



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

NOV -5 2008

Dr. Frank E. Sobotka
Rotam Agricultural Company Limited
c/o IPM Resources, LLC
660 Yardley-Newton Rd, Suite 105
Newtown, PA 18940

Dear Dr. Sobotka:

Subject: Rotam Metsulfuron-methyl 60 DF Herbicide (Incorporate All Uses from Five Similar Products
EPA Registration No. 83100-2
Application Dated August 11, 2008

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

1. There are several areas of your label where the phrase "Rotam Metsulfuron-methyl 60 DF Herbicide is recommended for...appear. Modify these areas by deleting the word "recommended" from the phrase/sentence. The Agency no longer allows use of the word "recommended" when referring to use sites. The sentences may be modified as necessary.
2. On page 3, under Effects on Weeds, the second paragraph, the phrase (heading) Spray Preparation and the language following it should be a separate section/paragraph.
3. On page 3, under Integrated Pest Management, replace the sentence "Do not allow weed escapes to go to seed" with the sentence "Weed Escapes that are allowed to go to seed will promote the spread of resistant biotypes."
4. On page 5, revise the first sentence of bullet 6 to read "If only ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) listed on this label."
5. On page 7, under Velpar L or Velpar DF, revise the first sentence to read "Tank mix 1 or 2 ounces...at rates specified on the container for various soil textures." The Agency no longer allows use of the word "recommended" when referring to application rates.
6. On page 7, under Release-Hardwood Control and Suppression, delete the word "recommended" from the first sentence.

7. On page 8, under Important Precautions, Conifer Plantations Only, replace the word “recommendations” in the last bullet with the word “instructions”.
8. On page 8, under Slash Pine Plantations, Site Preparation, delete the word “recommendations” from the first sentence. The sentence may be modified as necessary.
9. On page 9, under Loblolly Pine Plantations, Site Preparation for Control of Black Locust, revise the second sentence to read “Rotam Metsulfuron-methyl 60 DF Herbicide **may be used** where Loblolly pine is to be planted...”
10. On page 9, under Tank-Mix with Velpar L for Selective Weed Control for Listed States, revise the first sentence to read “Rotam Methsulfuron-methyl 60DF Herbicide, alone or tank-mixed with Velpar L (or “Velpar”) **may be used** for control of brush and weeds...”
11. On page 10, the first paragraph, revise the phrase “at rate recommended” in the third sentence to read “at rates **specified**”.
12. On page 10, under Hardwood Plantations, Application Information, revise the first sentence to read “Rotam Metsulfuron-methyl 60DF Herbicide **may be used** at rates up to 2 ounces per acre for the control...”
13. Add the sentence “Do not enter or allow others to enter the treated area until sprays have dried.” to the Non-Agricultural Use Requirements box.
14. On page 11, Noncrop Applications, the first paragraph, delete the word “recommended” from the first and second sentences. The sentences may be modified as necessary.
15. On page 11, under Brush Control, Application Information, revise the first sentence to read “Rotam Metsulfuron-methyl 60DF **may be used** for the control of undesirable brush growing in non-crop areas.
16. There are several areas of the label where phrases similar to “recommended rate(s)”, “recommended intervals”, or “intervals recommended” appear. Modify these phrases by replacing the word “recommended” with the word “specified”.
17. On page 21, under General Application Information, revise the first sentence to read “Rotam Metsulfuron-methyl 60DF Herbicide **may be used** to control many species of weeds...”
18. On page 22, under Important Precautions, correct the typographical error in bullet 4 and move the bullet beginning with “Broadleaf forage species” to the next line.

Page 3

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19. On page 23, under Application Information, delete the word "recommended" from the first and second sentences.

Submit one (1) copy of final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling supersedes all previously approved ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

James A. Tompkins
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

[DIRECTIONS FOR USE BOOKLET]

ROTAM Metsulfuron-methyl 60 DF Herbicide

HERBICIDE FOR SELECTIVE WEED AND BRUSH CONTROL ON NON-CROP INDUSTRIAL SITES, TURF (INDUSTRIAL, UNIMPROVED AND COMMERCIAL), NATIVE GRASSES, RANGELAND AND PASTURE

ACTIVE INGREDIENT:

Metsulfuron-methyl: methyl 2-[[[4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-carbonyl]amino)sulfonyl]benzoa

% by wt.

INERT INGREDIENTS

TOTAL

60.0% METSULFURON-METHYL
40.0% INERT INGREDIENTS
100.0% TOTAL
In EPA Letter Dated:

EPA Reg. No.: 83100 - 2 EPA Establishment No.: 69821-CHN-005

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Nov -5 2008
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 83100-2

Si usted no e 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

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, 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. FOR MEDICAL EMERGENCIES CALL YOUR LOCAL POISON CONTROL CENTER FOR ASSISTANCE.

Manufactured by:
Rotam Agrochemical Company Limited
660 Newtown-Yardley Rd.
Newtown, PA 18940

Net Contents: 8 ounces

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.

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.

This herbicide is injurious to plants at extremely low concentrations. Non-target plants may be adversely affected from drift and run-off.

GENERAL INFORMATION

ROTAM Metsulfuron-methyl 60DF Herbicide is a dispersible granule that is mixed in water and applied as a spray by ground or aerial application.

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for the control of annual and perennial weeds and unwanted woody plants on private, public and military lands, on rights-of-way, industrial sites, non-crop areas, ditchbanks of dry drainage ditches, certain types of unimproved turf grass, and conifer and hardwood plantations, including grazed areas on these sites. Do not use on irrigation ditches.

ROTAM Metsulfuron-methyl 60DF Herbicide controls weeds and woody plants primarily by postemergent activity. Although ROTAM Metsulfuron-methyl 60DF Herbicide has preemergence activity, best results are generally obtained when ROTAM Metsulfuron-methyl 60DF Herbicide is applied to foliage after emergence or dormancy break. Generally, for the control of annual weeds, ROTAM Metsulfuron-methyl 60DF Herbicide provides the best results when applied to young, actively growing weeds. For the control of perennial weeds, applications made at the bud/bloom stage or while the target weeds are in the fall rosette stage may provide the best results. The use rate depends upon the weed species and size at the time of application.

The degree and duration of control may depend on the following:

- Weed spectrum and infestation intensity
- Weed size at application
- Environmental conditions at and following treatment
- Soil pH, soil moisture, and soil organic matter

ROTAM Metsulfuron-methyl 60DF Herbicide may be applied on conifer and hardwood plantations, and non-crop sites that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded as well as seasonally dry flood deltas. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

Environmental Conditions and Biological Activity

ROTAM Metsulfuron-methyl 60DF Herbicide is absorbed primarily through the foliage of plants and by the roots to a lesser degree. Plant cell division is generally inhibited in sensitive plants within a few hours following uptake. Two to 4 weeks after

application, leaf growth slows followed by discoloration and tissue death. The final effect on annual weeds is evident about 4 to 6 weeks after application. The ultimate effect on perennial weeds and woody plants occurs in the growing season following application.

Warm, moist conditions following treatment promote the activity of ROTAM Metsulfuron-methyl 60DF Herbicide, while cold, dry conditions may reduce or delay activity. Weeds and brush hardened off by cold weather or drought stress may not be controlled. The use of a surfactant is recommended to enhance the control of susceptible plants except where noted. Apply at a minimum rate (concentration) of 1/4% volume/volume (1 quart per 100 gallons of spray solution) or at the manufacturer's recommended rate. Use only EPA approved surfactants containing at least 80% active ingredient. Certain types of surfactants, such as those incorporating acetic acid (i.e. LI-700), may not be compatible with ROTAM Metsulfuron-methyl 60DF Herbicide and may result in decreased performance. Certain surfactants may not be suitable for use on desirable plants, such as turf, listed on this label. Consult the surfactant manufacturer's label for appropriate uses.

Weed and brush control may be reduced if rainfall occurs soon after application.

Effects on Weeds

ROTAM Metsulfuron-methyl 60DF applied to foliage of weeds rapidly inhibits growth of susceptible plants; however, typical symptoms (discoloration) of dying weeds may not be noticeable for several weeks after applications, depending on growing conditions and weed susceptibility. Warm, moist conditions following treatment enhance the activity of ROTAM Metsulfuron-methyl 60DF, while cold, dry conditions delay activity. Weeds hardened off by cold weather or drought stress may not be fully controlled or suppressed and regrowth may occur. Snow or rainfall received within 4 hours after application can reduce the level of postemergence weed control. ROTAM Metsulfuron-methyl 60DF will also affect certain seedling weeds that have emerged after application.

Degree of control and duration of effect depend on: Weed spectrum and density, weed size and variability, growing conditions prior to and following application, amount of precipitation, and spray coverage. With adequate rainfall for soil activation, short-term residual control of the more sensitive species may be obtained for a few weeks after application. Spray Preparation

Add the proper amount of ROTAM Metsulfuron-methyl 60DF to the necessary volume of water in the spray tank with the agitator running. Continuous agitation is required for a uniform suspension and application. If spray preparation is left standing, thoroughly agitate before reusing.

Resistance

Biotypes of certain weeds listed on this label are resistant to ROTAM Metsulfuron-methyl 60DF Herbicide 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 ROTAM Metsulfuron-methyl 60DF Herbicide to help control these biotypes, or use a planned herbicide rotation program where other residual broadleaf herbicides having different modes of action are used.

Integrated Pest Management

To better manage weed resistance when using ROTAM Metsulfuron-methyl 60DF Herbicide, use a combination of tillage and tank-mix partners or sequential herbicide applications that have a different mode of action than ROTAM Metsulfuron-methyl 60DF Herbicide, 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 treated areas to help obtain information on the spread and dispersal of resistant biotypes.

GENERAL USE PRECAUTIONS

DO NOT USE ON FOOD OR FEED CROPS EXCEPT AS RECOMMENDED BY THIS LABEL OR SUPPLEMENTAL LABELING.

Injury to or loss of desirable trees or other plants may result if the precautions listed below are not followed.

- Do not apply ROTAM Metsulfuron-methyl 60DF Herbicide (except as recommended), or 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, or similar areas.

- Prevent drift of spray to desirable plants.
- Do not contaminate any body of water including irrigation water.
- Keep from contact with fertilizers, insecticides, fungicides, and seeds.

