytotoxicity considerations permitting.

8. On page 24, under the "LIMITATION OF WARRANTY AND LIABILITY" statement, and in the "CONDITIONS" paragraph, add "To the extent consistent with applicable law" to the beginning of the last sentence.

9. Add the batch number to containers per PR-Notice 2007-4.

10. The Registrant is invited to add pesticide resistance management labeling as outlined in PR-Notice 2001-5, Guidance for Pesticide Registrants on Pesticide Resistance Management Labeling. 11. On page 1, under "INERT INGREDIENTS", add "by" as in "...manufactured or distributed by Dupont".

12. On page 2, there are no requirements in the NON-AGRICULTURAL USE REQUIREMENTS box. Add "During treatment, do not allow anyone except the applicator in the area being treated. Do not allow anyone in the treated area until spray has dried."

13. Provide the formulator's exemption for the correct product. Your product is a 100% repack. Therefore, the formulator's exemption will be for that product. We have no Confidential Statement of Formula containing the technical with EPA Reg. No. 83558-23. If you are formulating an unapproved product using the technical with EPA Reg. No. 83558-23, you may be in violation of FIFRA. Before shipping any product with this unapproved formulation, submit all the necessary information/data and alternate Confidential Statement of Formula for approval.

Submit one copy of revised label before shipping product using this label accepted with comments.

This label supersedes all other labels except supplemental labels unless replaced by this label.

Please contact Phil Errico at 703-305-6663/ errico.philip@epa.gov for assistance in this matter.

Regards, James A. Tompkins PM 25

Herbigide Branch/Registration Division 7505P

VALURON[®] 60DF HERBICIDE DRY FLOWABLE

FOR USE ON WHEAT, BARLEY, TRITICALE, GRAIN SORGHUM, FALLOW, PASTURES,	AND RANGELAND
ACTIVE INGREDIENT: Metsulfuron Methyl:	% BY WT.
methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]carbonyl]amino]sulfonyl]benzoate	60.0%
INERT INGREDIENTS:	<u>40.0%</u>
	TOTAL 100.0%

ACCEPTED with COMMENTS In EPA Letter Dated MAR 2 2 2010

2 2010 KEEP OUT OF REACH OF CHILDREN CAUTION

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 66272-49

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EPA Est. No.

Manufactured for: Makhteshim Agan of North America, Inc. 4515 Falls of Neuse Rd, Suite 300 Raleigh NC 27609

EPA Reg. No. 66222-49

NET CONTENTS: 8 OZ

FIRST AID				
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.			
IF ON SKIN OR	Take off contaminated clothing.			
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.			
	Call a poison control center or doctor for treatment advice.			
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 mouth-to-mouth if possible.			
	Call a poison control center or doctor for further treatment advice.			
Have the product cont	ainer or label with you when calling a poison control center or doctor or going for treatment.			
For medical emergence	ties involving this product, call toll-free PROSAR 1-800-250-9291.			

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

Users should:

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

USER SAFETY RECOMMENDATIONS

• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

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 washwaters.

IMPORTANT INFORMATION PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid overfilling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

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

NON-AGRICULTURAL USE REQUIREMENTS

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

Valuron 60DF should be used only in accordance with recommendations on this label or in separate published Makhteshim Agan recommendations.

Makhteshim Agan will not be responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by Makhteshim Agan.

CHEMIGATION STATEMENT

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

GENERAL INFORMATION

Valuron 60DF herbicide is recommended for use on land primarily dedicated to the production of wheat, barley, triticale, grain sorghum, fallow, pasture, and rangeland.

Valuron 60DF is recommended for use on wheat, barley, triticale, grain sorghum, fallow, pasture, and rangeland in most states; check with your state extension or Department of Agriculture before use to be certain' Valuron 60DF is registered in your state. Valuron 60DF is not registered for use in Alamosa, Conejos, Costilla, Rio Grande, and Saquache counties of Colorado.

Valuron 60DF is a dry-flowable granule that controls weeds in wheat (including durum), barley, triticale, grain sorghum, pasture, rangeland grasses, and fallow. Valuron 60DF is mixed in water or can be preslurried in water and added to liquid nitrogen carrier solutions and applied as a uniform broadcast spray. A surfactant should be used in the spray mix unless otherwise specified on this label. Valuron 60DF is noncorrosive, nonflammable, nonvolatile, and does not freeze.

When an adjuvant is to be used with this product, Makhteshim Agan of North America, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

Valuron 60DF controls weeds by postemergence activity. For best results, apply Valuron 60DF to young, actively growing weeds. The use rate depends upon the weed spectrum and size of weeds at application. The degree and duration of control may depend on the following factors:

- weed spectrum and infestation intensity
- weed size at application
- environmental condition at and following treatment.

Environmental Conditions and Biological Activity

Valuron 60DF is absorbed through the foliage of broadleaf weeds rapidly inhibiting their growth. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies. Application of Valuron 60DF provides the best control in vigorously growing crops that shade competitive weeds. Weed control in areas of thin crop stand or seeding skips may not be as satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control.

Valuron 60DF may injure crops that are stressed from adverse environmental conditions (such as extreme temperatures or moisture, abnormal soil conditions, or cultural practices). In addition, different varieties of the crop may be sensitive to treatment with Valuron 60DF under otherwise normal conditions. Treatment of such varieties may injure crops.

In warm, moist conditions, the expression of herbicide symptoms is accelerated in weeds; in cold, dry conditions, expression of herbicide symptoms is delayed. In addition, weeds hardened-off by drought stress are less susceptible to Valuron 60DF.

Weed control may be reduced if rainfall or snowfall occurs soon after application.

APPLICATION INFORMATION

WHEAT, BARLEY AND TRITICALE

CROP	RATE PER ACRE	APPLICATION TIMING	
Wheat, Barley and Triticale	1/10 oz.	Dryland Wheat, Barley, and Triticale (except Durum or Wampum variety): Make applications after the crop is in the 2-leaf stage but before boot. Durum and Wampum variety Spring Wheat: Make applications after the crop is tillering but before boot. Applications to durum and wampum varieties should be made in	

combination with 2,4-D. Irrigated Wheat and Barley: Make applications after the crop begins tillering but before boot. First post-treatment irrigation should be delayed for at least 3 days after treatment and should not exceed 1 inch of water.
Do not apply during boot or early heading as crop injury may result. Apply once per use season.

