

66330-310

03/06/2009

1/05



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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Bill Washburn  
Regulatory Manager  
Arysta LifeScience North America LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

MAR 6 2009

Subject: Label Notification(s) for Pesticide Registration Notices 2007-4 and 98-10

1. Update of company name
2. Added emergency telephone number(s)
3. Updated warranty statement

Dear Mr. Washburn:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notices (PRN) 2007-4 and 98-10 dated February 3, 2009 for:

**EPA Registration 66330-310**

**Metsulfuron 60EG AG**

**EPA Registration 66330-307**

**Metsulfuron 60EG IVM**

The Registration Division (RD) has conducted a review of this request for applicability under PR Notices 2007-4 and 98-10 and finds that the label changes requested falls within the scope of PR Notices 2007-4 and 98-10. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Nicole Williams of my staff at 703-308-5551.

Sincerely,

A handwritten signature in black ink, appearing to be "Linda Arrington".

Linda Arrington  
Notifications & Minor Formulations Team Leader  
Registration Division (7505P)  
Office of Pesticide Programs

 <b>EPA</b> United States <b>Environmental Protection Agency</b> Washington, DC 20460	<input type="checkbox"/> <b>Registration</b> <input type="checkbox"/> <b>Amendment</b> <input checked="" type="checkbox"/> <b>Other:</b>	OPP Identifier Number
--	--	-----------------------

### Application for Pesticide - Section I

1. Company/Product Number <b>66330-310</b>	2. EPA Product Manager <b>LINDA ARRINGTON</b>	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) <b>METSULFURON 60EG AG</b>	PM#	
5. Name and Address of Applicant (Include ZIP Code)  <b>Arysta LifeScience North America, LLC</b> <b>15401 Weston Parkway, Suite 150</b> <b>Cary, NC 27513</b>  <input type="checkbox"/> Check if this is a new address	6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ <b>MAR 6 - 2009</b>  Product Name _____	

### Section - II

<input type="checkbox"/> Amendment – Explain below. <input type="checkbox"/> Resubmission in response to Agency letter dated _____ <input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application <input type="checkbox"/> Other - Explain below
--	---

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.)


**Notification of label change per PR Notice 2007-4.** This notification is consistent with guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if the amendment is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

**Notification of label change per PR Notice 98-10.** This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

### Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	
	If "Yes" Unit Packaging wgt.    No. per container	If "Yes" Package wgt.    No. per container		<input checked="" type="checkbox"/> Plastic <i>bag</i>	
*Certification must be submitted				<input type="checkbox"/> Glass	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container				4. Size(s) Retail Container <b>1.0 lb., 3.0 lb., 5 lb., and 10 lb.</b>	
5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On labeling accompanying product				6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	

### Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application).		
Name <b>Bill Washburn</b>	Title <b>Regulatory Manager</b>	Telephone No. (Include Area Code) <b>901-432-5118</b>
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title <b>Regulatory Manager</b>	
4. Typed Name <b>Bill Washburn</b>	5. Date <b>02/03/09</b>	



4/25

**METSULFURON 60EG AG**  
**Dry Flowable Herbicide**  
**For Use on Barley, Fallow, Pastures, Rangeland and Wheat**

**NOTIFICATION**

**MAR 6 - 2009**

**ACTIVE INGREDIENT:**

Metsulfuron methyl:

Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]carbonyl]amino]sulfonyl]benzoate.....60%

**OTHER INGREDIENTS:** .....40%

**TOTAL:** .....100%

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

<b>FIRST AID</b>	
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>HOT LINE NUMBER</b>	
<b>EMERGENCY TELEPHONE NUMBERS:</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952</b>	
<b>FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300</b>	

See enclosed booklet for additional precautionary language

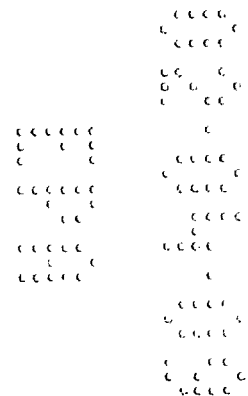
EPA Reg. No. 66330-310

EPA Est. No. XXX-XX-XXX

AD103105

Net Contents: \_\_\_\_\_

**Manufactured For:**  
**ARYSTA LIFESCIENCE NORTH AMERICA, LLC**  
15401 Weston Parkway, Suite 150  
Cary, NC 27513



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

**PERSONAL PROTECTIVE EQUIPMENT**

Some of the materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants.
- Shoes plus socks.
- Chemical-resistant gloves made of any waterproof material (such as polyethylene or polyvinylchloride).

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**

Users should:

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 cleaning equipment or 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:

6/25

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material

#### **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.

Weed control in pastures and rangeland is not within the scope of the Worker Protection Standard.

Do not enter or allow unprotected persons to enter treated area until sprays have dried.

All uses of METSULFURON 60EG AG should conform to recommendations published either herein or in separate Micro Flo recommendations. Losses or damages resulting from any use of this product not specifically recommended by Micro Flo are not Micro Flo's responsibility. All risks of non-recommended product usage is assumed by the user.

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

#### **GENERAL INFORMATION**

In most areas, METSULFURON 60EG AG is suggested for use on barley, fallow, pasture, rangeland and wheat. Prior to using METSULFURON 60EG AG, confirm that it is registered for use in your state with the local state extension or Department of Agriculture (the Colorado counties of Alamosa, Conejos, Costilla, Rio Grande, and Saquache have not approved METSULFURON 60EG AG for use therein).

METSULFURON 60EG AG is a dispersible granule that is applied with a surfactant as a spray after being mixed in water or slurried in a liquid nitrogen carrier.

Optimum control over foliage is achieved after emergence or dormancy break. Except as specified, optimum control is achieved when applied to young, actively growing weeds. The local environmental conditions, weed species and size at the time of application will determine use rate.

METSULFURON 60EG AG is noncorrosive, nonflammable, nonvolatile and does not freeze.

#### **ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY**

Primary absorption of METSULFURON 60EG AG takes place through plant foliage, creating leaf damage in susceptible plants and death within 1-3 weeks after treatment.