Low rates of ROTAM Metsulfuron-methyl 60DF Herbicide can kill or severely injure most crops. Following an ROTAM Metsulfuron-methyl 60DF Herbicide application, the use of spray equipment to apply other pesticides to crops on which ROTAM Metsulfuron-methyl 60DF Herbicide is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

Tank Mixes

ROTAM Metsulfuron-methyl 60DF Herbicide may be tank mixed with other herbicides registered for the use sites described in this label. Use only those tank mix partners that are labeled for the appropriate use site. When tank mixing, use the most restrictive label limitations for each of the products being used in the tank mix.

Spray Equipment

Low rates of ROTAM Metsulfuron-methyl 60DF Herbicide can kill or severely injure most crops. Following an ROTAM Metsulfuron-methyl 60DF Herbicide application, the use of spray equipment to apply other pesticides to crops on which ROTAM Metsulfuron-methyl 60DF Herbicide is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

The selected sprayer should be equipped with an agitation system to keep ROTAM Metsulfuron-methyl 60DF Herbicide suspended in the spray tank. Use a sufficient volume of water to thoroughly cover the foliage of undesirable weeds, generally 10 to 40 gallons per acre. Select a spray volume and delivery system that will deliver a uniform spray pattern. Be sure the sprayer is calibrated before use. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping to avoid injury to desired plants.

Refer to the brush control section of this label for information unique to that particular use.

Mixing Instructions

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of ROTAM Metsulfuron-methyl 60DF.
3. Continue agitation until the ROTAM Metsulfuron-methyl 60DF is fully dispersed, at least 5 minutes.
4. Once the ROTAM Metsulfuron-methyl 60DF is fully dispersed, maintain agitation and continue filling tank with water. ROTAM Metsulfuron-methyl 60DF should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired), and 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 reagitrate before using.
7. ROTAM Metsulfuron-methyl 60DF spray preparations are stable if they are pH neutral or alkaline and stored at or below 100°F.
8. If ROTAM Metsulfuron-methyl 60DF and a tank mix partner are to be applied in multiple loads, preslurry the ROTAM Metsulfuron-methyl 60DF in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the ROTAM Metsulfuron-methyl 60DF.

Sprayer Cleanup

Spray equipment must be cleaned before ROTAM Metsulfuron-methyl 60DF is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined below before applying ROTAM Metsulfuron-methyl 60DF.

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

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.

- 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 ROTAM Metsulfuron-methyl 60DF is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.
- 4. In addition to this cleanout procedure, all pre-cleanout guidelines on subsequently applied products should be followed as per the individual labels.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. **AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150-200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UN-FAVORABLE 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 air stream 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 3/4 of the wing or rotor length-longer booms increase drift potential.
- **Application Height** - Application more than 10 ft. above the canopy increases the potential for spray drift.

BOOM HEIGHT

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

WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many

factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS.

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

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

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 in your State responsible for pesticide regulation.

Do not apply more than 4 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide per acre per year.

AGRICULTURAL USES

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

CONIFER PLANTATIONS

Application Information

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for the control of many species of weeds and deciduous trees on sites where conifers are growing or are to be planted. Apply by ground equipment or by air (helicopter only). Refer to the "Weeds Controlled" and "Brush Species Controlled" for a listing of susceptible species.

Application Timing

Apply ROTAM Metsulfuron-methyl 60DF Herbicide after weeds have emerged or after undesirable hardwoods have broken winter dormancy and have reached the point of full leaf expansion.

Conifer Site Preparation --Application Before Transplanting

After consulting the "Weeds Controlled" and "Brush Species Controlled" tables, apply the rates of ROTAM Metsulfuron-methyl 60DF Herbicide recommended for the most difficult to control species on the site.

Southeast—Apply up to 4 ounces per acre for loblolly and slash pines. Transplant the following planting season.

Northeast and Lake States—Apply up to 2 ounces per acre for red pine. Transplant the following planting season. Apply up to 2 ounces per acre for black, white and Norway spruce. Transplant the following spring.

West—Apply up to 2 ounces per acre prior to planting Douglas Fir, Sitka Spruce, Western Red Cedar, Western Hemlock, Ponderosa Pine, and Grand Fir in the Coast Rangeland and western slope of the Cascades in Oregon and Washington. These conifer species listed can be planted anytime after application. Other conifer species can be planted providing the user has prior experience indicating acceptable tolerance to ROTAM Metsulfuron-methyl 60DF Herbicide soil residues.

Without prior experience, it is recommended that other species be planted on a small scale to determine selectivity before large-scale plantings are made as unacceptable injury may occur. Rotam will not assume responsibility for injury to any conifer species not listed on this label.

Tank Mix Combinations

For broader spectrum control, the following products are recommended in combination with ROTAM Metsulfuron-methyl 60DF Herbicide.

Accord: Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 2 to 10 quarts of Accord per acre. Refer to the product container for a list of species controlled.

Arsenal Applicator's Concentrate: Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 10 to 24 fluid ounces of Arsenal Applicator's Concentrate per acre. Loblolly and slash pines may be transplanted the planting season following application. The combination controls ash, black gum, cherry, hawthorn, honeysuckle, hophorn beam, persimmon, oaks (red, white and water), sassafras, sweetgum, Vaccinium species, and suppresses blackberry, dogwood, elms, myrtle dahoon, hickories, and red maple.

Accord + Arsenal Applicators Concentrate: Tank mix 1/2 to 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 16 to 64 fluid ounces of Accord and 10 to 12 fluid ounces of Arsenal Applicator's Concentrate per acre. Slash and loblolly pines may be transplanted the planting season following application. The combination controls cherry, dogwood, elms, oaks (red and water), persimmon, sassafras, sweetgum and suppresses hickory.

Glyphosate (4 pound active per gallon): Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 2 to 10 quarts of glyphosate per acre. Refer to the product container for a list of species controlled.

Imazapyr (4 pound active per gallon): Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 10 to 24 fluid ounces of imazapyr per acre. Loblolly and slash pines may be transplanted the planting season following application. This combination controls ash, black gum, cherry, hawthorn, honeysuckle, hophornbeam, persimmon, oaks (red, white and water), sassafras, sweetgum, Vaccinium species, and suppresses blackberry, dogwood, elms, myrtle dahoon, hickories, and red maple.

Glyphosate (4 pound active per gallon) + Imazapyr (4 pound active per gallon): Tank mix 1/2 to 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 16 to 64 fluid ounces of glyphosate and 10 to 12 fluid ounces of imazapyr per acre. Slash and loblolly pines may be transplanted the planting season following application. This combination controls cherry, dogwood, elms, oaks (red and water), persimmon, sassafras, sweetgum and suppresses hickory.

Velpar® L or Velpar® DF: Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide per acre with Velpar® L or Velpar® DF at the rates recommended on the container for various soil textures. Loblolly and slash pines may be transplanted the planting season following application. Refer to the product container for a list of species controlled.

Oust® Extra: Tank mix 1/2 to 1 1/2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 2 to 3 ounces of Oust® Extra per acre for herbaceous weed control. Refer to the product container and the "Weeds Controlled" section of this label for a listing of the weeds controlled. Loblolly and slash pines may be transplanted the planting season following application. Tank mix 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 3 ounces of Oust® Extra per acre for herbaceous weed control and early spring suppression of bull thistle and Canada thistle in the Coast Rangeland and western slope of the Cascade Mountains. Douglas fir may be transplanted at least 90 days following application.

Release--Hardwood Control and Suppression

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for application over the top of established slash and loblolly pine to control the species listed in "Weeds Controlled" and "Brush Species Controlled" section of this label. Apply 1 to 4 ounces per acre to control the species indicated, including kudzu.

Tank Mix Combinations

For broader spectrum control the following products are recommended in combination with ROTAM Metsulfuron-methyl 60DF Herbicide.

Arsenal Applicator's Concentrate: A tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 8 to 16 fluid

ounces of Arsenal Applicator's Concentrate per acre may be applied to loblolly pine. Refer to the Arsenal Applicatory's Concentrate label regarding the use of surfactants and the appropriate application timing with respect to the age and development stage of the pines. The combination controls ash, black gum, cherry, hawthorn, honeysuckle, hophornbean, oaks (red, white and water), sassafras, sweetgum, Vaccinium species, and suppression blackberry, dogwood, elm, myrtle dahoon, hickories, persimmon, and red maple.

Imazapyr (4 pound active per gallon): Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 8 to 16 fluid ounces of imazapyr per acre for application to loblolly pine. Refer to the imazapyr label regarding the use of surfactants and the appropriate application timing with respect to the age and development stage of the pines. This combination controls ash, black gum, cherry, hawthorn, honeysuckle, hophornbeam, oaks (red, white and water), sassafras, sweetgum, Vaccinium species, and suppresses blackberry, dogwood, elms, myrtle dahoon, hickories, persimmon, and red maple.

Velpar® L or Velpar® DF: Tank mix 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with Velpar® L or Velpar® DF at the rates recommended on the container for various soil textures. This combination may be applied to loblolly and slash pines.

Release--Herbaceous Weed Control

ROTAM Metsulfuron-methyl 60DF Herbicide may be applied to transplanted loblolly and slash pine for the control of herbaceous competition. Consult the "Weeds Controlled" for a listing of the susceptible species and recommended application rates. Best results are obtained when ROTAM Metsulfuron-methyl 60DF Herbicide is applied just before weed emergence until shortly after weed emergence.

Tank Mix Combinations

For broader spectrum control the following products are recommended in combination with ROTAM Metsulfuron-methyl 60DF Herbicide.

Arsenal Applicators Concentrate: Tank mix 1/2 to 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 4 ounces of Arsenal Applicators Concentrate per acre. The tank mix may be used on loblolly pine.

OUST XP: Tank mix 1/2 to 1 1/2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 2 to 3 ounces of OUST XP⁷ (or generic equivalent) per acre. Best results are obtained when ROTAM Metsulfuron-methyl 60DF Herbicide is applied just before weed emergence until shortly after weed emergence. The tank mix may be used on loblolly and slash pine.

Imazapyr (4 pound active per gallon): Tank mix 1/2 to 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 4 fluid ounces of imazapyr per acre. The tank mix may be used on loblolly pine.

Velpar® L or Velpar® DF: Tank mix 1/2 to 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with Velpar® L or Velpar® DF at the rates recommended on the container for various soil textures. This combination may be applied to loblolly and slash pines.