PASTURES AND RANGELAND

CROP	RATE PER ACRE	APPLICATION TIMING
Pasture and Rangeland	1/10 to 4/10 oz Spot Applications: 1 oz /100 gals water	Apply as a broadcast treatment. Do not exceed ¾ oz Valuron 60DF per acre.
Pasture native grasses (such as bluestems and grama) pasture grasses (such as bermudagrass, bluegrass, orchardgrass, bromegrass, fescue, and timothy)	1/10 to 4/10 oz Spot Applications: 1 oz /100 gals water	Minimum time from grass establishment to Valuron 60DF application for: Bermudagrass = 2 months; Bluegrass, Bromegrass, Orchardgrass =6 months Timothy= 12 months Fescue =24 months

Fescue Precautions:

Note that Valuron 60DF may temporarily stunt fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- Tank mix Valuron 60DF with 2,4-D.
- Use the lowest recommended rate for target weeds.
- Use surfactant at ½ to 1 pint per 100 gallons of spray solution (1/16 to 1/8% v/v).
- Make application later in the spring after the new growth is 5 to 6 inches tall, or in the fall.
- Do not use surfactant when liquid nitrogen is used as a carrier.

The first cutting yields may be reduced due to seedhead suppression resulting from treatment with Valuron 60DF.

Timothy Precautions:

Timothy should be at least 6" tall at application and be actively growing. Applications of Valuron 60DF to timothy under any other conditions may cause crop yellowing and/or stunting. To minimize these symptoms, take the following precautions:

- Tank mix Valuron 60DF with 2,4-D.
- Use the lowest recommended rate for target weeds.
- Use surfactant at ½ pint per 100 gallons (1/16% v/v).
- Make applications in the late summer or fall.
- Do not use surfactant when liquid nitrogen is used as a carrier.

Ryegrass Pastures (Italian or perennial): Do not apply Valuron 60DF as injury to or loss of the pasture may result.

Other Pastures Precautions: Varieties and species of pasture grasses differ in their tolerance to herbicides. When using Valuron 60DF on a particular grass for the first time, limit use to one container. If no injury occurs throughout the season, larger acreage may be treated the following season.

Broadleaf pasture species, such as alfalfa and clover, are highly sensitive to Valuron 60DF and will be severely stunted or injured by Valuron 60DF.

FALLOW

CROP	RATE PER ACRE	APPLICATION TIMING
Fallow	1/10 oz	Use as a fallow treatment in the spring or fall when the majority of weeds have emerged and are actively growing.

WINTER WHEAT TO BE GRAZED OUT IN THE STATES OF TEXAS, OKLAHOMA, NEW MEXICO AND KANSAS

CROP RATE PER	APPLICATION TIMING
Winter wheat to be 1/20 oz grazed out and not harvested for grain (Texas, Oklahoma, New Mexico and Kansas only)	Valuron 60 DF should be tank mixed with MCPA, 2,4-D and/or Dicamba for the suppression for winter annual broadleaf weeds in winter wheat to be grazed out and not harvested for grain. Apply with MCPA, 2,4-D and/or dicamba at label rates. Winter annual broadleaf weeds should be less than 1 inch tall or in the rosette stage for suppression. Add a Makhteshim recommended nonionic surfactant having at least 80% active ingredient at 1 to 2 quarts per 100 gallons of spray solution (a 24 to 0.5% y(u))

Precautions

Valuron 60 DF suppresses weeds by postemergence activity. For best results, apply product to young, actively growing weeds. The degree and duration of suppression at 1/20 oz per acre may depend upon the weed spectrum and infestation intensity weed size at application, and Environmental conditions at and following treatment.

HARVESTAID		
CROP	RATE PER ACRE	APPLICATION TIMING
Wheat, Barley and Triticale	1/10 oz	Apply in combination with 2,4-D or Glyphogan [®] to aid in dry down of many broadleaved weeds, thereby aiding grain harvest. Make applications after the crop has reached the hard dough stage but no later than 10 days before harvest. See section on Harvest Aid Tank Mixtures.

GRAIN SORGHUM

CROP	RATE PER ACRE	WEEDS CONTROLLED	APPLICATION TIMING
Grain Sorghum (Colorado, Kansas, Nebraska, Oklahoma, and Texas (north of I-20).	1/20 oz + ¼ lb active ingredient 2,4-D amine	Pigweed species, Puncture vine, Velvetleaf	Apply Valuron 60DF plus 2,4-D amine to irrigated or dryland grain sorghum when sorghum is 3 to 15 inches in height. If sorghum is taller than 10 inches to the top of the canopy, use drop nozzles and keep spray off the foliage. Apply only before the boot stage. Application should be made when all or a majority of the weeds have germinated and emerged. For best results, spray when weeds are less than 6 inches tall.

Sorghum varieties vary in sensitivity to 2,4-D amine. Spray only varieties known to be tolerant to 2,4-D amine. Contact seed company and Local County Extension Service for this information. Do not use surfactant or crop oil.

For optimum performance and crop safety, Read and follow all other use instructions, warnings, and precautions on companion herbicide labels.

Application Information

Valuron 60DF may be applied to grain sorghum by properly calibrated ground and aerial equipment

Valuron 60DF can be used on either dryland or irrigated grain sorghum. If application is made to irrigated sorghum delay first post-treatment irrigation for at least 3 days after treatment. The first post-treatment irrigation should not exceed 1 inch.

Use cultivation prior to Valuron 60 DF + 2,4-D amine treatment to cover exposed brace roots of grain sorghum to minimize injury from 2,4-D amine.

Precautionary Statements

- Temporary crop yellowing and/or stunting may occur soon after application, especially when crop is under stress conditions.
- Do not use on grain sorghum grown for seed production or syrup. Do not use on forage sorghum
- Do not use for forage or silage within 30 days of application.
- Do not include a surfactant or crop oil to the tank mix.
- Do not apply this treatment under cold, wet weather conditions or to grain sorghum growing under stress caused by weather, insecticides, or disease as crop injury may result.
- Do not apply to long season grain sorghum varieties or grain sorghum that is planted after July 1 as crop injury or delayed maturity may occur.
- Do not exceed one (1) application per year.
- Valuron 60 DF must be used with 2,4-D; in areas where 2, 4-D use is restricted, follow requirement of the restriction. If 2, 4-D use is prohibited, do not use Valuron 60DF on grain sorghum.

WEEDS CONTROLLED

Unless otherwise directed, treat when weeds are less than 4" tall or in diameter and are actively growing. Effectiveness may be reduced if rainfall occurs within 4 hours after application.

