

84930-14

10/8/2008

1/30



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

84930-14

OCT - 8 2008

NOTICE OF PESTICIDE:

- x Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

ARC-MET 60

Name and Address of Registrant (include ZIP Code):

ARCANA, LLC
323 S. College Ave., Suite 1
Fort Collins, CO 80524

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Make the following label changes:
1. Change the EPA Reg. No. to "84930-14".
2. Change the Active Ingredient's name to "Metsulfuron-methyl: methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]carbonyl]amino]sulfonyl]benzoate".
3. Change the heading from "INERT INGREDIENTS" to "OTHER INGREDIENTS".
4. Change the Spanish statement to read "Si usted no entiende la etiqueta..."
5. Change the second Environmental Hazards statement to "Do not contaminate...wash waters or rinsate."
6. On page 2, delete "V" from the seventh bullet under "Important".

Continued on page 2

Signature of Approving Official:

Jim Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

[Handwritten signature]

Date:

OCT 8 2008

7. On page 3, correct the typo in the heading "DIRECTIONS FOR USE".
8. Under Agricultural Use Requirements, add "Chemical-resistant gloves" to PPE.
9. On page 4, delete the phrase "point subsequently dies" from the 1st sentence.
10. On page 4 under Wheat and Barley use rates, change the word "to" to "or".
11. On page 4 under Durum and Wampum Spring Wheat, correct the typo "varieties".
12. On page 5 under Fescue Precautions, correct the typo "Note than..." to "Note that..."
13. On page 5 under Fescue and Timothy Precautions, change the phrase "recommended rate" to "directed rate".
14. On page 6 & 8, change the weed name from "Serencia lospedeza" to "Sericea lespedeza".
15. On page 7, revise the phrase "Weed suppression...(reduced population and/or vigor)..."
16. On page 7, correct the typo "CANADA THISTLE AND SOWTHISTLE". Also correct the sentence "The application will inhibit...to **compete** with the crop."
17. On page 7, correct the typo "CORN GROMWELL AND PROSTRATE **KNOTWEED**".
18. On page 8 under PENSACOLA BAHIAGRASS CONTROL, change the rate from "3.10 oz." to "3/10 oz." Correct the sentence "Under heavy bahiagrass...weather **conditions**...may occur."
19. On page 8 under "NOTE:", change the first sentence to read "Do not use ARC-MET 70 for the control..." and the second sentence to read "Do not apply ARC-MET 60 in liquid fertilizer..."
20. On page 9 under SURFACTANTS, change "Rotam" to "Arcana, LLC".
21. On page 9 under GROUND APPLICATION, correct the typo "30 **GPA**".
22. On page 10 under PRODUCT MEASUREMENT, change the first sentence to "ARC-MET 60 is **measured**..."
23. On page 11 under WITH GRASS CONTROL PRODUCTS, change the third sentence to "If **no** information is available...small area."
24. On page 12 under WITH 2,4-D, change the third sentence to read "In addition to the weeds listed...marestail, **puncturevine**, and common and **wild** sunflower."

25. On page 13, change the first sentence in the third paragraph to "When using high rates of liquid nitrogen fertilizer...risk of **crop** injury."
26. On page 18, change the last bullet to "Or **if** the minimum cumulative..." and change the following sentence to "To **rotate** to a major field crop...completed to that crop."
27. Move all text from "GRAZING" section on page 20 through page 25 before Storage and Disposal section to page 4 before "APPLICATION INFORMATION" section.
28. On page 20 under "8.", change the second sentence to "This **will** prevent..."
29. On page 24, correct the typo in the sentence "If weed control is unsatisfactory...such as postemergence **broadleaf** and/or grass herbicides."
30. On page 24 under PRECAUTIONS, change "Rotam" to "Arcana, LLC".
31. Change the heading "DISPOSAL STATEMENTS" to "CONTAINER DISPOSAL".
32. Revise the Container Disposal text to reflect solid formulation and container sizes. The directions for packages greater than 56 gallons must also be revised to reflect nonrefillable container residue removal statement. Refer to PR Notice 2007-4 for guidance on Container Disposal statements.