Release - Directed Spray in Conifers (Western US)

To release conifers from competing brush species, such as, blackberry, salmonberry, snowberry, thimbleberry and wild roses, mix 2 to 4 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide per 100 gallons of spray solution. Direct spray onto the foliage of competing brush species using a knapsack or backpack sprayer. For best results, apply any time after the brush species have reached full leaf stage but before autumn coloration. At application, the majority of the brush species should be less than six feet in height to help ensure adequate spray coverage. Thorough coverage of the target foliage is necessary to optimize results. Care should be taken to direct the ROTAM Metsulfuron-methyl 60DF Herbicide spray solution away from the conifer foliage.

NOTE: ROTAM Metsulfuron-methyl 60DF Herbicide may cause temporary yellowing and or growth suppression when the spray solution contacts conifer foliage. The use of a surfactant with ROTAM Metsulfuron-methyl 60DF Herbicide may improve brush control results. When using a surfactant with ROTAM Metsulfuron-methyl 60DF Herbicide, extra precaution must be taken to avoid contact with conifer foliage. Excessive drift onto conifers may result in severe injury.

IMPORTANT PRECAUTIONS — CONIFER PLANTATIONS ONLY

- Applications of ROTAM Metsulfuron-methyl 60DF Herbicide made to conifers that are suffering from loss of vigor caused by insects, diseases, drought, winter damage, animal damage, excessive soil moisture, planting shock, or other stresses may injure or kill the trees.
- Applications of ROTAM Metsulfuron-methyl 60DF Herbicide made for herbaceous release should only be made after adequate rainfall has closed the planting slit and settled the soil around the roots following transplanting.
- Do not apply ROTAM Metsulfuron-methyl 60DF Herbicide to conifers grown as ornamentals.
- ROTAM Metsulfuron-methyl 60DF Herbicide applications may result in damage and mortality to other species of conifers when they are present on sites with those listed in the preceding recommendations for conifer plantations.

SLASH PINE PLANTATIONS

Site Preparation

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for site preparation to control Blackberry and other vegetation where plantations of Slash pine will be transplanted the following season.

Weeds/Brush	Ounces ROTAM Metsulfuron-methyl 60DF Herbicide Per Acre
Blackberry	1/2 to 1-1/2
Black cherry Black locust Diffuse knapweed Japanese honeysuckle Palmetto	3-1/3

Application information

Apply ROTAM Metsulfuron-methyl 60DF Herbicide in a minimum of 10 gals water per acre by helicopter or ground sprayer; add surfactant at 0.25% by volume (1 qt, per 100 gals water). Treat perennial weeds and brush after they have reached full leaf, but before leaf tissue has hardened. Use sufficient spray volume for complete coverage of these plants.

Apply as a full coverage spray to foliage and stems. Total spray volume per acre will depend upon plant height and density of growth, and the type of equipment used.

Effectiveness may be reduced if rainfall occurs within 24 hours after application.

Slash pine may be transplanted the next season, at least 6 months after application of ROTAM Metsulfuron-methyl 60DF Herbicide.

For broader spectrum control, ROTAM Metsulfuron-methyl 60DF Herbicide should be tank mixed with "Velpar" Herbicide or Roundup® or Arsenal. For aerial application of combinations, follow directions on the package label of the companion product in addition to ROTAM Metsulfuron-methyl 60DF Herbicide directions above; see labels for additional plants controlled.

Note:

Poor weed and brush control may occur from application made when the soil is saturated with water and rain is imminent within 24 hours.

Do not use on poorly drained or marshy sites.

Do not apply by air within 200 feet of any homestead, agricultural land or other desirable plantings, agricultural land or any body of water. Do not apply when weather conditions favor drift from treated areas.

For Control of Black Locust

On Slash Pine Plantations for site preparation only, ground or aerial application may be used as recommended on this label. Apply ROTAM Metsulfuron-methyl 60DF Herbicide at the rate of 1 to 2 ounces per acre after the Black locust has reached full leaf but before leaf tissue has hardened in the fall. Use a nonionic surfactant of at least 80% active ingredient at a minimum rate of 1 quart per 100 gallons of spray solution.

Control may not be satisfactory if the Black locust is under stress at the time of treatment from drought or insects (i.e., Locust leafminer).

LOBLOLLY PINE PLANTATIONS

Site Preparation For Control of Black Locust

See Information Under "Slash Pine Plantations" for control of Kudzu in listed states.

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended where Loblolly pine is to be planted or has been established for at least 1 year on sites infested with Kudzu in AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, TX, and WV.

Apply 4 ounces ROTAM Metsulfuron-methyl 60DF Herbicide per acre; add a nonionic surfactant (80% active) at 1 qt/100 gals spray mix. Apply after full foliation of Kudzu. Application should be made with sufficient volume to thoroughly wet the Kudzu canopy from top to bottom with crossing passes of 45 to 90 degrees. A minimum of 30 gals water per acre per pass by ground equipment should be used, totaling 60 gals per acre.

Retreatment may be necessary. Retreat the area one year after the initial treatment. Broadcast application should be utilized if resprouting of Kudzu root-crowns are less than 20 feet apart. If root-crowns are greater than 20 feet, spot application may be utilized. Failure to treat escaped or border patches of Kudzu will result in reinvasion over the entire treated area in subsequent years.

Note:

1. Do not apply where conifers are suffering from loss of vigor caused by insects, disease, drought, winter damage, or other stresses, as injury may result.
2. Use on coarse textured, gravelly or rocky soils or exposed subsoils may result in conifer injury.
3. Do not use on poorly drained or marshy sites; however, pine on raised beds may be treated.
4. Temporary distortion of tip growth of pine may occur.

Tank Mix with Velpar® L For Selective Weed Control For Listed States

ROTAM Metsulfuron-methyl 60DF Herbicide, alone or tank mixed with Velpar L (or "Velpar"), is recommended for control of brush and weeds in established plantations of Loblolly pine at least 1 year old in AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, TX and WV.

In addition to brush species listed on Velpar L labeling, the combination controls or improves control of Blackberry, Black gum, Elm, and Winged elm, and Cherry. Additionally, the combination controls many weeds as shown on product labels. Apply 1.5 oz ROTAM Metsulfuron-methyl 60DF Herbicide in 5 to 30 gals per acre. For broader spectrum control, tank mix with Velpar L (or Velpar) at rates recommended on container labels. The combination should be applied during late Spring to early Summer. Apply by helicopter as described on the Velpar L container label. Application may also be applied by ground spray equipment.

Note:

1. Do not apply where conifers are suffering from loss of vigor caused by insects, disease, drought, winter damage, or other stresses, as injury may result.
2. Do not add surfactant to tank mixes containing "Velpar" or Velpar L.
3. Use on coarse textured, gravelly or rocky soils or exposed subsoils may result in conifer injury.
4. Poor weed and brush control may occur from application made when the soil is saturated with water and rain is imminent within 24 hours.
5. Do not use on poorly drained or marshy sites.
6. Temporary distortion of tip growth of pine may occur.
7. Do not apply by air within 200 feet of any homestead, agricultural land or other desirable plantings, agricultural land or any body of water.
8. Do not apply when weather conditions favor drift from treated areas.

HARDWOOD PLANTATIONS

Application Information

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended at rates of up to 2 ounces per acre for the control of many weed species on sites where yellow poplar is growing or is to be planted, and on sites where red alder is to be planted. Apply by ground equipment or by air (helicopter only). Refer to the "Weeds Controlled" sections of this label for a listing of susceptible species.

Application Timing

ROTAM Metsulfuron-methyl 60DF Herbicide may be applied as a site preparation treatment prior to planting red alder or yellow poplar. As a prior to planting site preparation treatment for red alder, ROTAM Metsulfuron-methyl 60DF Herbicide may be tank mixed with other herbicides labeled for this use.

ROTAM Metsulfuron-methyl 60DF Herbicide may also be applied over-the-top of planted yellow poplar seedlings after the soil has settled around the root system, but before the seedlings have broken dormancy (prior to bud break).

Release--Herbaceous Weed Control

ROTAM Metsulfuron-methyl 60DF Herbicide may be applied to yellow poplar for the control of herbaceous competition. Consult the "Weeds Controlled" for a listing of the susceptible species and recommended application rates. Best results are obtained when ROTAM Metsulfuron-methyl 60DF Herbicide is applied just before weed emergence until shortly after weed emergence.

Tank Mix Combinations

Tank mix 1/2 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 4 to 6 pints of Velpar® L as recommended on the package label for "RELEASE—HERBACEOUS WEED CONTROL" in pine plantations in the eastern U.S. Follow the Velpar® L label recommendations regarding altering the application rate by soil texture.

IMPORTANT PRECAUTIONS —HARDWOOD PLANTATIONS ONLY

Application of Velpar® L and ROTAM Metsulfuron-methyl 60DF Herbicide made to yellow poplar that are suffering from loss of vigor caused by insects, disease, drought, winter damage, animal damage, excessive soil moisture, planting shock or other stresses may injure or kill the seedlings.

- Applications of ROTAM Metsulfuron-methyl 60DF Herbicide made for release should only be made after adequate rainfall has closed the planting slit and settled the soil around the roots following transplanting.
- The use of surfactant is not recommended for applications made over the tops of trees.
- Careful consideration must be given by an experienced and knowledgeable forester to match the requirements of yellow poplar and/or red alder to the conditions of the site. Treatment of yellow poplar and/or red alder planted on a site inadequate to meet its requirements may injure or kill the seedlings.

NON-AGRICULTURAL USES

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.

Non-crop industrial weed control and selective weed control in turf (industrial, unimproved only) are not within the scope of the Worker Protection Standard.

NONCROP APPLICATIONS

(Rangeland, Pasture, Industrial and Professional Turf, Establishment and Maintenance of Native Grasses)

Application Information

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for use for general weed and brush control on non-crop, industrial sites such as airports, military installations, fence rows, roadsides and associated rights-of-way, petroleum tank farms, pipeline and utility rights-of-way, pumping stations, railroads, storage areas, and state and federal plant sites including government owned parks and recreational areas, federal controlled customs and boarder crossings, and, noncrop lands identified under government set-aside programs. It is also recommended for the control of certain noxious and troublesome weeds on lindrical unimproved and Professional turf, such as lawns, parks, cemeteries, and golf courses (fairways, aprons, tees and roughs), and for the establishment and maintenance of native grasses in noncrop, rangeland and pasture. This product may also be used on Sod Farms.

Consult the WEEDS CONTROLLED and BRUSH SPECIES CONTROLLED tables to determine the appropriate application rate.