Cereals, Pasture, Rangeland, and Fallow

1/10 oz. per acre	
Blue/purple mustard*	Miner's lettuce
Bur buttercup (testiculate)	Pigweed (redroot, smooth, tumble)
Coast fiddleneck (tarweed)	Plains coreopsis
Common chickweed	Prickly lettuce*
Common purslane	Russian thistle*
Conical catchfly	Shepherd's purse
Cowcockle	Smallseed falseflax
False chamomile	Smartweed (green, ladysthumb, pale)
Field pennycress (fanweed)	Snow speedwell
Filaree	Tansymustard*
Flixweed*	Treacle mustard (bushy wallflower)
Groundsel (common)	Tumble/Jim Hill mustard
Henbit	Volunteer sunflower
Kochia*	Waterpod
Lambsquarters (common, slimleaf)	Wild mustard
Mayweed chamomile	

Additional Weeds in Pasture/Rangeland Only

1/10 to 2/10 oz. per acre		
Bitter sneezeweed	Dandelion	
Buttercup	Marestail	
Carolina geranium	Plantain	
Common broomweed	Wild garlic*	
Common mullein	Woolly croton*	
Curly dock		

2/10 to 3/10 oz. per acre

Annual marshelder	Horsemint (beebalm)	
Blackeyed-Susan	Musk thistle*	
Buckbrush†	Pensacola bahiagrass*	
Burclover	Purple scabious	
Common yarrow	Western snowberry‡	
Dogfennel	Wildcarrot	

4/10 oz. per acre

Serecia lespedeza*

Grain Sorghum

1/20 02. per acre	
Pigweed	Puncture vine
Velvet leaf	

Weeds Suppressed ‡*

Cereals, Pasture, Rangeland, and Fallow

1/10 oz. per acre		
Canada thistle*	Knotweed (prostrate)*	
Common sunflower*	Sowthistle (annual)*	
Corn gromwell*	Wild buckwheat*	

Winter wheat to be grazed out in TX, OK, NM and KS

1/20 oz. per acre	
Winter annual broadleaf weeds such as henbit and musta	ard

Brush Suppressed‡

3/10 oz. per acre	
Blackberry	Multiflora rose*
Dewberry	

Weeds/Brush Suppressed with Spot Application (Pasture/Rangeland only)

1 oz. per 100 gallons of water

Blackberry *	Dewberry*
Canada thistle*	Multiflora rose*

*See the Specific Weed Problems section.

‡Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

SPECIFIC WEED PROBLEMS

Note: Thorough spray coverage of all weed species listed below is very important.

Blue Mustard, Flixweed, and Tansymustard: For best results, apply Valuron 60DF tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom.

Canada Thistle and Sowthistle: Apply either Valuron 60DF plus surfactant or Valuron 60DF plus 2,4-D or MCPA in the spring after the majority of thistles have emerged and are small (rosette stage to 6" elongating stems) and actively growing. The application will inhibit the ability of emerged thistles to compete with the crop. For Spot applications to Canada Thistle in pasture and rangeland, apply as a foliar spray once plant is fully leafed. Apply to runoff and include a surfactant in the spray mix at 1 to 2 quarts per 100 gallons of spray solution. Complete coverage of all foliage and stems is required for control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

Corn Gromwell and Prostrate Knotweed: Apply Valuron 60DF plus surfactant when weeds are actively growing, are no larger than 2" tall, and when crop canopy will allow thorough coverage. Tank mixing 2,4-D or MCPA with Valuron 60DF can improve results.

Kochia, Russian thistle, Prickly lettuce: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use Valuron 60DF in a tank mix with BANVEL/BANVEL SGF and 2,4-D, or bromoxynil and 2,4-D (such as $\frac{3}{4}$ - 1 pint BUCTRIL + $\frac{1}{4}$ - $\frac{3}{8}$ lb. active 2,4-D ester). Valuron 60DF should be applied in the spring when kochia, Russian thistle, and prickly lettuce are less than 2" tall or 2" across and are actively growing (refer to the TANK MIXTURES section of this label for additional details).

Sunflower (Common/volunteer): Apply either Valuron 60DF plus surfactant or Valuron 60DF plus 2,4-D, or MCPA after the majority of sunflowers have emerged, are 2" to 4" tall and are actively growing. Use spray volumes of at least 3 gallons by air or 5 gallons by ground (10 gallons by ground in pastures).

Wild Buckwheat: For best results, apply Valuron 60DF plus 2,4-D or MCPA when plants have no more than 3 true leaves (not counting the cotyledons). If plants are not actively growing, delay treatment until environmental conditions favor active weed growth.

Musk Thistle: Apply Valuron 60DF at 2/10 - 3/10 oz. per acre in the spring or early summer prior to flowering or in the fall after newly emerged plants have reached the rosette stage of growth. Fall applications should be made before the soil freezes.

Multiflora Rose: For best control, apply Valuron 60DF as a broadcast application when multiflora rose is less than 3' tall. Application should be made in the spring, soon after multiflora rose is fully leafed.

For Spot applications in pasture and rangeland, apply as a foliar spray once plant is fully leafed. Apply to runoff and include a surfactant in the spray mix at 1 to 2 quarts per 100 gallons of spray solution. Complete coverage of all foliage and stems is required for control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

Blackberry and Dewberry: For Spot applications in pasture and rangeland, apply as a foliar spray once plant is fully leafed. Apply to runoff and include a surfactant in the spray mix at 1 to 2 quarts per 100 gallons of spray solution. Complete coverage of all foliage and stems is required for complete control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

Pensacola bahiagrass control in established Bermudagrass pasture: Apply Valuron 60DF at 3/10 oz. per acre plus surfactant. Apply after green-up in the spring but before bahiagrass seedhead formation. Application should be made when moisture is sufficient to enhance grass growth.

Valuron 60DF is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, the use of Valuron 60DF can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore, Valuron 60DF treatments should be spread out over a period of years. Do not apply to an entire farm or ranch in one year. Fertilization (particularly with nitrogen and potassium) and/or replanting may accelerate the process of reestablishment of bermudagrass.

Under heavy bahiagrass pressure, grazing pressure, or adverse weather conditions (heat and drought), bahiagrass regrowth may occur.

Note: Valuron 60DF should not be used for the control of common or Argentine bahiagrass. Also, Valuron 60DF should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

Serecia lespedeza: Apply Valuron 60DF at 4/10 oz. per acre plus a surfactant at 1 to 2 quarts per 100 gallons of total spray solution. For best results, make applications to serecia lespedeza beginning at flower bud initiation through the full bloom stage of growth.

Note: Do not make applications if drought conditions exist at intended time of application.

Wild Garlic: Apply 1/10 to 2/10 oz. per acre of Valuron 60DF in the early spring when wild garlic is less than 12" tall with 2" to 4" of new growth.

Woolly Croton: Apply 1/10 to 2/10 oz. per acre of Valuron 60DF in the late spring or early summer at preemergence through 2 true leaf stage.

TANK MIXTURES

TANK MIXTURES IN CEREALS (WHEAT, BARLEY AND TRITICALE)

Valuron 60DF may be tank mixed with other suitable registered herbicides to control weeds listed under Weeds Suppressed, weeds resistant to Valuron 60DF, or weeds not listed under Weeds Controlled. Read and follow all manufacturer's label recommendations for the companion herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with Valuron 60DF.

With 2,4-D (amine or ester) or MCPA (amine or ester)

Valuron 60DF can be used as a tank-mix treatment with 2,4-D or MCPA (ester formulations provide best results) herbicides after weeds have emerged. For best results, use 1/10 oz. of Valuron 60DF per acre; add 2,4-D or MCPA herbicides to the tank at ¼ to ½ lb. active ingredient. Surfactant may be added to the mixture at ½ to 1 quart per 100 gallons of spray solution; however, adding surfactant may increase the potential for crop injury. Apply Valuron 60DF plus MCPA after the 3- to 5-leaf stage but before boot (with Durum and Wampum varieties do not apply before tillering). Apply Valuron 60DF plus 2,4-D after tillering (refer to appropriate 2,4-D manufacturer's label), but before boot.