Crop density will impact the effectiveness of METSULFURON 60EG AG – very thin or thick crop canopies may result in unsatisfactory weed control. For superior results use with healthy, active-growing crops with undergrowth weed competition.

Local environmental factors, such as moisture or temperature extremes, unusual soil conditions, crop breed variance/sensitivities or local procedural norms may create plant stress, which in turn creates a greater risk of crop damage from herbicide use, including METSULFURON 60EG AG.

Temperature extremes may impact the onset of obvious herbicide effects – for example, warm, moist weather will enhance symptoms, whereas cold, dry weather will slow the appearance of symptoms.

Extremes in moisture may decrease herbicide effectiveness – in drought conditions, weeds may be less vulnerable to METSULFURON 60EG AG, whereas precipitation may reduce effectiveness when it occurs shortly after treatment.

#### METSULFURON 60EG AG APPLICATION INFORMATION

CROP	DOSE RATE	TREATMENT TIMING Note: Crop damage may result from treatment at boot or early heading stages
Fallow	1/10 oz per acre	During active weed growth spring and autumn
Harvest Aid	1/10 oz per acre with 2,4-D or Roundup <sup>(1)</sup>	At least 10 days before harvest in hard dough stage <sup>(3)</sup>
Pasture and Rangeland	Broadcast Treatment: 1/10 to 4/10 oz per acre Spot Treatment: 1 oz per 100 gal of water <sup>(2)</sup>	Apply no earlier than the following times from establishment: <sup>(4)</sup> Bermudagrass 2 months Bluegrass, Bromegrass, and orchardgrass 6 months Timothy 12 months Fescue 24 months
Barley and Wheat (including durum)	1/10 oz per acre	Dryland (not Durum or Wampum variety) – crop should be in 2-leaf stage, prior to boot Durum and Wampum Variety Spring Wheat – between tillering and boot stages, with 2,4-D Irrigated Wheat and Barley - between tillering and boot stages; do not irrigate for 3-days or with more than 1 inch of water post application

- (1) Grain harvest will be improved with addition of 2,4-D or Roundup as these products assist with broadleaf weed drydown.
- (2) No more than ¾ oz METSULFURON 60EG AG should be used per acre.
- (3) For more information, refer to Harvest Aid Tank Mix section of this label.
- (4) Native grasses, such as bluestems and grama, may also be treated with METSULFURON 60EG AG.

#### ADDITIONAL NOTICES REGARDING PASTURE GRASSES

##### Fescue:

In the short term fescue may be yellowed, seedheads may be suppressed (leading to decreased crop yields at first cut) or other damage may occur – such effects may be decreased through a number of measures:

- 1.) Use 2,4-D in tank mix with METSULFURON 60EG AG
- 2.) The minimal suggested rate for local weeds should be applied
- 3.) 1/2 - 1 pt surfactant per 100 gal spray solution (1/16 to 1/8% v/v) should be applied (unless carrier is liquid nitrogen)
- 4.) Damage is lessened when growth is at least 5-6 inches tall, therefore target treatments for fall or late spring

##### Timothy:

Timothy may be yellowed and/or growth may be suppressed if METSULFURON 60EG AG is used when crop is less than 6" tall. – such effects may be decreased through a number of measures:

- 1.) Use 2,4-D in tank mix with METSULFURON 60EG AG
- 2.) The minimal suggested rate for local weeds should be applied
- 3.) 1/2 - 1 pt surfactant per 100 gal spray solution (1/16% v/v) should be applied (unless carrier is liquid nitrogen)
- 4.) Damage is lessened if treatments are targeted for late summer or fall

**Other Pastures:** Herbicide tolerance varies among plant species and varieties – to protect crops from potential damage, and to assess local effectiveness of product, it is recommended that only a single container of METSULFURON 60EG AG be used during the first treatment on a grass/location and that crop tolerance be assessed for a full season before increasing dosage and coverage in subsequent years.

**NOTES:**

- Do not apply this product to **Ryegrass Pastures (Italian or perennial)** as crop damage and pasture loss may result through use of this product.
- Certain species are highly susceptible to crop damage from METSULFURON 60EG AG, such as **Alfalfa and clover and other broadleaf pasture species.**

**WEEDS CONTROLLED**

Apply to actively growing weeds at a maximum of 4" in any dimension, unless specifically instructed otherwise.

Rainfall less than 4 hours after treatment may decrease product efficacy.

**CEREALS, FALLOW, PASTURE and RANGELAND**

Apply 1/10 oz per acre

Blue/purple mustard*	Mayweed chamomile
Bur buttercup (testiculate)	Miners lettuce
Coast fiddleneck (tarweed)	Pigweed (redroot, smooth, tumble)
Common chickweed	Plains coreopsis
Common purslane	Prickly lettuce*
Conical catchfly	Russian thistle*
Cowcockle	Shepherd's purse
False chamomile	Smallseed falseflax
Field pennycress (fanweed)	Smartweed (green, ladythumb, pale)
Filaree	Snow speedwell
Flixweed*	Tansy mustard*
Groundsel (common)	Treacle mustard (Bushy Wallflower)
Henbit	Tumble/Jim Hill mustard
Kochia*	Volunteer sunflower
Lambsquarters (common, slimleaf)	Waterpod
	Wild mustard

**PASTURE and RANGELAND WEEDS**

Apply 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	



Apply 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	Wild carrot

Apply 4/10 oz per acre

Serecia lespedeza\*

#### WEEDS SUPPRESSED ^^

##### CEREALS, FALLOW, PASTURE and RANGELAND

Apply 1/10 oz per acre

Canada thistle\*  
Common sunflower\*  
Corn gromwell\*  
Knotweed (prostrate)\*  
Sowthistle (annual)\*  
Wild buckwheat\*

##### BRUSH SUPPRESSED

Apply 3/10 oz per acre

Blackberry  
Dewberry  
Multiflora rose\*

##### SPOT APPLICATION (PASTURE/RANGELAND ONLY)

Apply 1 oz per 100 gal of water

Blackberry*	Dewberry*
Canada thistle*	Multiflora rose*

\* Refer to Specific Weed Issues portion of this label.