ROTAM Metsulfuron-methyl 60DF Herbicide may be applied in tank mixture with other herbicides labeled for use on non-crop sites. Fully read the labels and follow all directions and restrictions on each label.

BRUSH CONTROL

Application Information

ROTAM Metsulfuron-methyl 60DF is recommended for the control of undesirable brush growing in non-crop areas. Applications may be made by air, high volume ground application, low volume ground application, and ultra-low volume ground application. Except as noted elsewhere for multiflora rose, ROTAM Metsulfuron-methyl 60DF Herbicide should be applied as a spray to the foliage.

The application volume required will vary with the height and density of the brush and the application equipment used. Generally, aerial applications will require 15 to 25 gallons of water per acre; high volume ground application will require 100 to 400 gallons of water per acre; low volume ground application will require 20 to 50 gallons of water per acre; and ultra-low volume ground application will require 10 to 20 gallons of water per acre. Regardless of the application volume and equipment used, thorough coverage of the foliage is necessary to optimize results.

Brush Species Controlled

Species	High Volume ROTAM 60DF Metsulfuron-methyl Rate: oz./100 Gallons	Broadcast ROTAM 60DF Metsulfuron-methyl Rate: oz./acre
Ash	1-2	1-3
Aspen	1-2	1-3
Black locust	1-2	1-3
Blackberry	1-2	1-3
Camehorn	1-2	1-3
Cherry	1-2	1-3
Cottonwood	1-2	2-3

Eastern red cedar	1-2	2-3
Elder	1-2	2-3
Elm	1-2	1-3
Firs	3	1-2
Hawthorn	1-2	1-3
Honeysuckle	1-2	1/2 -1
Mulberry	1-2	2-3
Muhiflora rose	1-2	1-3
Muscadine (wild grape)	1-2	2-3
Oaks	1-2	1-3
Ocean spray (Holodiscus)	1-2	2-3
Osage orange	1-2	2-3
Red maple	1-2	2-3
Salmonberry	1/2 -1	1-3
Snowberry	1/2 -1	1-3
Spruce (black and white)	3	2-3
Thimbleberry	1/2 -1	1-3
Tulip tree	1/2-1	1-3
Wild roses	1/2 -1	1-3
Willow	1/2-1	1-3

For low volume and ultra-low volume ground applications, mix 4 to 8 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide per 100 gallons of spray solution.

Application Timing

Make a foliar application of the recommended rate of ROTAM Metsulfuron-methyl 60DF Herbicide during the period from full leaf expansion in the spring until the development of full fall coloration on deciduous species to be controlled. Coniferous species may be treated at anytime during the growing season.

Spot Treatment

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for the control of many species of weeds including noxious/invasive weeds in certain established grasses growing on non-crop areas. Refer to the "Weeds Controlled" section for a listing of susceptible weed species and the application rate per acre per the target weed.

Or, mix one gram of ROTAM Metsulfuron-methyl 60DF Herbicide per one gallon of water along with a surfactant. Spray to the point of wetting the entire surface of the target weeds, approximately 40 gallons of solution per acre.

Tank Mix Combinations

ROTAM Metsulfuron-methyl 60DF Herbicide may be tank mixed with any product labeled for non-crop brush control at the application rates specified on the companion product's label for the pests specified on the product's companion label. Read and follow the label instructions of both products when tank mixing. Follow the most restrictive limitations of any of the product labels being tank mixed.

Accord: After consulting the "Brush Species Controlled" Table, tank mix the prescribed rate of ROTAM Metsulfuron-methyl 60DF Herbicide with the rate of Accord indicated for the various application methods on the Accord label. Refer to the Accord label for list of species controlled.

Arsenal Herbicide: Combine 1 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide with 1 to 4 pints of Arsenal Herbicide herbicide per acre and apply as a broadcast spray. Aerial applications should use a minimum of 15 gallons per acre spray volume. In addition to species listed above controlled by ROTAM Metsulfuron-methyl 60DF Herbicide, this combination controls black gum, hophornbeam, sassafras, sweetgum, Vaccinium species, dogwood, myrtle dahoon, hickories, and persimmon.

Garlon 3A or Garlon 4 (or generic equivalents): After consulting the "Brush Species Controlled" table, tank mix the prescribed rate of ROTAM Metsulfuron-methyl 60DF Herbicide with the rate of Garlon 3A indicated for the various application methods on the Garlon 3A label. Refer to the Garlon 3A label for list of species controlled.

Krenite S Brush Control Agent: After consulting the "Brush Species Controlled" Table, tank mix the prescribed rate of ROTAM Metsulfuron-methyl 60DF Herbicide with the rate of Krenite S indicated for the various application methods on the Krenite S label. Refer to the Krenite S label for list of species controlled.

Tordon K Specialty Herbicide: After consulting the "Brush Species Controlled" Table, tank mix the prescribed rate of ROTAM Metsulfuron-methyl 60DF Herbicide with the rate of Tordon K indicated for the various application methods on the Tordon K label. Refer to the Tordon K label for list of species controlled.

Tordon K Specialty Herbicide + Arsenal Herbicide: Combine 1 to 1 1/2 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 2 to 8 fluid ounces of Arsenal Herbicide and 1 to 2 pints of Tordon K per 100 gallons of water. Apply as a high volume spray. This tank mix controls cherry, elms, box elder, maples, hackberry, redbud, ash, oaks (including shingle oak), black locust and sassafras.

*Tordon K is a restricted use pesticide.

Spotgun Basal Soil Treatment

For control of multiflora rose, prepare a spray suspension of ROTAM Metsulfuron-methyl 60DF Herbicide by mixing 1 ounce per gallon of water. Mix vigorously until the ROTAM Metsulfuron-methyl 60DF Herbicide is dispersed and agitate periodically while applying the spray suspension. Apply the spray preparation with an exact delivery handgun applicator. Apply at the rate of 4 milliliters for each 2 feet of rose canopy diameter. Direct the treatment to the soil within 2 feet of the stem union. When treating large plants and more than one delivery is required, make applications on opposite sides of the plant.

Applications should be made from early spring to summer.

IMPORTANT PRECAUTIONS---NON-CROP BRUSH ONLY

When using tank mixtures of ROTAM Metsulfuron-methyl 60DF Herbicide with companion herbicides, read and follow all use instructions, application rates, warnings and precautions appearing on the labels. Follow the most restrictive label instructions for each of the herbicides used.

NATIVE GRASSES

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for weed control and suppression in the establishment and maintenance of native grasses. It may be used where blue gramma, bluestems (big, little, plains, sand, ww spar) bromegrasses (meadow), buffalograss, green sprangletop, indiagrass, kleingrass, lovegrasses (atherstone, sand, weeping, wilman), orchardgrass, sideoats gramma, switchgrass (blackwell), wheatgrass (bluebunch, intermediate, pubescent siberian, slender, streamband, tall, thickspike, western), and Russian wildrye are established. It may also be applied over these species in the seedling stage, except for orchardgrass and Russian wildrye.

Application Information

Apply ROTAM Metsulfuron-methyl 60DF Herbicide at the rate of 1/10 ounce per acre for the control and suppression* of bur buttercup (testiculate), common purslane, common sunflower*, cutleaf evening-primrose*, flixweed*, lambsquarters* (common and slimleaf), marestail*, pigweed (redroot and tumble), snow speedwell, tansymustard*, and tumble mustard (Jim Hill mustard).

*Suppression is a visual reduction in weed competition (reduced population or vigor) as compared to untreated areas. Degree of suppression will vary with the size of weed and environmental conditions following treatment.

Application Timing

For established grasses, apply when weeds are in the seedling stage.

For grasses in the seedling stage, apply preplant or preemergence where the soil (seed bed) has been cultivated.

IMPORTANT PRECAUTIONS-NATIVE GRASSES

- Grass species or varieties may differ in their response to various herbicides. If no information is available, limit the initial use of ROTAM Metsulfuron-methyl 60DF Herbicide to a small area. Components in a grass seed mixture will vary in tolerance to ROTAM Metsulfuron-methyl 60DF Herbicide, so the final stand may not reflect the seed ratio.
- Under certain conditions such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after ROTAM Metsulfuron-methyl 60DF Herbicide application, temporary discoloration and/or grass injury may occur. ROTAM Metsulfuron-methyl 60DF Herbicide should not be applied to grass that is stressed by severe weather conditions, drought, low fertility, water-saturated soils, disease, or insect damage as grass injury may result. Severe winter stress, drought, disease, or insect damage before or following application also may result in grass injury.

Grass Preplant Intervals

Following an application of ROTAM Metsulfuron-methyl 60DF Herbicide to non-crop areas, the treated sites may be replanted with various species of grasses at the intervals recommended below.

For soils with a pH of 7.5 or less observe the following replant intervals:

Species	Rate of ROTAM Metsulfuron-methyl Herbicide (oz./acre)	Replacement Interval (months)
Brome, meadow	1/2-1	2
	1-2	3
Brome, smooth	1/2-1	2
	1-2	4
Fescue, aha	1/2-1	2
	1-2	4
Fescue, red	1/2-1	2
	1-2	4
Fescue, sheep	1/2-1	1
	1-2	4
Foxtail, meadow	1/2-1	2
	1-2	4
Green needlegrass	1/2-2	1
Orchardgrass	1/2-1	2
	1-2	4
Russian wildrye	1/2	1
	1	2
	2	3
Switchgrass	1/2-1	1
	1-2	3
Timothy	1/2-1	2
	1-2	4
Wheatgrass, western	1/2-1	2
	1-2	3

For soils with a pH of 7.5 or greater observe the following replant intervals:

Species	Rate of ROTAM Metsulfuron-methyl Herbicide (oz./acre)	Replant Interval (months)
Alkali sacaton	1/2-1	1
	1-2	3
Bluestem, big	1/2-2	3
Brome, mountain	1/2-1	1
	1-2	2
Gamma, blue	1/2-2	1
Gamma, sideoats	1/2	2
	>1/2	>3
Switchgrass	1/2	2
	>1/2	>3
Wheatgrass, thickspike	1/2-2	1
Wheatgrass, western	1/2-1	2
	1-2	3

The recommended intervals are for applications made in the spring to early summer. Because ROTAM Metsulfuron-methyl 60DF Herbicide degradation is slowed by cold or frozen soils, applications made the late summer or fall should consider the intervals as beginning in the spring following treatment.