With BANVEL[®]/BANVEL[®] SGF

For best results, apply Valuron 60DF at 1/10 oz. per acre; add 1/16 to 1/8 lb. active ingredient BANVEL/BANVEL SGF. Surfactant may be added to the mixture at ½ to 1 quart per 100 gallons of spray solution; however, adding surfactant may increase the potential for crop injury. Also refer to BANVEL/BANVEL SGF labels for application timing and restrictions.

With 2,4-D (amine or ester) and BANVEL[®]

Valuron 60DF may be applied in a 3-way tank mix with formulations of BANVEL and 2,4-D. Observe all applicable directions, restrictions, and precautions on labels of all products used. Make applications at 1/10 oz. of Valuron 60DF + 2-3 oz. BANVEL (4-6 oz. BANVEL SGF) + 4-6 oz. active 2,4-D ester or amine per acre. Use higher rates when weed infestation is heavy. Add 1 to 2 pints of surfactant to the 3-way mixture, where necessary, as deemed by local recommendations. Use of additional surfactant may not be needed with the higher phenoxy rates and ester phenoxy formulations. Consult the specific 2,4-D or BANVEL label, or local recommendations for more information. Apply this 3-way combination to winter wheat after the crop is tillering and prior to jointing (first node). In Spring Wheat (including Durum wheat), apply after the crop is tillering and before it exceeds the 5-leaf stage. Do not apply this 3-way mixture at high rates more than once a year or more than twice per year at the low rates.

With bromoxynil (such as BUCTRIL[®], BRONATE[®])

Valuron 60DF may be tank mixed with bromoxynil-containing herbicides registered for use on wheat, barley, or fallow. For best results, add bromoxynil-containing herbicides to the tank at 3 to 6 oz. active ingredient per acre (such as BRONATE or BUCTRIL at ³/₄ to 1¹/₂ pints per acre).

Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using these tank mixtures. Follow the most restrictive labeling.

With Starane[®]

For improved control of Kochia (2-4" tall), Russian thistle, mustard species, and wild buckwheat, Valuron 60DF may be tank mixed with 1/3 to 1 1/3 pints per acre of Starane.

With Starane® + Salvo®

For improved control of Kochia (2-4" tall), Russian thistle, mustard species and wild buckwheat, Valuron 60DF may be tank mixed with 2/3 to 2 2/3 pints per acre of Starane + Salvo.

With Starane[®] + Sword[®]

For improved control of Kochia (2-4" tall), Russian thistle, mustard species and wild buckwheat, Valuron 60DF may be tank mixed with 3/4 to 2 3/4 pints per acre of Starane + Sword.

With Maverick[®]

Valuron 60DF can be tank mixed with maverick herbicide for improved control of weeds in wheat. *With Aim*[®]

Valuron 60DF can be tank mixed with Aim herbicide for improved control of weeds in wheat and barley.

With Stinger[®], Curtail[®], Curtail[®] M or Widematch[®]

Valuron 60 DF can be tank mixed with Stinger, Curtail, Curtail M, or Widematch herbicides for improved control of weeds in wheat and barley.

With grass control products

Tank mixtures of Valuron 60DF and grass control products may result in poor grass control. Makhteshim Agan recommends that you first consult your state experiment station, university or extension agent, agricultural dealer,

or Makhteshim Agan representative as to the potential for antagonism before using the mixture. If no information is available, limit the initial use of Valuron 60DF and the grass product to a small area. Do not tank mix Valuron 60DF with HOELON[®] 3EC, as grass control may be reduced.

With Assert[®] herbicide or Avenge[®] herbicide

To control wild oat, tank mix Valuron 60DF with AVENGE or ASSERT.

When tank mixing Valuron 60DF with ASSERT, always include 2,4-D ester, MCPA ester, or bromoxynilcontaining products (such as BUCTRIL or BRONATE). Tank-mixed applications of Valuron 60DF plus ASSERT may cause temporary crop discoloration, stunting, or injury when heavy rainfall occurs shortly after application.

With EXPRESS®

Valuron 60DF may be tank mixed with EXPRESS based on local recommendations.

Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using this tank mixture.

With HARMONY® EXTRA

Valuron 60DF may be tank mixed with HARMONY EXTRA based on local recommendations. Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using this tank mixture.

With Puma[®]

Valuron 60DF can be tank mixed with Puma herbicide for improved control of weeds in wheat and barley.

With Discover[®] NG

Valuron 60DF can be tank mixed with Discover NG herbicide for improved control of weeds in spring wheat.

With Everest®

Valuron 60DF can be tank mixed with Everest herbicide for improved control of weeds in spring wheat.

With Insecticides and Fungicides

Valuron 60DF may be tank mixed or used sequentially with insecticides and fungicides registered for use on cereal grains. However, under certain conditions (drought stress, cold weather, or if the crop is in the 2-4 leaf stage), tank mixes or sequential applications of Valuron 60DF with organophosphate insecticides (such as parathion, DI-SYSTON) may produce temporary crop yellowing or, in severe cases, crop injury. The potential for crop injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application. Test these mixtures in a small area before treating large areas. Do not apply Valuron 60DF within 60 days of crop emergence where an organophosphate insecticide (such as DI-SYSTON) has been applied as an infurrow treatment, as crop injury may result. Do not use Valuron 60DF plus malathion as crop injury will result.

With Liquid Nitrogen Solution Fertilizer

Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing Valuron 60DF in fertilizer solution. Valuron 60DF must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the Valuron 60DF is added. Use of this mixture may result in temporary crop yellowing and stunting. If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at ½ pint to 1 quart per 100 gallons of spray solution (0.06-0.25% v/v) based on local recommendations. When using high rates of liquid nitrogen fertilizer in the spray solution, adding surfactant increases the risk of crop injury. Consult your agricultural dealer, consultant, fieldman, or Makhteshim Agan representative for a specific recommendation before adding an adjuvant to these tank mixtures. If 2,4-D or MCPA is included with Valuron 60DF and fertilizer mixture, ester formulations tend to be more compatible (see manufacturer's label). Do not add surfactant when using Valuron 60DF in tank mix with 2,4-D ester or MCPA ester and liquid nitrogen fertilizer solutions.

Liquid nitrogen fertilizer solutions that contain sulfur can increase crop response. Do not use low rates of liquid fertilizer as a substitute for a surfactant. Do not use with liquid fertilizer solutions with a pH less than 3.0.