^ Weed suppression means that weed competition is decreased, typically consisting of smaller numbers of less healthy weed plants as compared to areas which have not been treated. Several variables, such as amount of product used, weed size and vigor and local environment, impact the success of a weed suppression program.

##### SPECIFIC WEED ISSUES

**For best results it is necessary to ensure spray coverage of each detailed weed species that follows:**

**Blue Mustard, Flixweed and Tansymustard:** Use METSULFURON 60EG AG postemergence/pre-bloom in 2,4-D or MCPA tank mixture.

**Canada Thistle and Sowthistle:** To decrease crop competition, use METSULFURON 60EG AG during active-growth between rosette stage and 6" of stem growth in spring with in tank mix with surfactant and 2,4-D or MCPA

**Spot Applications (pasture/rangeland):** Use on fully leafed plants, taking care to ensure total exposure to all foliage and stems – spraying from all sides may be required. Spray mix to runoff with a surfactant at 1 to 2 qt per 100 gal of spray solution.

10/25

**Corn Gromwell and Prostrate Knotweed:** Use METSULFURON 60EG AG (with surfactant) in fields where crop canopy is sparse enough to permit exposure on actively growing plants which are at most 2" high. For best results, tank mix with 2,4-D or MCPA.

**Kochia, Prickly lettuce, Russian thistle:** Use METSULFURON 60EG AG on actively growing weeds which do not exceed 2" in any diameter during spring months. Use of 2,4-D and Banvel/Banvel SGF or bromoxynil (such as 3/4 - 1 pt Buctril + 1/4 - 3/8 lb active 2,4-D ester) in tank mixture is recommended to help combat difficult to control resistant biotypes (for more information, see label directions for Tank Mixtures).

**Sunflower (common/volunteer):** Use METSULFURON 60EG AG on actively growing, postemergence flowers between 2"-4" high. Product should be used with surfactant or 2,4-D or MCPA in no less than 3 gal by air or 5 gal by ground (10 gal by ground in pastures) spray volume.

**Wild Buckwheat:** Use METSULFURON 60EG AG on actively growing plants with fewer than three true non-cotyledon leaves (do not use when weeds are not growing actively). Use with 2,4-D or MCPA tank mixture.

**Musk Thistle:** Use METSULFURON 60EG AG before flower stage in spring/summer or after rosette stage in autumn (prior to soil freeze) at 2/10 to 3/10 oz per acre.

**Multiflora Rose:** Use METSULFURON 60EG AG in spring on fully leafed roses no more than 3' high. Broadcast application is recommended for optimal weed elimination.

**Spot Applications (pasture/rangeland):** Use on fully leafed plants, taking care to ensure total exposure to all foliage and stems – spraying from all sides may be required. Spray mix to runoff with a surfactant at 1 to 2 qt per 100 gal of spray solution.

**Blackberry and Dewberry Spot Applications (pasture/rangeland):** Use on fully leafed plants, taking care to ensure total exposure to all foliage and stems – spraying from all sides may be required. Spray mix to runoff with a surfactant at 1 to 2 qt per 100 gal of spray solution.

**Pensacola bahiagrass only\* (in Bermudagrass pasture establishment):** Use METSULFURON 60EG AG (with surfactant) under optimal growth conditions and prior to development of bahiagrass seedheads at a rate of at 3/10 oz per acre. Treatment in liquid fertilizer solutions is not recommended. Certain environmental stress conditions, such as drought or unusually high temperatures, and grass or grazing pressure, may make this product less effective. It is recommended that treatments be spread out over multiple growing seasons to control forage destruction and that use be combined with nitrogen and potassium fertilization and/or replanting of bermudagrass.

\*Common or Argentine bahiagrass are not recommended for use with METSULFURON 60EG AG.

**Serecia lespedeza:** Use METSULFURON 60EG AG in non-drought conditions between initial bud flowering and full bloom at 4/10 oz per acre with 1 to 2 qt per 100 gal surfactant in spray solution.

**Wild Garlic:** Use METSULFURON 60EG AG on garlic plants with only 2-4 inches of new growth and no more than 12" tall at 1/10 to 2/10 oz per acre.

**Woolly Croton:** Use METSULFURON 60EG AG on plants with no more than two true leaves (in spring/early summer) at 1/10 to 2/10 oz per acre.

#### SURFACTANTS

Nonionic surfactant consisting of a minimum of 80% active ingredient at 1 to 2 qt per 100 gal of spray solution (0.25 to 0.5% v/v) should always be used, with or without anti-foaming agent, absent directions to the contrary. Guidelines for suggested surfactants may be obtained where METSULFURON 60EG AG product was purchased, other agricultural suppliers or service providers or directly from your Micro Flo representative.

Liquid fertilizer is not a suitable replacement for surfactant and should not be used at any rate.

**Exceptions:** (1) 1/2 to 1 qt per 100 gals should be used for spring wheat/spring and winter barley;

- (2) 1/4 to 1/2 qt per 100 gals should be used on fescue pastures;  
 (3) 1/4 qt per 100 gals should be used on timothy pastures.

#### GROUND APPLICATION

Flat-fan or low-volume flood nozzles are recommended for best product dispersal and exposure with screens no smaller than 50-mesh.

Nozzle Type	Amount	Notes
30" Spacing Flood	Minimum 10 gallons per acre (GPA)	Nozzles should be TKIO equivalent (or smaller) with a minimum of 30 lbs. pressure per square inch.  All spacing nozzles must be overlapped completely.
40" Spacing Flood	Minimum 13 GPA	All spacing nozzles must be overlapped completely.
60" Spacing Flood	Minimum 20 GPA	All spacing nozzles must be overlapped completely.
Raindrop1 RA	Minimum 30 GPA	Nozzles spray patters must be overlapped completely.
Flat Fan	Minimum 3 GPA (barley/wheat) Minimum 10 GPA (pasture/rangeland)	--

#### AERIAL APPLICATION

Consider efficiency of product dispersal and exposure when selecting nozzle types and arrangements.

Apply between 1-5 GPA on **barley, fallow and wheat** (in Idaho, Oregon or Utah, apply a minimum of 3 GPA).