Also, please note that 40 CFR Part 156.140(a)(4) requires that a lot number, batch code, or other code used to identify the batch of the pesticide product which is distributed and sold be placed on nonrefillable containers. The code may appear either on the label or durably marked on the container itself.

33. On page 27, make the following changes to the Condition of Sale and Limitation of Warranty and Liability section:
 - a. Revise the first sentence of the second paragraph to "The Directions **for** Use of this product **must** be followed carefully."
 - b. Revise the third sentence of the third paragraph to "TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARCANA LLC MAKES NO WARRANTIES...EXCEPT AS STATED ABOVE."
 - c. Revise the last sentence to "TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY...REPLACEMENT OF THE PRODUCT."

Submit one (1) copy of the revised final printed label for the record.

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

A stamped copy of the label is enclosed for your records.

4/30

ACCEPTED
with COMMENTS
in EPA Letter Dated

ARC-MET 60

OCT - 8 2008

Agricultural Herbicide

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

84930-14

FOR USE ON WHEAT, BARLEY, FALLOW, PASTURES, AND RANGELAND

ACTIVE INGREDIENT:

Metsulfuron-methyl: methyl 2-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonylsulfonylbenzoate.....60.0%

INERT INGREDIENTS.....40.0%

TOTAL.....100.0%

EPA Reg. No.: 84930-

EPA Establishment No.: xxxxx-xx-xx

Net Contents:

Manufactured For:

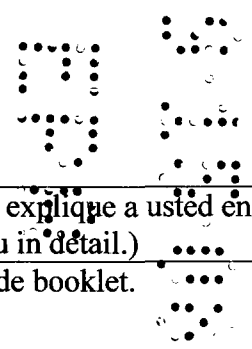
ARCANA, LLC

323 S. College Ave., Ste 1

Fort Collins, CO 80524

KEEP OUT OF REACH OF CHILDREN

CAUTION



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

See additional precautionary statements and directions for use inside booklet.

FIRST AID (Sulfonylurea)

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 CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF 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, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician (Sulfonylurea)

Symptoms of Poisoning and Recommendations for Medical Treatment: The compound does not cause any definite symptoms that would be diagnostic. Contact with the eyes may cause irritation.

No specific antidote. Treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time (NPIC Web site: www.npic.orst.edu). Outside of these times call your poison control center at 1-800-222-1222.

**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

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.

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 wash waters.

USER SAFETY RECOMMENDATIONS

User should:

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

IMPORTANT

- 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 the single spot in the field or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rate Vuses.
- 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 US

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. Keep unprotected persons out of treated areas until sprays have dried.

CHEMIGATION STATEMENT

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

GENERAL INFORMATION

ARC-MET 60 herbicide is recommended for use on land primarily dedicated to the production of wheat, barley, fallow, pasture, and rangeland.

ARC-MET 60 is recommended for use on wheat, barley, fallow, pasture, and rangeland in most states; check with your state extension or Department of Agriculture before use to be certain

ARC-MET 60 is registered in your state. **ARC-MET 60 is not registered for use in Alamosa, Conejos, Costilla, Rio Grande, and Saguache counties of Colorado.** ARC-MET 60 is a dry-flowable granule that controls weeds in wheat (including durum), barley, pasture, rangeland grasses, and fallow. ARC-MET 60 is mixed in water or can be pre-slurried 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.

ARC-MET 60 controls weeds by postemergence activity. For best results, apply ARC-MET 60 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

ARC-MET 60 is absorbed through the foliage of broadleaf weeds rapidly inhibiting their growth point subsequently dies. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies. Application of ARC-MET 60 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.

ARC-MET 60 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 ARC-MET 60 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 ARC-MET 60.