Testing has indicated that there is considerable variation in response among the species of grasses when seeded into areas treated with ROTAM Metsulfuron-methyl 60DF Herbicide. If species her than those listed above are to be planted into areas treated with ROTAM Metsulfuron-methyl 60DF Herbicide, a field bioassay should be performed or previous experience may be used to determine the feasibility of replanting treated sites.

ADDITIONAL GRASS APPLICATION INFORMATION FOR GRASS ESTABLISHMENT

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for the control or suppression of broadleaf weeds to aid in the establishment of the following perennial native or improved grasses:

- Blue Grama
- Bluestems -
- Big
- Little
- Sideoats grama
- Switchgrass
- Blackwell
- Wheatgrasses -

Plains	bluebunch
Sand	crested
W W spar	intermediate
Buffalograss	pubescent
Green sprangletop	Siberian
Kleingrass	slender
Lovegrasses --	steambank
Atherstone	tall
Sand	thickspike
Weeping	western
Wilman	Wildrye grass- Russian
Orchardgrass	

Maximize potential for grass establishment by consulting with the Natural Resource and Conservation Service of other government agencies or local experts concerning planting techniques and other cultural practices. Performance from ROTAM Metsulfuron-methyl 60DF Herbicide may not always be satisfactory due to the inability of newly planted grass stands to sufficiently compete with weeds, and the severity of weed pressure in new grass stands.

An additional herbicide application or mowing may be needed.

Use Rates and Application Timing for Grass Establishment Preplant (prior to planting) or Preemergence (after planting but before grass emergence)

Do not use more than 1/10 ounce per acre of ROTAM Metsulfuron-methyl 60DF Herbicide for grass establishment.

Apply ROTAM Metsulfuron-methyl 60DF Herbicide at 1/10 ounce per acre on all labeled grasses except orchardgrass and Russian wildrye grass. Do not apply ROTAM Metsulfuron-methyl 60DF Herbicide preplant or preemergence to orchardgrass and Russian wildrye grass as severe crop injury may result.

Early postemergence to new plantings

Apply ROTAM Metsulfuron-methyl 60DF Herbicide at 1/10 ounce per acre, plus a nonionic surfactant at the rate of 2 to 4 pints per 100 gallons of spray solution on all labeled grasses anytime after grass emergence.

Do not use a spray adjuvant other than non-ionic surfactant. Because grass species differ in time of emergence, apply only after the majority of grasses are in the 3 to 4 leaf stage.

Postemergence to stands with 1— 5 leaf grasses planted the previous season

Apply ROTAM Metsulfuron-methyl 60DF Herbicide at 1/10 ounce per acre plus a nonionic surfactant at the rate of 2 to 4 pints per 100 gallons of spray solution, on all labeled grasses when the majority of the grasses have one or more leaves.

Do not use a spray adjuvant other than non-ionic surfactant.

APPLICATION INFORMATION FOR ESTABLISHED GRASSES

Use Rates for Established Grasses

Apply up to 1 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre as a broadcast application to established grasses. For spot applications, use 1 ounce per 100 gallons of water. Do not apply more than 1 2/3 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide per acre per year.

Refer to the Weeds Controlled section of this label for a listing of the weeds controlled by ROTAM Metsulfuron-methyl 60DF Herbicide and the appropriate use rate to obtain control.

Application Timing — Established Grasses

ROTAM Metsulfuron-methyl 60DF Herbicide may be applied to established native grasses such as bluestems and grama, and on other established grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass, fescue and timothy that were planted the previous growing season (or earlier) and are fully tillered, unless otherwise directed on this label. Specific application timing information on several of these grass species follows:

Grass	Minimum time from Grass establishment ROTAM Metsulfuron-methyl 60DF Herbicide Application
Bermudagrass	2 months
Bluegrass, bromegrass, Orchardgrass	6 months
Timothy	12 months
Fescue	24 months

Fescue Precautions:

Note that ROTAM Metsulfuron-methyl 60DF Herbicide may temporarily stunt tall fescue, cause it to turn

yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- Do not use more than 4/10 ounce per acre of ROTAM Metsulfuron-methyl 60DF Herbicide
- Tank mix ROTAM Metsulfuron-methyl 60DF Herbicide with 2,4-D
- Use the lowest recommended rate for target weeds
- Use a non-ionic surfactant at 1/2 to 1 pint per 100 gallons of spray solution
- 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
- Do not use a spray adjuvant other than non-ionic surfactant The first cutting yields may be reduced due to seedhead suppression resulting from treatment with ROTAM Metsulfuron-methyl 60DF Herbicide.

Timothy Precautions:

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

- Do not use more than 4/10 ounce per acre ROTAM Metsulfuron-methyl 60DF Herbicide
- Tank mix ROTAM Metsulfuron-methyl 60DF Herbicide with 2, 4-D
- Use the lowest recommended rate for target weeds
- Use a non-ionic surfactant at 1/2 pint per 100 gallons of spray solution (1/16%)
- Make applications in the late summer or fall
- Do not use surfactant when liquid nitrogen is used as a carrier

Do not use spray adjuvant other than non-ionic surfactant Application of ROTAM Metsulfuron-methyl 60DF Herbicide to Pensacola bahiagrass, ryegrass (Italian or perennial) and Garrison's creeping foxtail may cause severe injury to and/or loss of forage.

Other Grasses:

Varieties and species of forage grasses differ in their tolerance to herbicides. When using ROTAM Metsulfuron-methyl 60DF Herbicide on a particular grass for the first time, limit use to a small area. In no injury occurs throughout the season, larger acreage may be treated the following season.

Broadleaf forage species, such as alfalfa and clover, are highly sensitive to ROTAM Metsulfuron-methyl 60DF Herbicide and will be severely stunted or injured by ROTAM Metsulfuron-methyl 60DF Herbicide.

CROP ROTATION

Before using ROTAM Metsulfuron-methyl 60DF Herbicide, carefully consider your crop rotation plans and options.

Minimum Rotational Intervals

Minimum rotation intervals* are determined by the rate of breakdown of ROTAM Metsulfuron-methyl 60DF Herbicide applied. ROTAM Metsulfuron-methyl 60DF Herbicide 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 ROTAM Metsulfuron-methyl 60DF Herbicide breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow ROTAM Metsulfuron-methyl 60DF Herbicide 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

ROTAM Metsulfuron-methyl 60DF Herbicide should not be used on soils having a pH above 7.9, as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, ROTAM Metsulfuron-methyl 60DF Herbicide 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 ROTAM Metsulfuron-methyl 60DF Herbicide.

Checking Soil pH

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

BIOASSAY

A field bioassay must be completed before rotating to any crop or grass species/variety not listed in 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. To conduct a field bioassay, grow test strips of the crop(s) or grass(es) you plan to grow the following year in fields previously treated with ROTAM Metsulfuron-methyl 60DF Herbicide. Crop or grass response to the bioassay will indicate whether or not to rotate to the crop(s) or grass(es) grown in the test

strips. If a field bioassay is planned, check with your local Agricultural dealer for information detailing the field bioassay procedure.

Rotation Intervals for Overseeding and Renovation

Location	Crop or Grass Species	Maximum ROTAM Metsulfuron-methyl 60DF Herbicide Rate	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, ryegrass, tall fescue	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 STATES NOT INCLUDED ABOVE	Red clover, white clover, and sweet clover	1/10 to 2/10	12
	Bermudagrass, bluegrass, ryegrass	1/10 to 2/10	6
	Tall 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
ALL AREAS WITH SOIL PH OF 7.5 OR LESS	Russian wildrye	1/10 to 1/2	1
	Green needlegrass, switchgrass, sheep fescue	1/10 to 1	1
	Meadow brome, smooth brome, alta fescue, red fescue, meadow foxtail, orchardgrass, Russian wildrye, timothy	1/10 to 1	2
ALL AREAS WITH SOIL PH OF 7.9 OR LESS	Alkali sacaton, mountain brome, blue grama thickspike wheatgrass	1/10 to 1	1
	Sideoats grama, switchgrass	1/10 to 1/2	2
	Western wheatgrass	1/10 to 1	2
	Sideoats grama, switchgrass, big bluestem	1/10 to 1	3

When used as directed, there is no grazing or haying restriction for use rates of 1 2/3 ounce per acre or less. At use rates greater than 1 2/3 ounce per acre and up to 3 1/3 ounce per acre, forage grasses may be cut for hay, fodder or green forage and fed to livestock, including lactating animals, 3 days after treatment.

IMPORTANT PRECAUTIONS

- Grass species or varieties may differ in their response to various herbicides. If no information is available, limit the initial use of ROTAM Metsulfuron-methyl 60DF Herbicide to a small area.
- Components in a grass seed mixture will vary in tolerance to ROTAM Metsulfuron-methyl 60DF Herbicide so the final stand may not reflect the seed ratio.
- Under certain conditions such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after ROTAM Metsulfuron-methyl 60DF Herbicide application, temporary discoloration and/or grass injury may occur. ROTAM Metsulfuron-methyl 60DF Herbicide should not be applied to grass that is stressed by severe weather conditions, drought, low fertility, water-saturated soils, disease, or insect damage as grass injury may result. Severe winter stress, drought, disease, or insect damage before or following application also may result in grass injury.
- Applications of ROTAM Metsulfuron-methyl 60DF Herbicide to lands undersown with legumes may cause injury to the legumes. Legumes in a seeding mixture may be severely injured or killed following an application of @ XP. The control of weeds in wheel track areas may be reduced if ground applications are made when dry, dusty field conditions exist. The addition of 2,4-D or MCPA should improve weed control under these conditions

WEEDS CONTROLLED

1/3 to 1/2 ounce per acre

- | | |
|-------------------|-------------------------|
| Annual sowthistle | Goldenrod |
| Aster | Lambsquarters |
| Bahiagrass | Marestail/horseweed**** |
| Beebalm | Maximillion sunflower |
| Bittercress | Miners lettuce |
| Bitter sneezeweed | Pennsylvania smartweed |

- Blackeyed-susan
- Blue mustard
- Bur buttercup
- Chicory
- Clover
- Cocklebur
- Common chickweed
- Common groundsel
- Common purslane
- Common yarrow
- Conical catchfly
- Corn cockle
- Cow cockle
- Crown vetch
- Dandelion
- Dogfennel
- False chamomile
- Fiddleneck tarweed
- Field pennycress
- Flixweed
- Plains coreopsis
- Plantain
- Redroot pigweed
- Redstem filaree
- Rough fleabane
- Shepherd's purse
- Silky crazyweed (locoweed)
- Smallseed falseflax
- Smooth pigweed
- Sweet clover
- Tansymustard
- Treacle mustard
- Tumble mustard
- Wild carrot
- Wild garlic
- Wild lettuce
- Wild mustard
- Wooly croton
- Wood sorrel
- Yankeweed