Apply between 2-5 GPA on **pasture and rangeland**.

Use caution to prevent spray drift – when sensitive crops are grown in nearby areas, consider using ground equipment on field edges and orient solid stream nozzles straight back during air treatments. For more information, refer to label information regarding Spray Drift Management.

#### MEASUREMENT

Utilize the METSULFURON 60EG AG volumetric measuring cylinder to measure this product. Cylinder measurements may vary by +/- 7.5% and ounce calibrated scales may be used if more detailed measurement is necessary.

#### TANK MIXTURES

Tank mixtures of METSULFURON 60EG AG and additional registered herbicides may used to manage unwanted growth of plants as described in this label at Weed Suppressed, those not specifically described as Weeds Controlled or those that have METSULFURON 60EG AG resistance.

Only herbicides with labeling instructions which are not in disagreement with this label should be tank mixed with METSULFURON 60EG AG. If there are any labeling conflicts, do not tank mix products.

12/25

## BARLEY AND WHEAT

Tank Mixture	Dose Rate	Timing	Notes
METSULFURON 60EG AG + 2,4-D (amine or ester) or MCPA (amine or ester)	1/10 oz per acre  + 1/4 to 1/2 lb active	Postemergence – 2,4-D - between tillering and boot stages (see 2,4-D label) MCPA - between 3-5 leaf and boot stages (post tillering for Durum and Wampum)	1/2 to 1 qt per 100 gal of spray solution surfactant may be used (although adds to risk of crop damage)
METSULFURON 60EG AG + Banvel or Banvel SGF	1/10 oz per acre  + 1/16 to 1/8 lb	See Banvel/Banvel SGF labels	1/2 to 1 qt per 100 gal of spray solution surfactant may be used (although adds to risk of crop damage)
METSULFURON 60EG AG + 2,4-D (amine or ester) + Banvel or Banvel SGF	1/10 oz per acre  + 4 - 6 oz active  + 2 - 3 oz Banvel or 4 - 6 oz Banvel SGF	Winter wheat – between tillering and first node joining stages  Spring wheat (including Durum) – between tillering and 5-leaf stage	When applying 3-way tank mixture, take special care to read and understand all product labels and restrictions.  When weeds are thick, use high end of use ranges – limit use at this level to one time annually. At lower range, limit use to two times annually.  Surfactant may be used at 1-2 pts. if indicated by local conditions and product labels.
METSULFURON 60EG AG + Bromoxynil (e.g. BUCTRIL or BRONATE)	3 to 6 oz or 3/4 - 1 1/2 pt per acre	See Bromoxynil labels.	Take special care to understand all product labels and restrictions – follow most conservative recommendations.
METSULFURON 60EG AG + Assert + 2,4-D or MCPA ester or Bromoxynil			Some combination of listed products should be used when METSULFURN and Assert used in Tank Mix.  Short term crop damage (e.g. discoloration, stunting) may be associated with significant precipitation subsequent to treatment.
METSULFURON 60EG AG + Express		See product labels.	Local conditions and advice will inform whether this tank mix is appropriate for use in a given area.  See product labels for directions, warnings and counterindications. Follow the most restrictive labeling.
METSULFURON 60EG AG + Harmony Extra		See product labels.	Local conditions and advice will inform whether this tank mix is appropriate for use in a given area.  See product labels for directions, warnings and counterindications. Follow the most restrictive labeling.

13/25

**Notes regarding tank mixtures of METSULFURON 60EG AG and grass control products:**

- Prior to tank mixing METSULFURON 60EG AG and grass control products, in order to avoid possible insufficient weed suppression discuss local growth competition conditions with a local agricultural extension agents, university, experiment station, agricultural dealer, or Micro Flo representative. Test in a discreet area prior to widespread use.
- Tank mixtures of Avenge or Assert may be used to control wild oat growth.
- Do not tak-mix Metsulfuron 60EG AG and Hoelon 3EC, as grass control may be reduced.

**Notes regarding tank mixes of METSULFURON 60EG AG and insecticides and fungicides:**

- Tank mixtures or sequential application may be used.
- Crop damage (short-term yellowing, permanent injury) may result from use of METSULFURON 60EG AG with organophosphate insecticides (e.g. parathion, Di-Syston) if crops are already stressed from drought, severe temperatures or if plants have between 2-4 leaves. Extreme differences in day and nighttime temperatures may increase the likelihood for crop damage.
- Tank mixtures should be spot tested prior to full field application.
- If an organophosphate insecticide (e.g. Di-Syston) is used for in-furrow applications, do not use METSULFURON 60EG AG for 60 days prior to crop emergence.
- To avoid crop damage, do not use Malathion, in connection with METSULFURON 60EG AG.

**Notes regarding tank mixing with liquid nitrogen solution fertilizer carrier:**

- Compatibility tests should be run prior to using liquid nitrogen fertilizer solutions instead of water as a carrier solution in tank mixtures.
- Short term crop damage (yellowing, stunting) may arise when liquid nitrogen solutions are used.
- Do not use in liquid nitrogen fertilizer solutions as a replacement for surfactant.
- Always use liquid nitrogen fertilizer solutions with a pH of at least 3.0.

Application Instructions:

- 1.) Combine METSULFURON 60EG AG with small amount of water.
- 2.) Combine slurried METSULFURON 60EG AG with liquid nitrogen solutions (sample rates - 28-0-0, 32-0-0). Mixture must be constantly agitated during the mixing process.
- 3.) Surfactant –
  - Low rate liquid nitrogen fertilizer use (spray volume no more than 50%) - 1/2 to 1 qt per 100 gal (0.06-0.25%) of spray solution surfactant should be used per local conditions and advice.
  - High rate liquid nitrogen fertilizer use (spray volume more than 50%) – surfactant not recommended without specific local indications due to higher potential for crop damage. Consult local representatives for more information.
- 4.) Use with 2,4-D/MCPA – Ester solutions are preferred, surfactant should not be used.