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

APPLICATION INFORMATION

Use Rates

Wheat (including Durum) and Barley	Apply 1/10 oz. ARC-MET 60 per acre to wheat to barley.
Pasture and Rangeland	Apply 1/10 to 4/10 oz. ARC-MET 60 per acre as a broadcast treatment to pasture and rangeland. For spot applications, use 1 oz. per 100 gallons of water. Do not exceed 3/4 oz ARC-MET 60 per acre.
Harvest Aid	Apply 1/10 ARC-MET 60 per acre in combination with 2,4-D or Roundup to aid in dry down of many broadleaved weeds, thereby aiding grain harvest.
Fallow	Apply ARC-MET 60 at 1/10 oz. per acre.

Wheat and Barley (Application Timing)

Dryland Wheat and Barley (except Durum and 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 2,4D
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.
Wheat and Barley-	Make applications after the crop has reached the hard dough stage but no

Harvest Aid	later than 10 days before harvest. See section on Harvest Aid tank mixtures.
Fallow	ARC-MET 60 may be used as a fallow treatment in the spring or fall when the majority of weeds have emerged and are actively growing.

Do not apply during boot or early heading as crop injury may result.

Pasture Grasses (Application Timing)

ARC-MET 60 may be used on some native grasses such as bluestems and grama, and on other pasture grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass, fescue, and timothy. Specific application information on several of these pasture grasses follows:

Pasture Grass	Minimum time from grass establishment to ARC-MET 60 application
Bermudagrass	2 months
Bluegrass, Bromegrass, Orchardgrass	6 months
Timothy	12 months
Fescue	24 months

Fescue Precautions:

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

- Tank mix ARC-MET 60 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 ARC-MET 60.

Timothy Precautions:

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

- Tank mix ARC-MET 60 with 2,4-D
- Use the lowest recommended rate for target weeds
- 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 ARC-MET 60 as injury to or loss of pasture may result.

Other Pastures: Varieties and species of pasture grasses differ in their tolerance to herbicides. When using ARC-MET 60 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 ARC-MET 60 and will be severely stunted or injured by ARC-MET 60.

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, ladythumb, 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	

1/10 to 2/10 oz. per acre

Annual marshelder	Horsemint (beebalm)
Blackeyed-Susan	Musk thistle*
Buckbrush ¹	Pensacola bahiagrass*
Burclover	Purple scabious
Common yarrow	Western snowberry ¹
Dogfennel Wildcarr	Wildcarrot

2/10 to 3/10 oz. per acre

Serencia lospedeza*

Weeds Suppressed^{1*}

Cereals, Pasture, Rangeland, and Fallow 1/10 oz. per acre

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

Brush Suppressed¹

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 ARC-MET 60 tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom.

CANANDA THISTLE AND SHOWTHISTLE: Apply either ARC-MET 60 plus surfactant or ARC-MET 60 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 complete 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 KNOTWED: Apply ARC-MET 60 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 ARC-MET 60 can improve results.

KOCHIA, RUSSIAN THISTLE, PRICKLY LETTUCE: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use ARC-MET 60 in a tank with BANVEL ®/BANVEL ® SGF and 2,4-D, or bromoxynil and 2,4-D (such as 3/4 – 1 pint BUCTRIL® + ¼ - 3/8 lb. active 2,4-D eked. ARC-MET 60 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 ARC-MET 60 plus surfactant or ARC-MET 60 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 ARC-MET 60 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 ARC-MET 60 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 the rosette stage of growth. Fall applications should be made before the soil freezes

MULTIFLORA ROSE: For best control, apply ARC-MET 60 as a broadcast application when multiflora rose is less than 3’ tall. Application should made in the spring, soon after multiflora rose is fully leafed. For spot application 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 ARC-MET 60 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.

ARC-MET 60 is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pasture, the use of ARC-MET 60 can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore ARC-MET 60 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: ARC-MET 60 should not be used for the control of common or Argentine bahiagrass. Also, ARC-MET 60 should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

SERECIA LESPEDEZA: Apply ARC-MET 60 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.