1/2 to 1 ounce per acre

- Blackberry
- Black herbane
- Broom snakeweed*
- Buckhorn plantain
- Bull thistle
- Common crupina
- Common sunflower
- Curly dock
- Dewberry
- Dyer's woad
- Garlic mustard
- Gorse
- Halogeton
- Henbit
- Honeysuckle
- Multiflora rose and other wild roses
- Musk thistle***
- Oxeye daisy
- Plumeless thistle
- Prostrate knotweed
- Rosering gaillardia
- Seaside arrowgrass
- Sericea lespedeza
- Tansy ragwort
- Teasel
- Wild caraway

1 to 2 ounces per acre

- Common mullein
- Common tansy
- Field bindweed**
- Greasewood
- Gumweed
- Houndstongue
- Lupine
- Old world climbing fern (Lygodium)
- Perennial pepperweed
- Poison hemlock
- Purple loosestrife
- Purple scabious
- Scotch thistle
- Scouringrush
- Salsify
- Snowberry
- St. Johnswort
- Sulphur cinquefoil
- Western salsify
- Whitetop (hoary cress)
- Wild iris

1 1/2 to 2 ounces per acre

- Canada thistle**
- Dalmation toadflax**
- Duncecap larkspur
- Russian knapweed**
- Tall larkspur
- Wild parsnip
- Yellow toadflax**

3 to 4 ounces per acre

- Kudzu

* Apply fall through spring.

** Suppression, which is a visual reduction in weed competition (reduced population or vigor) as compared to untreated areas. Apply as a full coverage spray for best performance.

*** Certain biotypes of musk thistle are more sensitive to ROTAM Metsulfuron-methyl 60DF Herbicide and may be controlled with rates of 1/4 to 1/2 ounce per acre. Treatments of ROTAM Metsulfuron-methyl 60DF Herbicide may be applied from rosette through bloom stages of development.

**** Certain biotypes of maretail/horsetail are less sensitive to ROTAM Metsulfuron-methyl 60DF Herbicide and may be controlled by tank mixes with herbicides with a different mode of action.

Problem Weed Control

For broader spectrum control and for use on certain biotypes of broadleaf weeds which may be resistant to ROTAM Metsulfuron-methyl 60DF Herbicide and herbicides with the same mode of action, the following tank mixes are recommended.

Dicamba + 2,4-D

Weed	Rate of ROTAM Metsulfuron-methyl 60DF Herbicide	Rate of dicamba (fluid ounces/acre)	Rate of 2,4-D (fluid ounces/acre)
Kochia control	1/2	8	16
Spotted knapweed control	1/2	8	16
Rush skeletonweed suppression	1	8	16

RANGELAND AND PASTURES

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for control of certain broadleaf weeds in permanent rangeland and pastures where certain desirable perennial grasses are established.

Selective use on established perennial grasses

On grasses such as western wheatgrass, crested wheatgrass, sideoats gramma, hairy gramma, bluestems, smooth brome, purple threawn, hooded windmillgrass, switchgrass, and bermudagrass, apply postemergence at the rates of 1/10 to 3/4 oz. per acre as listed under WEEDS CONTROLLED.

Selective use on established and newly seeded grasses

Blue gramma, bluestems, sideoats gramma, Blackwell switchgrass, buffalograss, green sprangletop, indiagrass, kleingrass, lovegrasses (atherstone, sand, weeping, wilman), orchardgrass, wheatgrass (bluebunch, intermediate, pubescent siberian, slender, streambank, tall, thickspike), and wildrye grass (Russian) may be treated only at 1/10 oz. ROTAM Metsulfuron-methyl 60DF Herbicide per acre (see WEEDS CONTROLLED).

New seedlings (except Russian wildrye, and orchardgrass) of these grasses may be treated either preplant (before planting) or preemergence (after planting but before emergence). All of the grasses listed may be treated postemergence (after emergence).

WEEDS CONTROLLED

1/10 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre (add 1-3 qts. surfactant/100 gals. for emerged weeds)

Chickweed (common)	Field pennycress (fanweed)	Plains coreopsis	Snow speedwell
Common purslane	Filaree	Shepherdspurse	Tumble mustard (Jim Hill)
Conical catchfly	Groundsel (common)	Smallseed falseflax	Volunteer sunflower
Cow cockle	Mayweed	Smartweed (green ladysthumb, pale)	Waterpod
False chamomile	Miner's lettuce		Wild mustard

Early Spring* (a)

1/10 to 1/5 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre (add 1-3 qts. surfactant/100 gals. for emerged weeds)

Buttercup	Henbit	Mayweed	Wild garlic* (b)
Carolina geranium			

Late Spring/Early Summer* (c)

1/10 to 1/5 ounce ROTAM Metsulfuron-methyl 60DF per acre (add 1-3 qts. surfactant/100 gals. for emerged weeds)

Bitter sneezeweed	Common marestalk	Pigweed	Woolly croton
Common broomweed			

Late Spring/Early Summer* (c)

1/10 to 1/3 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre (add 1-3 qts. surfactant/100 gals. for emerged weeds)

Canada thistle* (d)	Muskthistle*(e)	Western snowberry or Buckbrush* (f)	
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* (a-f see below)

- (a) Apply in the early spring, but before weeds are 4 inches tall or in diameter. Apply when weeds are actively growing.
- (b) Apply in the early spring when garlic is less than 12 inches tall with 2 to 4 inches of new growth. Thorough spray coverage of all garlic plants is essential.
- (c) Apply in the late spring or early summer, but before weeds are 4 inches tall. Apply when weeds are actively growing.
- (d) Suppression-apply when the Canada thistle is at least 6-10 inches tall and near flowering.
- (e) Apply in the spring or early summer to the rosette stage, before bolting, for best control.
- (f) Suppression-a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with the rate used, size of weeds, and environmental conditions following treatment.

1/3 to 1/2 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre (plus surfactant)

Annual sowthistle	Common groundsel	Field pennycress	Rough fleabane
Aster	Common mullein	Flixweed	Shepherdspurse
Bahiagrass (Pensacola)	Common purslane	Goldenrod	Smallseed falseflax
Beebalm	Common yarrow	Gumweed	Smooth pigweed
Bittercress	Conical catchfly	Lambsquarters	Sweet clover
Blackberry	Corn cockle	Maximillion sunflower	Tansymustard
Blackeyed-Susan	Cow cockle	Miner's lettuce	Treacle mustard
Blue mustard	Crown vetch	Multiflora rose* (g)	Tumble mustard
Chicory	Dandelion	Pennsylvania smartweed	Wild carrot
Clover	Dogfennel	Plains coreopsis	Wild mustard
Cocklebur	False chamomile	Plantain	Woolly sorrel
Common chickweed	Fiddleneck tarweed	Redstem filaree	Yankeweed

* (g) Apply in the spring, soon after fully leafed. Multiflora rose must be less than 3 feet tall for a broadcast application to give effective control. See also SPOT APPLICATION.
 * Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with the rate used, size of weeds, and environmental conditions following treatment.

1/2 to 3/4 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre (plus surfactant)

Broom snakeweed (apply fall/spring)	Common sunflower	Dyer's woad	Prostrate knotweed
Buckhorn plantain	Curly dock	Hoary cress (whitetop)	Rosering gaillardia

3/4 to 1 ounce ROTAM Metsulfuron-methyl 60DF Herbicide per acre (plus surfactant)

Crupina	Henbit	St. Johnswort	Teasel
Gorse	Marestail	Tansy ragwort	Wild roses
Halogeton	Perennial pepperweed		

1 to 1 2/3 ounces ROTAM Metsulfuron-methyl 60DF Herbicide per acre (plus surfactant)

Bull thistle	Poison hemlock	Scotch thistle	Snowberry
Common tansy	Salsify	Scouringrush	

Use the lower rate of ROTAM Metsulfuron-methyl 60DF Herbicide on light infestations or seedling weeds and the higher rates on heavy infestations, larger weeds, or where extended control is desired. Note: Do not apply ROTAM Metsulfuron-methyl 60DF Herbicide to pasture grasses under stress from drought, insects, disease, cold temperatures, or poor fertility as injury may result. SPOT APPLICATION: Apply 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide per 100 gallons of water, plus surfactant, for the control of: • Blackberry • Canada thistle • Multiflora rose

Apply as a foliar spray to runoff. Do not exceed 167 gallons of total spray per acre. Foliar applications should be made after plants are fully leafed. Complete coverage of all foliage and stems is required for control. Effectiveness may be reduced if rainfall occurs within 4 hours after application. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage. For Canada thistle, apply in the spring when growth is at least 6-10 inches tall and before flowering.

Do not use on bahiagrass or ryegrass pasture as severe injury will result. Applications of ROTAM Metsulfuron-methyl 60DF Herbicide to fescue early in the season may cause yellowing and stunting of the grass as well as seedhead suppression.

Use low rates for minimum effect (chlorosis) on pasture grasses, particularly fescue.

Do not exceed 1 2/3 oz. ROTAM Metsulfuron-methyl 60DF Herbicide per acre per year.

ROTAM Metsulfuron-methyl 60DF Herbicide has no grazing restriction.

Do not use on grasses grown for seed.

General Application Information

This product may be applied to rangeland or pasture by air or ground. Use an adequate spray volume to obtain thorough coverage of the target weeds.

Applications to Rangeland and Pasture

Ground Applications

Apply using properly calibrated equipment. Select a spray volume and delivery system that will insure thorough coverage and a uniform spray pattern. Avoid overlapping, and shut off spray booms while starting, turning, slowing, or stopping, or injury to the crop or following crops may result.

Unless otherwise directed, use a surfactant of at least 80% active ingredient in postemergence applications to weeds. Add surfactant as the last ingredient at the rates of 1 to 3 quarts per 100 gallons of spray volume; use the high rate for maximum effects on emerged weeds. Antifoaming agents may be needed. DO NOT use liquid fertilizer as a substitute for a surfactant.

Equipment-Spray Volumes

For optimum spray distribution and thorough coverage use flat fan or low volume flood nozzles. For flat fan nozzles, do not use less than 3 gallons per acre (GPA) spray volume.