**HARVEST AID**

Grain harvest may be assisted by using tank mixed METSULFURON 60EG AG with the products described below to increase broadleaf weed dry down. Specific weed species controlled are detailed on this label at Weeds Controlled.

Tank Mixture	Dose Rate	Timing	Notes
METSULFURON 60EG AG + 2,4-D	1/10 oz per acre + 1/4 to 1/2 lb active	Postemergence – hard dough stage (active growing weeds only)  Do not harvest within 10 days of application or when weeds are still wet.	1 -2 qts per 100 gal of spray solution surfactant should be used*  Increased amounts of 2,4-D may be used on large, dense weeds  Can be used on cocklebur, marestalk, puncturevine and common and wild sunflower in addition to listed weeds
METSULFURON 60EG AG	1/10 oz per acre	Postemergence – hard dough stage (active growing weeds)	See Roundup label for adjuvant directions – note that adjuvant is

14/25

+	+	only)	suggested for best results
Roundup	Refer to Roundup label and local use rates	Do not harvest within 10 days of application or when weeds are still wet.	

\*This information applies to use with surfactant only in areas where 2,4-D is not approved for use. Such treatments may not be as successful.

#### FALLOW

When using METSULFURON 60EG AG with other herbicides in tank mix for fallow, carefully examine all label directions for each tank mixed product – do not combine product with incompatible labeling.

#### PASTURES OR RANGELAND

2,4-D, Banvel, Grazon P+D, Tordon 22K or Weedmaster may all be tank mixed with METSULFURON 60EG AG, provided that the all tank mixed products are approved for local postemergence use on the plant varieties below:

Annual marshelder	Common ragweed
Burclover	Giant ragweed
Carolina horsenettle	Prickly lettuce
Common cocklebur	Sunflower
Common milkweed	Western ragweed

METSULFURON 60EG AG should be used at 1/10 to 2/10 oz per acre in combination with any individual product below:

<u>Product</u>	<u>Rate (oz /A)</u>
2,4-D	16 to 32
Amber	0.35 *
Banvel	4 to 32
Grazon P+D	8 to 32
Remedy	8
Tordon 22K	4 to 16
Weedmaster	8 to 32

\* May be used on ragweed on counties where Phenoxy is restricted or herbicides are otherwise regulated

#### Notes regarding tank mixing with liquid nitrogen solution fertilizer carrier:

- Compatibility tests should be run prior to using liquid nitrogen fertilizer solutions instead of water as a carrier solution in tank mixtures.
- Short term crop damage (yellowing, stunting) may arise when liquid nitrogen solutions are used.
- Do not use in liquid nitrogen fertilizer solutions as a replacement for surfactant.
- Always use liquid nitrogen fertilizer solutions with a pH of at least 3.0.

#### Application Instructions:

- 1.) Combine METSULFURON 60EG AG with small amount of water.
- 2.) Combine slurried METSULFURON 60EG AG with liquid nitrogen solutions (sample rates - 28-0-0, 32-0-0). Mixture must be constantly agitated during the mixing process.
- 3.) Surfactant –
  - Low rate liquid nitrogen fertilizer use (spray volume no more than 50%) - 1/4 qt per 100 gal (0.03% v/v) of spray solution surfactant should be used per local conditions and advice.
  - High rate liquid nitrogen fertilizer use (spray volume more than 50%) – surfactant not recommended without specific local indications due to higher potential for crop damage. Consult local representatives for more information.
- 4.) Use with 2,4-D/MCPA – Ester solutions are preferred, surfactant should not be used.

15/05

**CROP ROTATION**

In order to maintain flexibility with future planting, take care to set out your crop rotation strategy for future planting seasons prior to applying any agricultural chemical, including METSULFURON 60EG AG. Because this product has limited crop approval, when rotating crops which are not approved for use with METSULFURON 60EG AG, space out applications of approved barley, fallow, pasture, rangeland and wheat acreage and leave some fields untreated at any given time.

**MINIMUM ROTATIONAL INTERVALS**

The least permissible time between application of METSULFURON 60EG AG and the next proposed planting is the "minimum rotational interval" and is set by examining the rate at which METSULFURON 60EG AG is decomposed in the soil.

Four main factors impact soil breakdown:

- Soil pH – high pH decreases/low pH increases
- Soil temperature – high temperature increases/low temperature decreases
- Soil moisture – high moisture increases/low moisture decreases
- microorganisms in soil

It is recommended that each of these variables be habitually measured and accounted for in crop rotation determinations, in particular soil moisture and temperature which are highly changeable and reliant on uncontrollable environmental factors.

**Notes regarding soil pH:**

Prior to applying METSULFURON 60EG AG, soil pH samples should be taken from a representative field area. Local agricultural resources can provide specific details regarding local conditions and suggested procedures, however generally it is advised to take 0"-4" samples from multiple field locations for individual examination.

If field tests indicate that soil pH is greater than 7.9, use of METSULFURON 60EG AG could lead to wheat and barley crop injury, due to extended breakdown rates and rotation intervals approaching three years. Other crops may be similarly affected by ongoing low levels of METSULFURON 60EG AG in the soil, therefore use is not recommended in such situations.

**BARLEY AND WHEAT**

Post-Application of METSULFURON 60EG AG at 1/10 OZ per acre – all regions

CROP	SOIL pH	MINIMUM CUMULATIVE PRECIPITATION (INCHES)	MINIMUM ROTATION INTERVAL (MONTHS)
Spring/winter wheat	Less than 7.9	N/A	1
Barley, durum wheat, spring/winter oat	Less than 7.9	N/A	10

16/25

## NON-IRRIGATED LAND CROPS

Post application of METSULFURON 60EG AG at 1/10 OZ PER ACRE (barley, fallow, pasture, or wheat)