TANK MIXTURES IN PASTURES OR RANGELAND

Valuron 60DF can be applied in a tank-mix combination with GRAZON[®] P+D, TORDON[®] 22K, 2,4-D, BANVEL[®], or WEEDMASTER[®] in states where these products are labeled for postemergence control of the following weeds:

Annual marshelder	Common ragweed
Burclover	Giant ragweed

Carolina horsenettle	Prickly lettuce
Common cocklebur	Sunflower
Common milkweed	Western ragweed

For best results, apply Valuron 60DF at 1/10 to 2/10 oz. per acre with one of the following products:

Product	Rate (oz./A)	
GRAZON [®] P+D	8 to 32	
TORDON [®] 22K	4 to 16	
2,4-D	16 to 32	
BANVEL®	4 to 32	
WEEDMASTER®	8 to 32	
REMEDY®	8	
AMBER®	0.35*	

*For suppression of Ragweed in Phenoxy Restricted and Herbicide Regulated Counties.

With Liquid Nitrogen Solution Fertilizer

Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing Valuron 60DF in fertilizer solution. Valuron 60DF must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the Valuron 60DF is added. Use of this mixture may result in temporary crop yellowing and stunting.

If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at $\frac{1}{4}$ pint per 100 gallons of spray solution (0.03% v/v).

When using high rates of liquid nitrogen fertilizer in the spray solution, adding surfactant increases the risk of crop injury. Consult your agricultural dealer, consultant, fieldman, or Makhteshim Agan representative for a specific recommendation before adding an adjuvant to these tank mixtures.

If 2,4-D or MCPA is included with Valuron 60DF and fertilizer mixture, ester formulations tend to be more compatible (see manufacturer's label). Do not add surfactant when using Valuron 60DF in tank mix with 2,4-D ester and liquid nitrogen fertilizer solutions. Do not use low rates of liquid fertilizer as a substitute for a surfactant. Do not use with liquid fertilizer solutions with a pH less than 3.0.

TANK MIXTURES IN FALLOW

Valuron 60DF may be used as a fallow treatment and may be tank mixed with other herbicides that are registered for use in fallow. Read and follow all manufacturer's label recommendations for the companion herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with Valuron 60DF.

TANK MIXTURES IN HARVEST AID

A tank mix of Valuron 60DF plus 2,4-D and surfactant, or Glyphogan[®], will typically aid in dry down of many broadleaved weeds, thereby aiding grain harvest. Postemergence application should be made to actively growing weeds after the crop is in the hard dough stage. If weeds are not dry within 10 days after application, delay harvest until weeds are dry. See weeds listed in the WEEDS CONTROLLED chart of this label.

With 2,4-D

Use 1/10 oz. Valuron 60DF plus ¼ to ½ lb. active ingredient 2,4-D per acre on moderate weed infestations; higher rates of 2,4-D may be used on large weeds if permitted by the 2,4-D brand labeling. Include 1 to 2 quarts surfactant per 100 gallons spray solution. In addition to the weeds listed in WEEDS CONTROLLED chart of this label, the 2,4-D combination will also dry down common cocklebur, marestail, puncturevine, and common and wild sunflower. In areas where 2,4-D use is restricted, apply Valuron 60DF with surfactant only; however, this treatment may be less effective.

With Glyphogan[®]

Use 1/10 oz. Valuron 60DF plus the locally recommended rate of Glyphogan[®] (see Glyphogan[®] label for maximum seasonal rate). Valuron 60DF requires the use of an adjuvant for optimum activity. Consult the Glyphogan[®] label or local recommendations for the amount of adjuvant to include.

SURFACTANTS

Spray Adjuvants

Applications of Valuron 60DF must include either a nonionic surfactant or cop oil concentrate unless otherwise specified. In addition, an ammonium nitrogen fertilizer may be used. Consult local Makhtehshim Agan fact sheets technical bulletins, and service policies prior to using other adjuvant systems. If another herbicide is tank mixed with Valuron 60DF, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients (40 CFR 1001).

Nonionic Surfactant (NIS)

- Apply 0.06 to 0.50% v/v (1/2 to 4 pints per 100 gallons of spray solution) -See Tank Mixtures section for additional information.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

Exceptions: (1) On all spring wheat and spring or winter barley use ½ to 1 quart per 100 gallons; (2) on Fescue pastures use ¼ to ½ quart per 100 gallons; (3) on Timothy pastures use ¼ quart per 100 gallons. Consult your agricultural dealer, applicator, or Makhteshim Agan representative for a listing of recommended surfactants. Antifoaming agents may be used if needed.

Do not use low rates of liquid fertilizer as a substitute for surfactant.

GROUND APPLICATION

To obtain optimum spray distribution and thorough coverage, use flat-fan or low-volume flood nozzles.

For flood nozzles on 30" spacings, use at least 10 gallons per acre (GPA), flood nozzles no larger than TK10 (or equivalent), and a pressure of at least 30 pounds per square inch (psi). For 40" nozzle spacings, use at least 13 GPA; for 60" spacings, use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings. With RAINDROP RA nozzles, use at least 30 GPA and ensure that nozzle spray patterns overlap 100%.

Grain sorghum: Apply uniformly by ground with a properly calibrated low pressure (20-40 PSI) boom sprayer equipped with flat fan nozzles. Use 10-30 GPA with ground equipment.

For flat-fan nozzles, use at least 3 GPA for applications to wheat or barley. Use at least 10 GPA for applications to pasture or rangeland.

Use 50-mesh screens or larger.

AERIAL APPLICATION

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Wheat, Barley, Triticale, and Fallow: Use 1 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah.

Grain sorghum: Use orifice discs, cores, and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage at 2 to 5 GPA.

Pasture and Rangeland: Use 2 to 5 GPA.

When applying Valuron 60DF by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the Spray Drift Management section of this label.

PRODUCT MEASUREMENT

Valuron 60DF is measured using the Valuron 60DF volumetric measuring cylinder. The degree of accuracy of this cylinder varies by +/- 7.5%. For more precise measurement, use scales calibrated in ounces.

CROP ROTATION

Before using Valuron 60DF, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your wheat, barley, fallow, pasture, or rangeland acres at the same time.

Minimum Rotational Intervals

Minimum rotation intervals* are determined by the rate of breakdown of Valuron 60DF applied. Valuron 60DF breakdown in the soil is affected by soil pH, presence of soil microorganisms, soil temperature, and soil moisture. Low soil pH, high soil temperature, and high soil moisture increase Valuron 60DF breakdown in soil while high soil pH, low soil temperature, and low soil moisture slow Valuron 60DF breakdown. Of these 3 factors, only soil pH remains relatively constant. Soil temperature, and to a greater extent, soil moisture, can vary significantly from year to year and from area to area. For this reason, soil temperatures and soil moisture should be monitored regularly when considering crop rotations.

*The minimum rotation interval represents the period of time from the last application to the anticipated date of the next planting.

Soil pH Limitations

Valuron 60DF should not be used on soils having a pH above 7.9 as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, Valuron 60DF could remain in the soil for 34 months or more, injuring wheat and barley. In addition, other crops planted in high pH soils can be extremely sensitive to low concentrations of Valuron 60DF.