For flood nozzles on 30-inch nozzle spacing, use not less than 10 GPA and no larger than TK 10 or equivalent and not less than 30 psi. On 40-inch nozzle spacing, use not less than 13 GPA or not less than 20 GPA when nozzles are on a 60-inch spacing. 100% overlapping of nozzle spray pattern is recommended for 30, 40, and 60-inch spacing. With Raindrop [1] nozzles, do not use less than 30 GPA and insure for 100% overlap of nozzle spray patterns.

Use 50-mesh screens or larger.

Application may also be made with a handgun using 100 to 300 gals. water per acre (as needed for coverage of weed growth). Do not exceed 3/4 oz. ROTAM Metsulfuron-methyl 60DF Herbicide per acre per year.

IMPORTANT PRECAUTIONS — SPRAY DRIFT

Follow these practices to minimize drift. Do not allow spray to drift on to adjacent crops or land, as even small amounts may injure other plants. When spraying near adjacent, sensitive crops or plants, do everything possible to reduce spray drift. This includes:

- Stop spraying if wind speed becomes excessive. DO NOT SPRAY IF WIND SPEED IS 10 MPH OR GREATER. DO NOT SPRAY IF WINDS ARE GUSTY.
- High temperatures, drought, and low relative humidity increase the possibility of harmful spray drift. EXTREME CAUTION MUST BE USED WHEN THESE CONDITIONS ARE PRESENT AND SENSITIVE CROPS OR PLANTS ARE NEARBY, REGARDLESS OF WIND SPEED.
- Do not apply when a temperature inversion exists.
- Drift from ground equipment may be further reduced by:
 1. Reducing pressure (PSI). DO NOT EXCEED 40 PSI when applying ROTAM Metsulfuron-methyl 60D Herbicide.
 2. Applying as close to target plants as possible while still maintaining a good spray pattern.
- Use extreme care when applying in areas adjacent to any body of water.

Keep out of lakes, streams, ponds, reservoirs, or any body of water.

Refer to the SPRAY DRIFT MANAGEMENT Section found elsewhere on this label for additional spray drift information.

Application as a Spot Treatment Technique in Range and Noncrop Areas

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for use as spot treatment to control noxious and troublesome weeds on rangeland and non-crop areas such as roadsides and industrial sites including government and private lands.

General Application Information

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended to control many species of weeds, including noxious weeds, in certain established grasses growing on non-crop areas and forage grasses growing on rangeland and pasture. Refer to the WEEDS CONTROLLED section found elsewhere on this label for a listing of susceptible weed species.

If the sprayer is calibrated, consult this label to select the application rate per acre of ROTAM Metsulfuron-methyl 60DF Herbicide appropriate for the target weeds, or

Use a measuring guide to mix one gram of ROTAM Metsulfuron-methyl 60DF Herbicide per one gallon of water along with a suitable surfactant. Spray to the point of wetting the entire surface of the target weeds, approximately 40 gallons of solution per acre.

When applied in this manner there is no grazing restriction following the use of ROTAM Metsulfuron-methyl 60DF Herbicide.

Application Timing

Applications may be made at anytime of the year, except when the soil is frozen.

IMPORTANT PRECAUTIONS

- Varieties and species of grasses differ in their tolerance to herbicides. When using ROTAM Metsulfuron-methyl 60DF Herbicide on a particular grass for the first time, limit use to a single 1 ounce container. If no injury occurs throughout the season larger acreage may be treated.
- Applications made to some established grasses may cause temporary stunting, yellowing, or seed head suppression (i.e. fescue, timothy).
- Applications made to newly established grasses less than 2 years from seeding may result in injury or loss.
- Do not apply to forage grasses known to be sensitive to ROTAM Metsulfuron-methyl 60DF Herbicide such as ryegrass (Italian and perennial), bahia or Garrison's creeping foxtail. • Broadleaf forage species such as alfalfa and clover are highly sensitive to ROTAM Metsulfuron-methyl 60DF Herbicide and will be severely injured or killed.
- When used as directed, there is no grazing restriction for use rates of 1 2/3 ounces per acre and less. At use rates of 1 2/3 to 3 1/2 ounces per acre, forage grasses may be cut for hay, fodder, or green forage and fed to livestock, including lactating animals, 3 days after treatment.

Aerial Application on Utility Rights-of-Way, Military Installations, Rangeland, and Pastures (Western U.S.)

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for control of noxious and troublesome species of weeds and brush on rangeland, and pastures in the western U.S. by aerial (helicopter and fixed wing) application. Applications may be made in the states of Arizona, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, North Dakota, Nevada, New Mexico, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

Refer to the WEEDS CONTROLLED and BRUSH SPECIES CONTROLLED found elsewhere on this label for species of weeds and brush controlled and the appropriate use rates. When used as directed, forage grasses may be cut for hay, fodder, or green forage and fed to livestock 3 days after treatment at rates up to 3 1/3 ounces per acre. At rates of 1 2/3 ounces per acre and less, there is no grazing restriction.

Apply with helicopter or fixed wing aircraft fitted with application equipment designed to deliver droplets of uniform size and to prevent drift. Mix tanks or nurse tanks should be equipped with an agitation system capable of keeping the ROTAM Metsulfuron-methyl 60DF Herbicide thoroughly mixed during the application. If the spray preparation is left standing, thoroughly agitate before using.

The use of a non-ionic surfactant of at least 80% active ingredient at a minimum rate of 1 qt/100 gal. of spray solution is necessary for acceptable performance. Apply the finished solution at rates between 5 and 25 gal/acre.

Apply a minimum of 5 gallons of solution per acre when application rates of greater than 1/2 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide per acre are used. A minimum of 2 gallons of solution per acre may be used when application rates of 1/2 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide per acre and less are used. Use the lower volumes when applications are made with fixed wing aircraft or when the target vegetation is small or sparse. Use the higher volumes when applications are made with a helicopter (10 to 25 gal/acre) or when the target vegetation is tall, dense, or forms multiple canopies (strata) of foliage.

Thorough coverage of the target plant's foliage is necessary to obtain adequate control. For broader spectrum control, ROTAM Metsulfuron-methyl 60DF Herbicide may be tank mixed with other herbicides labeled for tank mix combination and aerial application on the specific use sites. Refer to the ROTAM Metsulfuron-methyl 60DF Herbicide package label for a complete listing of registered tank mixes. Refer to the respective package labels for appropriate use rates and use sites. Read and follow the most restrictive cautionary statements and restrictions on the ROTAM Metsulfuron-methyl 60DF Herbicide and companion product's package label.

APPLICATION RESTRICTIONS

In Idaho, Oregon and Washington state, use at least 3 gallons of spray solution per acre.

TURF – INDUSTRIAL AND ORNAMENTAL

Industrial Turf Applications (Unimproved Only)

Application Information

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for selective weed control in unimproved industrial turf where certain grasses are well established and desired as ground cover. ROTAM Metsulfuron-methyl 60 DFis also recommended for the control of certain noxious and troublesome weeds in turf.

In addition to conventional spray equipment, ROTAM Metsulfuron-methyl 60DF Herbicide may also be applied with invert emulsion equipment. When using an invert emulsion, mix the prescribed rate of ROTAM Metsulfuron-methyl 60DF Herbicide in the water phase. Consult the WEEDS CONTROLLED table to determine which weeds will be controlled by the following recommendations.

Fescue and Bluegrass

Apply 1/4 to 1/2 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide per acre.

Crested Wheatgrass and Smooth Brome

Apply 1/4 to 1 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide per acre.

Bermudagrass

Apply 1/4 to 2 ounces of ROTAM Metsulfuron-methyl 60DF Herbicide per acre.

Application Timing

Applications may be made at anytime of the year, except when the soil is frozen. When a spring application is made on fescue or bluegrass, a second application may be made during the summer after full seed head maturation.

Growth Suppression and Seed head Inhibition (Chemical Mowing) Application Information

ROTAM Metsulfuron-methyl 60DF Herbicide is recommended for growth suppression and seed head inhibition in well established fescue and bluegrass turf at the use rate of 1/4 to 1/2 ounce per acre.

Tank Mix Combination

ROTAM Metsulfuron-methyl 60DF Herbicide may be tank mixed with Embark for improved performance in the regulation of growth and seed head suppression. Tank mix 1/4 to 1/2 ounce of ROTAM Metsulfuron-methyl 60DF Herbicide with 1/4 to 1/2 pint of Embark.

Application Timing

Application may be made after at least 2 to 3 inches of new growth has emerged until the appearance of the seed stalk.

IMPORTANT PRECAUTIONS — FESCUE

ROTAM Metsulfuron-methyl 60DF Herbicide may temporarily stunt tall fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- Do not use more than 4/10 ounce per acre of ROTAM Metsulfuron-methyl 60DF Herbicide.
- Tank mix ROTAM Metsulfuron-methyl 60DF Herbicide with 2,4-D.
- Use the lowest recommended rate for target weeds.
- Use a non-ionic surfactant at 1/2 to 1 pint per 100 gallons of spray solution.
- Make application later in the spring after the new growth is 5 to 6 inches tall, or in the fall.
- Do not use a surfactant when liquid nitrogen is used as a carrier.
- Do not use a spray adjuvant other than non-ionic surfactant.
- The yields from the first cutting may be reduced due to seedhead suppression resulting from treatment with ROTAM Metsulfuron-methyl 60DF Herbicide.

IMPORTANT PRECAUTIONS-INDUSTRIAL TURF ONLY

- An application of ROTAM Metsulfuron-methyl 60DF Herbicide may cause temporary discoloration (chlorosis) of the grasses. Use the lower recommended rates for minimum discoloration.
- With fescue and bluegrass, sequential applications made during the same or consecutive growth periods (i.e. spring and fall) may result in excessive injury to turf.
- Excessive injury may result when ROTAM Metsulfuron-methyl 60DF Herbicide is applied to turf that is under stress from drought, insects, disease, cold temperatures (winter injury), or poor fertility.
- ROTAM Metsulfuron-methyl 60DF Herbicide is not recommended for use on bahiagrass.

Professional Turf and Ornamental Applications

ROTAM Metsulfuron-methyl 60DF Herbicide is for use on Professional Turf and Ornamentals, such as Lawns, Parks, Cemeteries, and Golf Courses (Fairways, Aprons, Tees and Roughs). This product may also be used on Sod Farms.