STATE	LOCATION County or Area	CROP	SOIL pH	MINIMUM CUMULATIVE PRECIPITATION (inches)	MINIMUM ROTATION INTERVAL (months)
Colorado	All	Grain sorghum, Proso millet	Less than 7.9	N/A	10
	Commonly north of I-70	Flax, Safflower, Sunflower	Less than 7.9	N/A	22
		Field Corn	Less than 7.9	15	12
Idaho	Southern	Flax, Safflower, Sunflower	Less than 7.9	N/A	22
	All	Canola Lentils Peas	Less than 6.8	18	10
		Canola	6.9 - 7.9	18	22
		Lentils	6.9 - 7.9	18	34
		Peas	6.9 - 7.9	18	15
Kansas	All	Grain sorghum, Proso millet	Less than 7.9	N/A	10
		Flax, Safflower, Sunflower	Less than 7.9	N/A	22
	Central and Western (West of Flintheads)	Field Corn	Less than 7.9	15	12
	Western (West of Hwy. 183)	Soybeans	Less than 7.5	22	22
			7.6-7.9	33	34
Central (commonly East of Hwy. 183 and West of Flintheads)	Soybeans	Less than 7.9	15	12	
Montana	All	Field Corn Grain sorghum, Proso millet	Less than 7.9	22	22
		Alfalfa (hay only)	7.6 - 7.9	N/A	34
			Less than 7.5	N/A	22
		Flax, Safflower, Sunflower	Less than 7.9	N/A	22
Nebraska	All	Grain sorghum, Proso millet	Less than 7.9	N/A	10
		Flax, Safflower, Sunflower	Less than 7.9	N/A	22
	Commonly West of Hwy. 77 and East of the Panhandle	Field Corn	Less than 7.9	15	12
		Soybeans	Less than 7.5	22	22
			7.6 - 7.9	33	34



17/25

STATE	LOCATION County or Area	CROP	SOIL pH	MINIMUM CUMULATIVE PRECIPITATION (inches)	MINIMUM ROTATION INTERVAL (months)
New Mexico	All	Grain sorghum, Proso millet	Less than 7.9	N/A	10
		Flax, Safflower, Sunflower	Less than 7.9	N/A	22
	Eastern	Cotton (dryland only)	Less than 7.9	30	22
North Dakota	West of Hwy. 1	Dry beans, Field corn, Flax, Grain sorghum, Proso millet, Safflower, Sunflower	Less than 7.9	22	22
	East of Hwy. 1	Dry beans, Field corn, Flax, Grain sorghum, Proso millet, Safflower, Sunflower	Less than 7.9	34	34
Oklahoma	All	Grain sorghum, Proso millet	Less than 7.9	N/A	10
		Flax, Safflower, Sunflower	Less than 7.9	N/A	22
		Field corn	Less than 7.9	15	12
	Panhandle	Cotton (dryland only)	Less than 7.9	30	22
	East of the Panhandle	Cotton (dryland only)	Less than 7.9	25	14
Oregon	All	Canola, Lentils, Peas	Less than 6.8	18	10
		Canola	6.9 - 7.9	18	22
		Lentils	6.9 - 7.9	18	34
		Peas	6.9 - 7.9	18	15
South Dakota	All	Flax, Safflower, Sunflower	Less than 7.9	N/A	22
	South of Hwy. 212, East of the Missouri River, South of Hwy. 34 and West of Missouri River	Grain sorghum, Proso millet	Less than 7.9	13	12
	Commonly East of Missouri River, South of Hwy. 14, and West of Missouri River	Field Corn	Less than 7.9	15	12
Texas	All	Grain sorghum Proso millet	Less than 7.9	N/A	10
		Flax, Safflower, Sunflower	Less than 7.9	N/A	22

18/25

STATE	LOCATION County or Area	CROP	SOIL pH	MINIMUM CUMULATIVE PRECIPITATION (inches)	MINIMUM ROTATION INTERVAL (months)
	Panhandle	Field corn	Less than 7.9	15	12
		Cotton (dryland only)	Less than 7.9	30	22
	Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Nafarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrant, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood and Young counties	Field Corn	Less than 7.9	15	12
		Cotton (dryland only)	Less than 7.9	25	14
Washington	All	Canola, Lentils, Peas	Less than 6.8	18	10
		Canola	6.9 - 7.9	18	22
		Lentils	6.9 - 7.9	18	34
		Peas	6.9 - 7.9	18	15
Utah	All	Flax, Safflower, Sunflower	Less than 7.9	N/A	22
Wyoming	All	Flax, Safflower, Sunflower	Less than 7.9	N/A	22
	Southern	Grain sorghum, Proso millet	Less than 7.9	N/A	10
	Goshen, Laramie, and Platte counties	Field corn	Less than 7.9	15	12
	Northern	Grain sorghum, Field corn Proso millet	Less than 7.9	22	22

**For situations not specified:**

When considering crops, geographic areas or other situations which are not covered in the previous chart, presume a 34 month minimum rotation intervals provided that overall precipitation is a minimum of 28" over that period. If a decreased minimum rotation interval is desired, then a crop specific field bioassay should be conducted successfully prior to major crop rotation or prior to any minor crop rotation (as per USDA guidelines). Refer to Field Bioassay labeling.

19/25

**PASTURE/RANGELAND**  
(Overseeding and renovation)

LOCATION	CROP	MAXIMUM METSULFURON 60EG AG RATE ON PASTURE (oz per A)	MINIMUM ROTATION INTERVAL (Months)
Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia	Alfalfa, bermudagrass, bluegrass, bromegrass, fescue, orchardgrass, red clover, ryegrass, sweet clover, timothy, white clover	1/10 - 3/10	4
	Wheat (except durum)	1/10 - 3/10	1
	Barley, durum, oat	1/10 - 3/10	10
All other states	Red clover, sweet clover, white clover	1/10 - 2/10	12
	Bermudagrass, bluegrass, bromegrass, orchardgrass, ryegrass, timothy	1/10 - 2/10	6
	Fescue	1/10 - 2/10	18
	Wheat (except durum)	1/10 - 2/10	1
	Barley, durum, oat	1/10 - 2/10	10

**For situations not specified:**

When considering crops, geographic areas or other situations which are not covered in the previous chart, presume a 34 month minimum rotation intervals provided that overall precipitation is a minimum of 28" over that period. If a decreased minimum rotation interval is desired, then a crop specific field bioassay should be conducted successfully prior to major crop rotation or prior to any minor crop rotation (as per USDA guidelines). Refer to Field Bioassay labeling.