12/30

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 ARC-MET 60 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 ARC-MET 60 in the late spring or early summer at preemergence through 2 true leaf stage.

SURFACTANTS

Unless otherwise specified, add a Rotam recommended nonionic surfactant having at least 80% active ingredient at 1 to 2 quarts per 100 gallons of spray solution (0.25 to 0.50% v/v)

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 or applicator, 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 GAP and ensure that nozzle spray patterns overlap 100%.

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, AND FALLOW: Use 1 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah.

PASTURE AND RANGELAND: USE 2 TO 5 GPA.

When applying ARC-MET 60 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

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

TANK MIXTURES

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

TANK MIXTURES IN CEREALS (WHEAT AND BARLEY) WITH 2,4-D (AMINE OR ESTER) OR MCPA (AMINE OR ESTER)

ARC-MET 60 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 ARC-MET 60 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 ARC-MET 60 plus MCPA after the 3- to 5-leaf stage but before boot (with Durum and Wampum varieties do not apply before tillering). Apply ARC-MET 60 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 ARC-MET 60 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

ARC-MET 60 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 ARC-MET 60 + 2 - 3 oz. BANVEL (4 - 6 oz. BANVEL SGF) + 4 - 6oz. 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 ®)

ARC-MET 60 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 ¾ to 1 ½ pints per acre).

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

WITH GRASS CONTROL PRODUCTS

Tank mixtures of ARC-MET 60 and grass control products may result in poor grass control. Rotam recommends that you first consult your state experiment station, university extension agent or agricultural dealer, as to the potential for antagonism before using the mixture. If not information is available, limit the initial use of ARC-MET 60 and the grass product to a small area.

To control wild oat, tank mix ARC-MET 60 with AVENGE ® or ASSERT ®.

When tank mixing ARC-MET 60 with ASSERT, always include 2,4-D ester, MCPA ester, or bromoxynil-containing products (such as BUSTRIL or BRONATE). Tank-mixed application of ARC-MET 60 plus ASSERT may cause temporary crop discoloration, stunting, or injury when heavy rainfall occurs shortly after application. Do not tank mix ARC-MET 60 with HOELON 3EC ®, as grass control may be reduced.

WITH EXPRESS ®

ARC-MET 60 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

ARC-MET 60 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 INSECTICIDES AND FUNGICIDES

ARC-MET 60 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 ARC-MET 60 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 ARC-MET 60 within 60 days of crop emergence where an organophosphate insecticide (such as DI-SYSTON ®) has been applied as an in-furrow treatment, as crop injury may result. Do not use ARC-MET 60 plus malathion as crop injury will result.

WITH LIQUID NITROGEN SOLUTION FERTILIZER

Liquid nitrogen fertilizer solutions may be used as a carrier in place in water. Run a tank mix compatibility test before mixing ARC-MET 60 in fertilizer solution. ARC-MET 60 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 ARC-MET 60 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 grass injury. Consult your agricultural dealer, consultant or fieldman, or for the specific recommendation before adding an adjuvant to these tank mixtures. If 2,4-D or MCPA is included with ARC-MET 60 and fertilizer mixture, ester formulations tend to be more compatible (see manufacturer's label). Do not add surfactant when using ARC-MET 60 in tank mix 2,4-D ester or MCPA 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 HARVEST AID

A tank mix of ARC-MET 60 plus 2,4-D and surfactant, or ROUNDUP, 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 harvests until weeds are dry. See weeds listed in the WEEDS CONTROLLED chart of this label.

WITH 2,4-D

Use 1/10 oz. ARC-MET 60 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, marestalk, punbturevine, and common and while sunflower. In areas where 2,4-D use is restricted, apply ARC-MET 60 with surfactant only; however, this treatment may be less effective.

WITH ROUNDUP

Use 1/10 oz ARC-MET 60 plus the locally recommended rate of ROUNDUP (see ROUNDUP label for maximum seasonal rate). ARC-MET 60 requires the use of an adjuvant for optimum activity. Consult the ROUNDUP label or local recommendations for the amount of adjuvant to include.