Controls the following perennial and annual weedy grasses:

Bahiagrass Ryegrass
Foxtail

Controls the following broadleaf (dicot) weeds:

Annual sowthistle	Henbit
Aster	Hoary cress (whitetop)
Bittercress	Kochia
Blue mustard	Lambsquarters
Buckhorn	Miners lettuce
Bur buttercup	Pennsylvania smartweed
Canada thistle	Plantain
Chicory	Prickly lettuce
Clover (white)	Prostrate knotweed
Common chickweed	Redroot pigweed
Common groundsel	Redstem filaree
Common mullein	Shepherdspurse
Common purslane	Smallseed flaxweed
Common sunflower	Smooth pigweed
Common yarrow	Spurge (prostrate)
Conical catchfly	Sweet clover
Cow cockle	Tansy mustard
Crown vetch	Treacle mustard
Curly dock	Tumble mustard
Dandelion	Virginia buttonweed
Dogfennel	Wild carrot
False chamomile	
Fiddleneck tarweed	
Field pennycress	
Flixweed	
Goldenrod	

For use only on Kentucky Bluegrass, Fine Fescue, Bermudagrass and St. Augustinegrass turf areas.

IMPORTANT PRECAUTIONS — TURF

Use lowest rates for minimum chlorosis of the turf.

Do not apply ROTAM Metsulfuron-methyl 60DF Herbicide to turf under stress from drought, insects, disease, cold temperatures, high temperatures of above 85°F on cool season grasses, or poor fertility as injury may result.

Do not apply to turf less than 1 year old.

Do not use on Bahiagrass where it is the desired turf, as severe injury may result.

Do not plant ornamentals such as shrubs and trees in treated areas for at least 1 year after the last application, or bedding plants for at least 2 years.

NOTE: Addition of a nonionic surfactant of at least 80% active ingredient at 0.25 percent by volume (1 qt./100 gal.) provides maximum performance, but may temporarily increase chlorosis of the turf.

Allow one week between the application of ROTAM Metsulfuron-methyl 60DF Herbicide and other pesticide products. (This guideline can be relaxed where severe insect or disease attack requires immediate treatment).

DO NOT USE ON FOOD OR FEED CROPS.

Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply ROTAM Metsulfuron-methyl 60DF Herbicide (except as recommended) or 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.

When overseeding, wait 2 months (8 weeks) after application. Do not apply to any body of water, including streams, irrigation water or wells.

Do not apply where runoff water may flow onto agricultural land, as injury to crops may result.

Do not allow spray drift onto adjacent crops or other desirable plants or trees as injury may occur.

Follow these practices to minimize drift:

- Stop spraying if wind speed becomes excessive. Spray drift can occur at wind speeds less than 10 MPH. If sensitive plants are downwind,

extreme caution must be used. Do not spray if winds are gusty.

- High temperatures, drought and low relative humidity increase the possibility of harmful spray drift. Caution must be used when these conditions are present and sensitive plants are nearby.
- Use large droplet size sprays to minimize drift.
- Use spray pressures of 35 psi or less when applying this product.

HOW TO USE

Use spray volumes of 20 to 80 gal./acre and pressures of 25 to 35 psi at the following rates of ROTAM Metsulfuron-methyl 60DF Herbicide from the weeds listed below:

0.125 TO 0.25 OZ. PRODUCT/ACRE

Ryegrass (greens)

0.25 TO 0.33 OZ. PRODUCT/ACRE

- Bittercress
- Blue mustard
- Bur buttercup
- Chickweed
- Chicory
- Clover (white)
- Creeping beggarweed
- Dandelion
- Field pennycress
- Ground ivy (Fall)
- Parsley-piert
- Prostrate spurge
- Redstem filaree
- Spurweed
- Wild carrot

0.33 TO 0.5 OZ. PRODUCT/ACRE

- Annual sowthistle
- Aster
- Carolina geranium
- Common yarrow
- Crown vetch
- Florida betony
- Ground ivy (Spring*)
- Henbit
- Lambsquarters
- Lespedeza
- Miners lettuce
- Plantain
- Pricky lettuce
- Ragweed
- Redroot pigweed
- Ryegrass (fairways)
- Seedling dogfennel
- Shepherdspurse
- Smooth pigweed
- Smallseed falsefiar
- Sweet clover
- Tansy mustard
- Treacle mustard
- Tumble mustard
- Wild celery
- Wild garlic
- Wild lettuce
- Wild onion
- Woodsorrel (oxalis)

0.25 TO 0.75 OZ. PRODUCT/ACRE

Bahiagrass*

0.5 TO 1 OZ. PRODUCT/ACRE

- Brazil pusley
- Buckhorn plantain
- Canada thistle**
- Curly dock
- Common groundsel
- Common purslane
- Common sunflower
- Crabgrass
- Dogfennel
- Dollarweed*
- Florida pusley
- Foxtail
- Hoary cress (whitetop)
- Kochia
- Pennsylvania smartweed
- Plantain
- Prostrate knotweed
- Sida (southern)
- Virginia buttonweed
- Wild mustard

* A repeat application may be required in 4 to 6 weeks.

** Suppression only involving a visual reduction in competition compared to an untreated area.

*** Controls seedling Virginia buttonweed. Suppression only of more mature plants. Repeat application may be required in 4 to 6 weeks.

The required amount of ROTAM Metsulfuron-methyl 60DF Herbicide should be added when the spray tank is half full of water and, with agitator running, add the proper amount of product. Finish adding the required amount of water. Continuous agitation is required to keep the product in suspension.

Spray preparations of this product may degrade in acid solutions if not used in 24 hours; it is stable in alkaline solutions. Thoroughly re-agitate before using.

Tank mixes with other registered herbicides should be tested for compatibility before full scale mixing. Use mechanical or bypass agitation to thoroughly mix the spray suspension. It is not necessary to premix this product with water in a separate container prior to adding it to the spray tank. This product should always be added to the tank first, before any other herbicides or adjuvants.

Kentucky Bluegrass and Fine Fescue: Apply 0.25 to 0.5 oz. of ROTAM Metsulfuron-methyl 60DF Herbicide per acre for control of the listed weeds. Do not exceed a total of 0.5 oz. per acre within a 9-month period.

St. Augustinegrass, Bermudagrass and Zoysiagrass (Meyers and Emerald): Apply 0.25 to 1.0 oz. of ROTAM Metsulfuron-methyl 60DF Herbicide per acre for weed control. Some chlorosis or stunting of the turfgrass may occur following application.

Bahiagrass Control: For the selective control of Bahiagrass in Bermudagrass turf; use 0.25 to 0.75 oz. of ROTAM Metsulfuron-methyl 60DF Herbicide per acre. Use the higher rates of the range on Argentine, Common and Paraguayan Bahiagrass. Apply a repeat treatment in 4 to 6 weeks if necessary. Some chlorosis or stunting of the Bermudagrass may occur following the application.

Centipedegrass: Apply 0.25 to 0.5 oz. of this product per acre for weed control. Some chlorosis or stunting of the turfgrass may occur following the application.

NOTE: Addition of a nonionic surfactant of at least 80% active ingredient at 0.25 percent by volume (1 qt./100 gal.) provides maximum performance, but may temporarily increase chlorosis of the turf.

Allow one week between the application of ROTAM Metsulfuron-methyl 60DF Herbicide and other pesticide products. (This guideline can be relaxed where a severe insect or disease attack requires immediate treatment.)

RECOMMENDED SPRAYER CLEANUP

Immediately after spraying, thoroughly remove all traces of ROTAM Metsulfuron-methyl 60DF Herbicide from mixing and spray equipment as follows:

1. Drain tank, rinse interior surface of tank, then flush tank, boom and hoses with clean water for a minimum of 5 minutes.
2. Fill the tank with clean water, then add an ammonia cleaning solution. Use one gallon ammonia (containing 3% active) per 100 gallons of water. Turn on sprayer long enough to flush through boom, hoses and nozzles. Stop spraying, but keep agitator working in the tank for 15 minutes, then drain.
3. Repeat Step 2.
4. Repeat Step 1.
5. Nozzles and screens should then be removed and cleaned separately. To remove traces of cleaning solution, rinse the tank thoroughly with clean water and flush through hoses and boom.
6. Flush boom and hoses with clean water for 5 minutes just prior to using the sprayer for the first time after the ROTAM Metsulfuron-methyl 60DF Herbicide application.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal (Nonrefillable container 5 gallons or less): 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. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain 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 CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident,
call CHEMTREC AT 1-800-424-9300**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying 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 must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ROTAM AGROCHEMICAL COMPANY LIMITED or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ROTAM AGROCHEMICAL COMPANY LIMITED and Seller harmless for any claims relating to such factors.

ROTAM AGROCHEMICAL COMPANY LIMITED 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 the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ROTAM AGROCHEMICAL COMPANY LIMITED, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ROTAM AGROCHEMICAL COMPANY LIMITED MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, In no event shall ROTAM AGROCHEMICAL COMPANY LIMITED or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED 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 ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ROTAM AGROCHEMICAL COMPANY LIMITED and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ROTAM AGROCHEMICAL COMPANY LIMITED.

EPA Registered: October 2, 2006
Amended: _____

- EPA Registered: October 2, 2006
- ®Arsenal is a registered trademark of BASF Corporation.
- ®Accord is a registered trademark of Monsanto Company.
- ®Embark is a registered trademark of PBI Gordon Corporation.
- ®Garlon and ®Tordon are registered trademarks of Dow Agrosciences.

[BASE CONTAINER LABEL]

ROTAM Metsulfuron-methyl 60 DF Herbicide

ACTIVE INGREDIENT:	% by wt.
Metsulfuron-methyl: methyl 2-[[[4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]-carbonyl]amino)sulfonyl]benzoa.....	60.0%
INERT NGREDIENTS	40.0%
TOTAL	100.0%

EPA Reg. No.: 83100-2

EPA Est. No.: 69821-CHN-005

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no e 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.)

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR 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, 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. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL YOUR LOCAL POISON CONTROL CENTER FOR ASSISTANCE.

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.

This herbicide is injurious to plants at extremely low concentrations. Non-target plants may be adversely affected from drift and run-off.

DIRECTIONS FOR USE

Refer to attached booklet for complete Precautionary Statements and Directions For Use.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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Manufactured by:
Rotam Agrochemical Company Limited
660 Newtown-Yardley Road
Newtown, PA 18940

Net Contents: 8 ounces