**FIELD BIOASSAY**

Prior to rotating any non-listed crops (per Rotation Intervals charts), or when soil, precipitation and use conditions do not conform to chart requirements, then a field bioassay should be conducted by cultivating crop "test strips" under intended growth conditions in METSULFURON 60EG AG treated fields. The success of the bioassay should suggest the likely success of full field cultivation. Information on specific local field bioassay practices should be discussed with your Micro Flo dealer or representative prior to testing.

**GRAZING/FORAGE/HAY**

Pastures and rangeland treated with METSULFURON 60EG AG may be grazed or cut for forage and hay.

If cutting less than 4 hours after application, then basic protective clothing should be worn (coveralls, shoes and socks). Refer to Agricultural Use Requirements for additional information.

**MIXING METSULFURON 60EG AG (WATER CARRIER)**

1. Add water to mixing tank/container until 1/4 to 1/3 full (refer to Tank Mixture section for liquid nitrogen fertilizer solution instructions).
2. Continually stir solution while adding appropriate measure of METSULFURON 60EG AG.
3. Mix constantly for 5 minutes or more to completely disperse METSULFURON 60EG AG.
4. Fill tank with water, mixing constantly, ensuring that METSULFURON 60EG AG is completely combined with water prior to combining additives.
5. Tank mix additives may be combined as tank fills, followed by nonionic surfactant (surfactant should be final additive).
6. Without constant agitation, blend will begin to settle, requiring remixing prior to application.
7. Once combined with water and other additives, METSULFURON 60EG AG should be used in no more than 24 hours or degradation may occur.
8. When multiple loads of METSULFURON 60EG AG and tank mix chemicals are planned, METSULFURON 60EG AG should be slurred in a small amount of clear water before tank mixing to allow METSULFURON 60EG AG to dissolve completely.
9. Do not use METSULFURON 60EG AG with spray additives, which decrease overall spray solution pH to be less than 3.0.

20/25

**SPRAY EQUIPMENT**

For details on appropriate GPA, nozzle types and arrangements, nozzle heights above the target canopy, pressure, speed and other sprayer characteristics, see sprayer product labeling.

An even spray pattern can be obtained through the use of an appropriate spray volume and delivery system. Prior to use, ensure that the sprayer is calibrated. Prevent damage to non-target plants while starting, turning, slowing or stopping by avoiding overlapping and shut off spray booms.

Take care to avoid spray drift and refrain from using equipment, settings, or using this product when environmental factors would contribute to spray drift. Carefully study label details regarding Spray Drift Management.

**SPRAYER CLEANUP**

Prior to METSULFURON 60EG AG spraying, clean all spray equipment. Label cleanup procedures for previously applied products should be abided by. In the event that label directions for previously applied products are not provided, the procedure below should be followed.

If more than one METSULFURON 60EG AG application is used, several steps should be taken at the end of each day of spraying in order to avoid the accumulation of dried pesticide deposits in the application equipment. First, rinse the interior of the tank with fresh water. Then, partially refill the tank. Finally, flush the boom and hoses.

**Instructions for re-using equipment for crops not approved for use with METSULFURON 60EG AG:**

All apparatus must be completely cleaned directly after use of METSULFURON 60EG AG to prevent damage to other crops during later use:

1. Empty tank; using clean water, completely rinse spray tanks, boom, and hoses. Detach visible deposits.
2. Fill the tank with clean water. Per 100 gal of clean water, add 1 gal of household ammonia\* (contains 3% active). Use the solution to flush the hoses, boom, and nozzles. After flushing, fill the tank completely with solution and circulate it throughout the tank and hoses. Continue circulation for a minimum of 15 minutes. Use the solution to flush the hoses, boom, and nozzles again. Empty the tank.
3. Detach the nozzles and screens. Rinse separately with cleaning agent and water.
4. Conduct step 2 again.
5. Use clear water to rinse the tank, boom, and hoses.
6. The rinsate solution may be re-applied to the crop(s) as specified herein, if ammonia is used as the only cleaner. Abide by all labeled use rate instructions. Refer to the label on the cleaner for rinsate disposal instructions in the event that other cleaners are used. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

\*Cleaning can also be conducted using equal amounts of an alternate - strength ammonia solution or a MICRO FLO-approved cleaner product. Be sure to carefully review and abide by the individual cleaner instructions. Agricultural dealers, applicators, or MICRO FLO representatives should be contacted for a listing of approved cleaners.

**Comments:**

1. Combining chlorine bleach and ammonia will produce dangerous gases. Do not mix these substances. Equipment cleaning procedures should not be conducted in an enclosed area.
2. To aid in the removal of any caked deposits, steam-clean aerial spray tanks before conducting the cleanout procedure.
3. Follow the most intensive cleaning procedures when tank mixing METSULFURON 60EG AG with other pesticides.
4. In accordance with the individual label guidelines, follow all pre-cleanout guidelines on subsequently applied products.

## 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. Several factors will influence the applicator balance of drift control and coverage. These factors include: the presence of sensitive species nearby, the environmental conditions, and pest pressure. **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** – Follow recommended lower spray pressures for the nozzle. Using higher pressure will result in smaller droplet size and will not increase 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 released parallel to the airstream produces larger droplets than other orientations and is the recommended practice.

**Nozzle Type** – Bigger droplets will be produced from solid stream nozzles, including disc and core with swirl plate removed, oriented straight back.

**Boom Length** – For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height** - Spray drift potential is greater if application is made more than 10 ft above the canopy.

#### BOOM HEIGHT

To decrease droplet exposure to evaporation and wind, set the boom at the lowest labeled height that will provide even coverage. Keep the boom on crop level and minimize bounce when using ground equipment.

#### WIND

Wind speeds of more than 10 mph will heighten drift potential. The possibility of inversion at wind speeds of less than 3 mph will also increase drift potential. However, drift potential will also be affected by numerous other factors at any given wind speed, including droplet size and equipment type. **DO NOT MAKE APPLICATIONS DURING HIGH WINDS 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 increases during a temperature inversion because vertical air mixing is restricted, causing small suspended droplets to stay 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**

Wind influence can be decreased by shielding the boom or individual nozzles. The applicator must ensure that the shields are preventing drift but are not interfering with even product application.