TANK MIXTURES IN FALLOW

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

TANK MIXTURES IN PASTURES OR RANGELAND

ARC-MET 60 can 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 ARC-MET 60 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
ORACLE®	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 and water. Run a tank mix compatibility test before mixing ARC-MET 60 in fertilizer solution. ARC-MET 60 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 ARC-MET 60 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 ¼ 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 grass injury. Consult your agricultural dealer, consultant or fieldman, or for a specific recommendation before adding an adjuvant to these tank mixtures.

If 2,4-D or MCPA is included with ARC-MET 60 and fertilizer mixture, ester formulations tend to be more compatible (see manufacturers' label). Do not add surfactant when using ARC-MET 60 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.

CROP ROTATION

MINIMUM ROTATIONAL INTERVALS

Minimum rotation intervals* are determined by the rate of breakdown of ARC-MET 60 applied. ARC-MET 60 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 ARC-MET 60 breakdown in soil while high soil pH, low soil temperature, and low soil moisture slow ARC-MET 60 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

ARC-MET 60 should not be used on soils have a pH above 7.9 as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, ARC-MET 60 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 ARC-MET 60.

CHECKING SOIL PH

Before using ARC-MET 60 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.

ROTATIONAL INTERVALS FOR CEREALS

All Areas-Following Use of ARC-MET 60 at 1/10 oz. per Acre

Crop	Soil pH Precipitation (inches)	Minimum Cumulative Interval (months)	Minimum Rotation
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 ARC-MET 60 at 1/10 oz. per Acre on Wheat, Barley, Fallow, or Pasture

	Location	Crop	Soil pH Cumulative Precipitation (inches)	Minimum Rotation intervals (months)	Minimum
State	County or Area				
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	General 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
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower	7.9 or lower	No restrictions	22
	Central and Western Kansas west of the Flint Hills	Field corn	7.9 or lower	15	12
	Western Kansas West of Hwy. 183	Soybeans	7.5 or lower 7.6 – 7.9	22 33	22 34
	Central Kansas; generally east of Hwy. 183 and west of the Flint Hills	Soybeans	7.9 or lower	15	12
	Montana	Statewide	Grain sorghum, Proso millet, Field corn	7.9 or lower	22
Alfalfa (hay only)			7.6 – 7.9 7.5 or lower	No restrictions No restrictions	34 22
Flax, Safflower, Sunflower			7.9 or lower	No restrictions	22
Nebraska	Statewide	Grain sorghum, Proso Millet	7.9 or lower	No restrictions	22
	Generally west of Hwy. 77 and east of the Panhandle	Field corn	7.9 or lower	15	12
		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
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Eastern New Mexico	Cotton (dry land only)	7.9 or lower	22	22
North Dakota	West of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	22	22
	East of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, 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
	Panhandle	Cotton (dry land only)	7.9 or lower	30	22
	East of the Panhandle	Cotton (dry land 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
South Dakota	Statewide	Flax, Safflower, 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
	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	7.9 or lower	No restrictions	22
	Pandhandle	Field corn	7.9 or lower	15	12
		Cotton (dry land only)	7.9 or lower	30	22
	North Central Texas*	Field corn	7.9 or lower	15	12
		Cotton (dry land only)	7.9 or lower	25	14
	<p>*The counties of North Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Deha, 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, Roberston, Rockwall, Shackelford, Somervell, Stephens, Tarrant, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young</p>				

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
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 only)	Field corn	7.9 or lower	15	12
	Northern Wyoming	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22

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	Crop	Maximum ARC-MET 60 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.

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 ARC-MET 60. 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 field representative for information detailing the field bioassay procedure.

GRAZING

There are no grazing restrictions on ARC-MET 60.