Checking Soil pH

Before using Valuron 60DF determine the soil pH of the areas of intended use. To obtain a representative pH value for the test area, take several 0" to 4" samples from different areas of the field and analyze them separately. Consult local extension publications for additional information on recommended soil sampling procedures.

BIOASSAY

A field bioassay must be completed before rotating to any crop not listed (see the Rotation Intervals table), or if the soil pH is not in the specified range, or if the use rate applied is not specified in the table, or if the minimum cumulative precipitation has not occurred since application.

Field Bioassay

To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with Valuron 60DF. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) grown in the test strips. If a field bioassay is planned, check with your local agricultural dealer or Makhteshim Agan representative for information detailing the field bioassay procedure.

Rotational Intervals for Cereals All Areas-Following Use of Valuron 60DF at 1/10 oz. per Acre						
Crop Soil pH Minimum Cumulative Minimum Rotation Precipitation (inches) Interval (months)						
Winter and spring wheat	7.9 or lower	No restrictions	1			
Durum wheat, barley, spring/winter oat	7.9 or lower	No restrictions	10			

Rotation Intervals for Crops in Non-Irrigated Land Following Use of Valuron 60DF at 1/10 oz. per Acre on Wheat, Barley, Fallow, or Pasture

Lo	County or Area	Сгор	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Colorado Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		IR Corn, STS soybeans	7.9 or lower	No restriction	4

	Generally north of I-70	Field corn	7.9 or lower	15	12
Idaho	Southern Idaho	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Statewide	Peas, Lentils, Canola	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	15
		Lentils	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas (Garbanzo Beans)	7.3 or lower	10	10
		Chickpeas (Garbanzo Beans)	7.4 or higher	28	34
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, safflower, Sunflower	7.9 or lower	No restrictions	22
	Central and Western Kansas	Field corn	7.9 or lower	15	12
	west of the Flint Hills	IR Corn	7.9 or lower	15	4
	Western Kansas west of Hwy. 183	Soybeans	7.5 or lower 7.6-7.9	22 33	22 34
	Central Kansas; generally east of	Soybeans	7.9 or lower	15	12
	Hwy. 183 and west of the Flinthills	STS Soybeans	7.9 or lower	15	4
Montana	Statewide	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22
		Alfalfa (hay only)	7.6-7.9	No restrictions	34
			7.5 or lower	No restrictions	22
		Sunflower	7.9 or lower		22
Nebraska	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		IR Corn, STS Soybeans	7.9 or lower	No restrictions	4
	Generally west of Hwy. 77 and east	Field corn	7.9 or lower	15	12
	of the Panhandle	Soybeans	7.5 or lower 7.6-7.9	22 33	22 34
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10

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		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	30	22
North Dakota	West of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Soybean, Sunflower	7.9 or lower	22	22
	East of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Soybean, Sunflower	7.9 or lower	34	34
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
		IR Corn, STS Soybean	7.9 or lower	No restrictions	4
	Panhandle	Cotton (dryland only)	7.9 or lower	30	22
	East of the Panhandle	Cotton (dryland only)	7.9 or lower	25	14
Oregon	Statewide	Peas, Lentils, Canola	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	15
		Lentils	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas (Garbanzo Beans)	7.3 or lower	10	10
		Chickpeas (Garbanzo Beans)	7.4 or higher	28	34
South Dakota	Statewide	Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	22
	South of Hwy. 212 & east of Missouri River, & south of Hwy. 34 & west of Missouri River	Grain sorghum, Proso millet	7.9 or lower	13	12

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	Generally east of Missouri River & south of Hwy. 14, & west of Missouri River	Field corn	7.9 or lower	15	12
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	22
	Panhandle	Field corn	7.9 or lower	15	12
		Cotton (dryland only)	7.9 or lower	30	22
	North Central Texas*	Field corn	7.9 or lower	15	12
		Cotton (dryland only)	7.9 or lower	25	14
	Camp, Cass, Clay, Foard, Franklin, C Kaufman, Knox, La Parker, Rains, Re Throckmorton, Titu	Gollin, Cooke, Cor Grayson, Hardemar amar, Limestone, M d River, Robertson s, Upshur, Van Zan	yell, Dallas, Delta, n, Haskell, Hill, H cLennan, Milam, N , Rockwall, Shack dt, Wilbarger, Wich	Denton, Eastiano, E ood, Hopkins, Hun lontague, Morris, N elford, Somervell, S ilta, Williamson, Wis	tilis, Falis, Fannin, t, Jack, Johnson, afarro, Palo Pinto, Stephens, Tarrent, e, Wood, Young
Washington	Statewide	Peas, Lentils, Canola	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	15
		Lentils	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas (Garbanzo Beans)	7.3 or lower	10	10
ł		Chickpeas (Garbanzo Beans)	7.4 or higher	28	34
Utah	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Wyoming	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Southern Wyoming	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
	Southern Wyoming (Goshen, Laramie, and Platte counties	Field corn	7.9 or lower	15	12
	Northern Wyoming	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22

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Rotation intervals not covered above; the minimum rotation interval is 34 months with at least 28" of cumulative precipitation during the period:

- to any major field crop not listed (See the Rotation Intervals table)
- if the soil pH is not in the specified range
- if the use rate applied is not specified in the table
- or if the minimum cumulative precipitation has not occurred since application

To rotate to a major field crop at an interval shorter than recommended, a field bioassay must be successfully completed to that crop. A field bioassay must be successfully completed before rotation to any minor crops (as determined by the USDA criteria). See section on Field Bioassay for further information.

Rotation Intervals in Pasture or Rangeland for Overseeding and Renovation

Location	Сгор	Maximum Valuron 60DF Rate on Pasture (oz. per acre)	Minimum Rotation Interval (months)
AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV	Alfalfa, red clover, white clover, sweet clover, bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, fescue, timothy	1/10 to 3/10	4
	Wheat (except durum)	1/10 to 3/10	1
	Durum, barley, oat	1/10 to 3/10	10
All Areas Not Included Above*	Red clover, white clover, sweet clover	1/10 to 2/10	12
	Bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, timothy	1/10 to 2/10	6
	Fescue	1/10 to 2/10	18
	Wheat (except durum)	1/10 to 2/10	1
	Durum, barley, oat	1/10 to 2/10	10

Rotation intervals not covered above; the minimum rotation interval is 34 months with at least 28" of cumulative precipitation during the period:

- to any major field crop or pasture crop not listed (See the Rotation Intervals table)
- if the use rate applied is not specified in the table

To rotate to a major field crop at an interval shorter than recommended, a field bioassay must be successfully completed to that crop. A field bioassay must be successfully completed before rotation to any minor crops (as determined by the USDA criteria). See section on Field Bioassay for further information.

Rotation Intervals for Crops in Non-Irrigated Land Following Use of Valuron 60DF at 1/20 oz Per Acre On Wheat That Will Be Grazed Out in TX, OK, NM, and KS.