### **AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS**

Air assisted field crop sprayers work by aiming a stream of air (and chemical droplets) at the ground/targeted weed growth. If such sprayers are appropriate for the desired use and are calibrated accordingly, then the likelihood of spray drift may be low. Otherwise, such sprayers may result in high spray drift. The applicator must ensure that the equipment used is appropriate and set up accordingly and that no drift is actually taking place.

**Note:** Product effectiveness, namely overall coverage and penetration) may be influenced by use of air assisted field sprayers and use of this equipment may not always be advisable. See label details regarding application equipment for more information.

### **WEED RESISTANCE**

Some plant species will develop multiple "biotypes" or variances in the genetic code which create plants which look the same, but which actually may react differently to chemical applications. Some weed types which are generally controllable with METSULFURON 60EG AG have developed resistance to ALS inhibitors and similarly acting herbicides such as Amber Herbicide, Pursuit Herbicide, Finesse Herbicide, Harmony Extra Herbicide and METSULFURON 60EG AG.

Difficult targets may require treatment with a herbicide with a different mode of action, for example, post-emergence broadleaf and/or grass herbicides. Such products can be used in tank mixture with METSULFURON 60EG AG or a planned rotation program can be developed where different products are used at different times. Such measures are particularly important against biotypes which are known to be resistant to METSULFURON 60EG AG, for example, kochia, prickly lettuce, and Russian thistle.

### **INTEGRATED PEST MANAGEMENT**

Multiple methods should be used to combat field weed problems and to avoid weed seeding. In addition to use of METSULFURON 60EG AG, other options include use of other herbicides with different modes of action in tank-mixture or rotation and field tillage. Refer to local agricultural information resources for other appropriate herbicides for your location and crop type. In addition, always maintain complete records of herbicide and pesticide applications, including timing, dose-rate and field information in order to track the effectiveness of treatments and resistance development.

**PRECAUTIONS**

Failure to observe the following may cause damage to or eradication of desirable trees or other plants:

Do not drain or flush equipment onto or near desirable trees or other plants. This prohibition extends to areas where roots of desirable trees or other plants may reach and to areas where the herbicide may be washed or moved into contact with roots

Do not apply to athletic fields, commercial sod operations, driveways, golf courses, lawns, tennis courts, walks, or other high-maintenance, fine turfgrass areas.

Do not apply this product to grasses grown for seed.

Do not apply to irrigated land where tidewater 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 this product to snow-covered ground.

Product application should be limited when information is not obtainable regarding local conditions and reactions of barley and wheat crops from local experiment stations, university agricultural departments, or extension agents.

Short term crop damage (e.g. discoloration) may result from the use of this product during times of intense rain, extensive cold temperatures, or extreme differences in day and nighttime temperatures. Stress caused by severe weather, insect infestation, drought or disease may also cause crop damage, particularly to barley and wheat with between 2 and 5 leaves. METSULFURON 60EG AG is not recommended under these conditions.

Crop damage may occur to stressed spring wheat (as indicated by lack of seedling vigor) from preemergence use of wild oat herbicides and postemergence use of METSULFURON 60EG AG

Crop damage may result from use of this product in cold weather, therefore it should not be used during the winter in the Pacific Northwest or elsewhere with potentially extreme and unpredictable winter weather.

Do not apply this product to wheat, barley, or pastures underseeded with legumes.

Crop injury may result to nearby land from soil erosion if soil treated with METSULFURON 60EG AG drifts away from treatment area. This risk can be decreased by avoiding application of this product to unpacked, light, or dry soil without first stabilizing soil with rain, mulch, by decreasing tillage, or other locally approved methods.

Product effectiveness may be decreased during ground application in dry, dusty wheel tracks, and tank mixing METSULFURON 60EG AG with 2,4-D or MCPA is recommended.

If treatment with 2,4-D containing herbicides was made less than 2 weeks prior to spring cereal planting, it is recommended that subsequent postemergence treatment with METSULFURON 60EG AG be postponed until the start of tillering to avoid potential crop damage.

24/25

## STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Store product in a cool dry place in original container only. Store separately from water, other pesticides, fertilizer, food or feed to avoid contamination.

**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. Do not reuse or refill this container. Offer for recycling, if available, or dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### Warranty and Disclaimer Statement

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. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.**

Raindrop RA is a trademark of Delevan Corp.

Amber is a trademark of Novartis Crop Protection Inc.

Assert, Avenge, Banvel, Banvel SGF, Pursuit, Weedmaster are trademarks of BASF Corp.

Buctril, Bronate, Hoelon 3EC are trademarks of Aventis CropScience.

Grazon P+D, remedy, Tordon 22K are trademarks of Dow AgroSciences

Di-Syston is a trademark of Bayer Corp

Express, Finesse and Harmoney Extra are trademarks of E.I. DuPont de Nemours Co.



**METSULFURON 60EG AG  
Dry Flowable Herbicide**

**ACTIVE INGREDIENT:**

Metsulfuron methyl:  
Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate ..... 60%  
**OTHER INGREDIENTS:** ..... 40%  
**TOTAL:** ..... 100%

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

<b>FIRST AID</b>	
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>HOT LINE NUMBER</b>	
<b>EMERGENCY TELEPHONE NUMBERS:</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952</b>	
<b>FOR CHEMICAL EMERGENCY:</b> Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300	

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

**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 cleaning equipment or disposing of equipment washwaters.

**DIRECTIONS FOR USE**

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

**STORAGE AND DISPOSAL**

**PESTICIDE STORAGE:** Store product in a cool dry place in original container only. Store separately from water, other pesticides, fertilizer, food or feed to avoid contamination.  
**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. Do not reuse or refill this container. Offer for recycling, if available, or dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**See attached booklet for additional precautionary language**

EPA Reg. No. 66330-310

EPA Est. No. XXX-XX-XXX

AD103105

Net Contents: \_\_\_\_\_

**Manufactured For:**

ARYTA LIFESCIENCE NORTH AMERICA, LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

25/25