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 ARC-MET 60.
3. Continue agitation until the ARC-MET 60 is fully dispersed, at least 5 minutes.
4. Once the ARC-MET 60 is fully dispersed, maintain agitation and continue filling tank with water. ARC-MET 60 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 ARC-MET 60 spray mixture within 24 hours of mixing to avoid product degradation.
8. If ARC-MET 60 and tank mix partner are to be applied in multiple loads, preslurry the ARC-MET 60 in clean water prior to adding to the tank. This is prevent the tank mix partner from interfering with the dissolution of the ARC-MET 60.

Do not use ARC-MET 60 with spray additives that reduce the pH of the spray solution to below 3.0.

SPRAY EQUIPMENT

For specific application equipment, refer to the manufacturers' 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.

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 ARC-MET 60 in suspension.

SPRAYER CLEANUP

Spray equipment must be cleaned before ARC-MET 60 is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined below after spraying ARC-MET 60.

When multiple loads of ARC-MET 60 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 ARC-MET 60 and before spraying crops other than Wheat, Barley, Fallow, Pasture, or Rangeland

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 an approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions.

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 are recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
3. When ARC-MET 60 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 are subsequently applied products should be followed as per the individual labels.
5. Where routine spraying practices include shared equipment frequently being switch between applications of ARC-MET 60 and applications of other pesticides to ARC-MET 60-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to ARC-MET 60 to further reduce the chance of crop injury.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factor 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 sunsets 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 ARC-MET 60 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 a 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 ARC-MET 60 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 ARC-MET 60.

INTEGRATED PEST MANAGEMENT

To better manage weed resistance when using ARC-MET 60, use a combination of tillage and tank-mix partners or sequential herbicide applications that have a different mode of action than ARC-MET 60, 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.
- Do not use on grasses grown for seed.
- Do not apply to irrigated land where tail water 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. Rotam 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 to ARC-MET 60 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 ARC-MET 60 application, temporary discoloration and/or crop injury may occur. ARC-MET 60 should not be applied to wheat to 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 ARC-MET 60 post emergence preceded by pre-emergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold weather, or drought) cause 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 under sown with legumes, as injury to the forage may result.
- 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.
- Pre-plant or pre-emergence 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 post emergence applications of ARC-MET 60. For increased crop safety, delay ARC-MET 60 treatment until crop tillering has begun.

STORAGE AND DISPOSAL

PESTICIDE 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.

DISPOSAL STATEMENTS:

Nonrefillable container: Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10

seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 5 gallons and less than 56 gallons: 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 56 gallons: 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.

For refillable containers: Refill this container with pesticide 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.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ARCANA LLC or Seller, All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ARCANA LLC and Seller harmless for any claims relating to such factors.

30/
30

ARCANA LLC 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 referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ARCANA LLC, and Buyer and User assume the risk of any such use. ARCANA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent allowed by state law, neither ARCANA LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ARCANA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ARCANA, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ARCANA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of Sale and Limitation of Warranty and Liability which may not be modified except by written agreement signed by a duly authorized representative of ARCANA LLC.

- AMBER ® is a registered trademark of Syngenta
- ASSERT ® is a registered trademark of BASF
- BANVEL ® is a registered trademark of BASF
- BANVEL ® SGF is a registered trademark of BASF
- BRONATE ® is a registered trademark of Bayer Crop Science
- BUCTRIL ® is a registered trademark of Bayer Crop Science
- DI-SYSTON ® is a registered trademark of Bayer Crop Science
- EXPRESS ® is a registered trademark of E.I.DuPont de Nemours and Co.
- GRAZON ® P+D is a registered trademark of Dow Agro Sciences LLC
- HARMONY ® EXTRA is a registered trademark of E.I.DuPont de Nemours and Co.
- HOELON ® is a registered trademark of Bayer Crop Science
- ORACLE ® is a registered trademark of Control Solutions Inc.
- REMEDY ® is a registered trademark of Dow Agro Sciences LLC
- ROUNDUP ® is a registered trademark of Monsanto
- TORDON ® 22K is a registered trademark of Dow Agro Sciences LLC
- WEEDMASTER ® is a registered trademark of BASF