CROP	SOIL pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Grain Sorghum	7.9 or lower	No Restrictions	4
Cotton	7.9 or lower	No Restrictions	10
Alfalfa	6.8 or lower	No Restrictions	10
	6.9 to 7.9	No Restrictions	22
Beans, Dry	6.8 or lower	No Restrictions	10
	6.9 to 7.9	No Restrictions	22

Rotation Intervals for crops not covered above following the use of Valuron 60DF at 1/20 oz per acre on wheat that will be grazed out.

Restriction:

For use only on winter wheat that will be grazed out and will not be harvested for grain.

The minimum rotation interval is 22 months with at least 18" of cumulative precipitation during the period:

- to any crop not listed in the Rotation Intervals table
- if the soil pH is not in the specified range

To rotate to a crop at an interval shorter than recommended, a field bioassay must be successfully completed to rotate to that crop. See section on Field Bioassay for further information.

SELECTIVE WEEDING TO AID IN THE ESTABLISHMENT AND MAINTENANCE OF GRASSES IN THE CONSERVATION RESERVE PROGRAM

Valuron 60DF Herbicide is recommended for the control or suppression of certain broadleaf weeds (refer to EPA approved label for weeds controlled and suppressed) in the following perennial native or improved grasses grown on land enrolled in the Conservation Reserve Program (CRP):

Blue Grama	Lovegrasses- atherstone, sand, weeping, wilman
Bluestems-big, little, plains, sand, WW spar	Orchardgrass
Buffalograss	Sideoats grama
Green sprangletop	Switchgrass- blackwell
Indiangrass	Wheatgrasses- bluebunch, crested, intermediate, pubescent, Siberian, slender, streambank, tall, thickspike, western
Kleingrass	Wildrye grass- Russian

GENERAL INFORMATION

Valuron 60DF Herbicide provides postemergence activity and offers short-term residual control or suppression of labeled weeds. Degree of control and duration of effect depend on weed spectrum and density; weed size and variability; amount of cover canopy; growing conditions prior to, at and following application; amount and timing of precipitation; and spray coverage.

Maximize potential for grass establishment by consulting with the Soil Conservation Service or other local experts concerning planting techniques and other cultural practices.

APPLICATION TIMING

Preplant (prior to planting): Valuron 60DF may be applied prior to planting at not more than 1/10 oz/A on all labeled grasses except orchardgrass and Russian wildrye grass.

Preemergence (after planting but before grass emergence): Valuron 60DF may be applied after planting, but before grass emergence, at not more than 1/10 oz/A on all labeled grasses except orchardgrass and Russian wildrye grass.

Early postemergence to new plantings: Valuron 60DF may be applied at not more than 1/10 oz/A on all labeled grasses anytime after grass emergence.

Because grass species differ in time of emergence, apply only after majority of grasses are in the 3-to-4 leaf stage.

Early postemergence applications to stands planted the previous season: Valuron 60DF may be applied at not more than 1/10 oz/A on all labeled grasses if the majority of the grasses have one or more leaves.

Late postemergence (tillered stands) to stands planted the previous season: Valuron 60DFmay applied at not more than 1/10 oz/A to all labeled grasses in all labeled states.

WEED CONTROL

For best weed control performance, use Valuron 60DF in a tank mix with 2,4-D (ester formulations perform best). Read and follow all manufacturer's label recommendations for the 2,4,-D used. If those recommendations conflict with this label, do not tank mix the 2,4-D with Valuron 60DF.

Apply Valuron 60DF preemergence to weeds or postemergence to small actively growing weeds before they exceed 4" in height or diameter. For all postemergence applications, add a surfactant at the rate of 1 to 2 quarts/100 gallons of spray solution.

One to two inches of rainfall (enough to wet the top 2-3 inches of soil profile) may be needed to move the herbicide into the weed root zone before the next flush of weeds emerge. The amount of moisture required for sufficient activation increases with crop or weed residue and for finer textured soils. Without sufficient rainfall to move Valuron 60DF in to the weed root zone, weeds that germinate after treatment will not be controlled.

Avoid postemergence applications to weeds which are not actively growing due to adverse weather conditions. Weeds hardened off by cold weather or drought stress may not be adequately controlled.

Performance: Because newly planted CRP grass stands do not sufficiently compete with weeds and because weed pressure in CRP fields is often severe, performance from Valuron 60DF may not always be satisfactory. An additional herbicide application or mowing may be needed.

TANK MIXTURES

Preplant: Valuron 60DF may be tank mixed with Glyphogan[®]or Landmaster^{®2} II as a preplanting treatment to control broadleaf and grassy weeds. When using Landmaster[®] II tank mix, allow at least 7 days after application before planting grasses. Refer to Glyphogan[®] and Landmaster[®] II fact sheets and labels for all use instructions, label rates, weed control claims, warnings and precautions.

Postemergence: Valuron 60DF can be tank mixed with 2,4-D at ¼ lb. Al/A for all labeled grasses larger than the 5-leaf stage. For fully tillered stands up to ½ lb. Al/A of 2,4-D may be used. Surfactant may be added at ½ to 1 qt per 100 gallons of spray solution. However, the addition of surfactant may increase the chance of grass injury.

Valuron 60DF can also be tank mixed with Banvel^{®1.} Use not more than 1/8 to ¼ lb. Al/A Banvel[®] plus Valuron 60DF after majority of grasses are in the 3-leaf stage. In established grasses (2nd year stands), use not more than ¼ to ½ lb. Al/A Banvel[®] plus Valuron 60DF. Surfactant may be added at ½ to 1 qt. per 100 gallons of spray solution. However, the addition of surfactant may increase the chance of grass injury.

Read and follow all use instructions, label rates, weed control claims, warnings and precautions for the companion herbicide(s).

PRECAUTIONS

Under certain conditions such as high soil pH, heavy rainfall, prolonged cool weather, or frost conditions, just prior to or soon after application, temporary discoloration or stunting of the grasses may occur.

Legumes in a seeding mixture may be severely injured or killed following an application of Valuron 60DF.

- Do not apply to frozen ground where surface runoff may occur. Do not apply when snow covers the ground.
- Do not use more than 2/10 ounce per acre per year.

Because cultivators of perennial grass differ in their tolerance to herbicides, limit the first use of Valuron 60DF to a small area prior to adoption as a field practice. Likewise, components in a seed mixture will vary in tolerance to Valuron 60DF so that the final stand may not reflect seed ratio.

Do not treat stands showing winter stress or lack of vigor symptoms as grass injury may occur.

RECROPPING INTERVALS FOR GRASSES ON CONSERVATION RESERVE PROGRAM (CRP)

Whenever Valuron 60DF has previously been used in wheat, barley, or fallow, the following grasses may be planted after the intervals specified in the tables below. The planting of grass and legume mixtures is not recommended as injury to the legume may occur.

Bentgrasses	Lovegrasses – Sand, Weeping	
Blue grama	Orchardgrass (Excluding Piaute)	
Bluestems-Big, Little, Plains, Sand, WW Spar	Praire sandreed	
Buffalograss	Sand dropseed	
Galleta	Sheep fescue	

Green needlegrass	Sideoats grama
Green sprangletop	Switchgrass
Indiangrass	Wheatgrasses –Crested, Intermediate, Pubescent, Slender, Streambank, Tall, Thickspike, Western
Indian ricegrass	Wild-ryegrasses- Beardless, Russian

ROTATION INTERVALS IN:

MN, MT, ND, SD, and Northern WY:

Soil pH	Use Rate (oz/acre)	Minimum Interval for Planting
Grasses		
7.5 or lower	1/10	4 months (all grasses)
7.6 to 7.9	1/10	4 months (Wheatgrasses only)

AR, CO, ID, KS, LA, NE, NM, OK, OR, TX, UT, WA, Southern WY:

Soil pH Grasses	Use Rate (oz/acre)	Minimum Interval for Planting
7.9 or lower	1/10	2 months (all grasses)

GRAZING

There are no grazing restrictions on Valuron 60DF.

IMPORTANT PRECAUTIONS

Treated vegetation may be cut for forage or hay. Coveralls and shoes plus socks must be worn if cutting within 4 hours of treatment.

MIXING INSTRUCTIONS

- 1. Fill the tank ¼ to 1/3 full of water (if using liquid nitrogen fertilizer solution in place of water, see TANK MIXTURES sections for additional details).
- 2. While agitating, add the required amount of Valuron 60DF.
- 3. Continue agitation until the Valuron 60DF is fully dispersed, at least 5 minutes.
- 4. Once the Valuron 60DF is fully dispersed, maintain agitation and continue filling tank with water. Valuron 60DF should be thoroughly mixed with water before adding any other material.
- 5. As the tank is filling add tank mix partners (if desired) then add the necessary volume of nonionic surfactant. Always add surfactant last.
- 6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly reagitate before using.
- 7. Apply Valuron 60DF spray mixture within 24 hours of mixing to avoid product degradation.
- 8. If Valuron 60DF and a tank mix partner are to be applied in multiple loads, preslurry the Valuron 60DF in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the Valuron 60DF.

Do not use Valuron 60DF with spray additives that reduce the pH of the spray solution to below 3.0.

SPRAY EQUIPMENT

For specific application equipment, refer to the manufacturer's recommendations for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment properly before application. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern with minimum drift. Use higher spray volumes to obtain better coverage when the crop canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, turning, slowing, or stopping to avoid crop injury.

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Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray to drift onto nontarget sites. For additional information on spray drift, refer to the Spray Drift Management section of the label.

Continuous agitation is required to keep Valuron 60DF in suspension.

SPRAYER CLEANUP

Spray equipment must be cleaned before Valuron 60DF is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined in After Spraying Valuron 60DF section of this label.

At the End of the Day

When multiple loads of Valuron 60DF herbicide are applied, it is recommended that at the end of each day of spraying, the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits that can accumulate in the application equipment.

After Spraying Valuron 60DF and Before Spraying Crops other then Wheat, Barley, Triticale, Grain Sorghum, Fallow, Pasture, or Rangeland

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of Valuron 60DF as follows:

- 1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
- 2. Fill the tank with clean water and 1 gallon of household ammonia* (contains 3% active) for every 100 gallons of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.
- 3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 4. Repeat step 2.
- 5. Rinse the tank, boom, and hoses with clean water.
- 6. If only ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

*Equivalent amounts of an alternate-strength ammonia solution or a Makhteshim Agan-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your agricultural dealer, applicator, or Makhteshim Agan representative for a listing of approved cleaners.

Notes:

- 1. Attention: Do not use chlorine bleach with ammonia as dangerous gases will form. Do not clean equipment in an enclosed area.
- 2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
- 3. When Valuron 60DF is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.
- 4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual labels.
- 5. Where routine spraying practices include shared equipment frequently being switched between applications of Valuron 60DF and applications of other pesticides to Valuron 60DF-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to Valuron 60DF to further reduce the chance of crop injury.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines 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 (>150-200 microns). 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.

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential

can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

WEED RESISTANCE

Biotypes of certain weeds listed on this label are resistant to Valuron 60DF and other herbicides with the same mode of action*, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species that are identical in appearance but have slightly different genetic compositions; the mode of action of an herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to retreat problem areas using a product with a different mode of action, such as postemergence broadleaf and/or grass herbicides.

If resistant weed biotypes such as kochia, prickly lettuce, and Russian thistle are suspected or known to be present, use a tank-mix partner with Valuron 60DF to help control these biotypes, or use a planned herbicide rotation program where other residual broadleaf herbicides having different modes of action are used.

*Naturally occurring weed biotypes that are resistant to ALS inhibitor herbicides (such as AMBER Herbicide, PURSUIT[®] Herbicide, FINESSE Herbicide, or HARMONY EXTRA Herbicide) may also be resistant to Valuron 60DF.

INTEGRATED PEST MANAGEMENT

To better manage weed resistance when using Valuron 60DF, use a combination of tillage and tank-mix partners or sequential herbicide applications that have a different mode of action than Valuron 60DF, to control escaped weeds. Do not let weed escapes go to seed.

Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative herbicide recommendations available in your area.

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.

PRECAUTIONS

- Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
 - ⇒ Do not apply (except as recommended), drain, or flush 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, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
 - \Rightarrow Do not use on grasses grown for seed.
- Do not apply to irrigated land where tailwater will be used to irrigate crops other than wheat and barley.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- Wheat and barley varieties may differ in their response to various herbicides. Makhteshim Agan recommends that you first consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use of Valuron 60DF to a small area.
- Under certain conditions such as heavy rainfall, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after Valuron 60DF application, temporary discoloration and/or crop injury may occur. Valuron 60DF should not be applied to wheat or barley that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Risk of injury is greatest when crop is in the 2- to 5-leaf stage. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.
- The combined treatment effects of Valuron 60DF postemergence preceded by preemergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold weather, or drought) causes poor seedling vigor.
- In the Pacific Northwest, to prevent cold weather-related crop injury, avoid making applications during winter months when weather conditions are unpredictable and can be severe.
- Do not apply to wheat, barley, or pastures undersown with legumes, as injury to the forage may result.

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- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when treated soil is blown onto land used to produce crops other than cereal grains or pasture/rangeland.
- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.
- Preplant or preemergence applications of 2,4-D or herbicides containing 2,4-D made within 2 weeks of planting spring cereals may cause crop injury when used in conjunction with early postemergence applications of Valuron 60DF. For increased crop safety, delay Valuron 60DF treatment until crop tillering has begun.

STORAGE AND DISPOSAL

STORAGE: Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food, or feed in storage.

PRODUCT DISPOSAL: Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **CONTAINER DISPOSAL:**

Nonrefillable Container (flexible-bag-all weights): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available.

Nonrefillable Container (rigid-fifty lbs. or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Nonrefillable Container (rigid-greater than fifty lbs.): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Refillable Container: Refillable container. Refill this container with metsulfuron methyl only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

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