OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
WASHINGTON, D.C. 20460

September 11, 2024

Alexis B. Bromley
Manager, Regulatory-Crop Protection & Adjuvants
Loveland Products Inc.
P.O. Box 1286
Greeley, CO 80632-1286

Subject: Label Amendment - Registration Review Mitigation for Metsulfuron-methyl
Product Name: LPI Metsulfuron Methyl
EPA Registration Number: 34704-999
Application Date: December 21, 2017 & August 25, 2022
Decision Number: 596225

Dear Alexis B. Bromley:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Metsulfuron-methyl Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must

submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Caleb Carr by phone at (202) 566-0636, or via email at carr.caleb@epa.gov.

Sincerely,

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

ENCLOSURE: Stamped label

LPI

METSULFURON METHYL

GROUP 2 HERBICIDE

[Editorial Note – [Bracketed text] is optional}

Dry Flowable
For use on Wheat, Barley, Triticale and Fallow

ACTIVE INGREDIENT	BY WEIGHT
Metsulfuron Methyl	
Methyl 2-[[[[(4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]carbonyl] amino]sulfonyl]benzoate	**60.0%**
OTHER INGREDIENTS	**40.0%**
TOTAL	**100.0%**

KEEP OUT OF REACH OF CHILDREN

CAUTION

[For Additional Precautionary Statements, Complete First Aid, Directions for Use, Storage and Disposal and Other Use Information, See Inside This Label Booklet]

FIRST AID	
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 further treatment advice.
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 further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
FOR A MEDICAL EMERGENCY INVOLVING this product CALL: 1-866-944-8565.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

EPA REG. NO. 34704-999
EPA EST. NO. 34704-MS-001
NET CONTENTS 2.5 GALS. (9.46 L)

FORMULATED FOR
LOVELAND PRODUCTS, INC.
P.O. BOX 1286, GREELEY, COLORADO 80632-1286

[EXP 12/17 Print and version codes to be placed here]

ACCEPTED
Sep 11, 2024
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 34704-999

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 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 exist, 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. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate..

Groundwater Label Advisory
Metsulfuron methyl is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Label Advisory
This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for weeks after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of metsulfuron methyl from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Non-target Organism Advisory Statement This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

IMPORTANT INFORMATION
PESTICIDE HANDLING

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

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval (REI). 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 REI of 4 hours.
PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

This product must be used only in accordance with instructions on this label, Supplemental Labels, Special Local Need Registrations, FIFRA Section 18 exemptions, or as otherwise permitted by FIFRA. Always read the entire label, including the Limitation of Warranty and Liability.

PRODUCT INFORMATION

This product is registered for use on land primarily dedicated to the production of wheat, barley, triticale and fallow.

This product is registered for use on wheat, barley, Triticale and fallow in most states. Check with your state extension or Department of Agriculture before use, to be certain this product is registered in your state. This product is not registered for use in Alamosa, Conejos, Costilla, RioGrande, and Saquache counties of Colorado.

This product is a dry-flowable granule that controls weeds in wheat (including durum), barley, Triticale and fallow. This product is mixed in water or can be preslurried in water and added to liquid nitrogen carrier solutions and applied as a uniform broadcast spray. A surfactant should be used in the spray mix unless otherwise specified on this label. This product is noncorrosive, nonflammable, non-volatile, and does not freeze.

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

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

IMPORTANT RESTRICTIONS

- Do not apply this product through any type of irrigation system.
- Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots extend,or in locations where the product may be washed or moved into contact with their roots, as injury or loss of desirable trees or other plants may result.
- Do not use on lawns, walks, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high maintenance, fine turfgrass areas, or similar areas.
- Do not use on grasses grown for seed.
- Do not apply to irrigated land where tailwater will be used to irrigate crops other than wheat and barley.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- Do not apply to wheat, barley or triticale undersown with legumes, as injury to the forage may result.

IMPORTANT PRECAUTIONS

- Wheat and barley varieties may differ in their response to various herbicides. DuPont recommends that you first consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use of this product to a small area.
- Under certain conditions such as heavy rainfall, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after this product application, temporary discoloration and/or crop injury may occur. this product should not be applied to wheat or barley that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Risk of injury is greatest when crop is in the 2 to 5- leaf stage. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.
- The combined treatment effects of this product postemergence preceded by preemergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold weather, or drought) causes poor seedling vigor.

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

Environmental Conditions and Biological Activity
This product is absorbed through the foliage of broadleaf weeds, rapidly inhibiting their growth. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies.

Application of this product provides the best control in vigorously growing crops that shade competitive weeds. Weed control in areas of thin crop stand or seeding skips may not be as satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control.

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

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

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

WEED RESISTANCE MANAGEMENT

The active ingredient in this product is metsulfuron methyl, which is an acetolactate synthase ALS (acetohydroxyacid synthase AHAS) inhibitor (Group 2). A given weed population may contain or develop resistance to an herbicide after repeated use. Appropriate resistance-management strategies should be followed to mitigate or delay resistance. If levels of control provided by applications of this product is reduced, and cannot be accounted for by factors such as misapplication, abnormal levels of target species or extremes of weather, it may be the case that target species have developed a strain resistant to applications of this product. Contact your local extension agent, crop advisor, or sales representative to find out if suspected resistant weeds have been found in your region.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

If resistance develops, this product may not provide sufficient control of target species. Where you suspect target species are developing resistance, contact State/local agricultural advisors. Integrated weed management guidelines promote an economically viable, environmentally sustainable, and socially acceptable weed control program regardless of the herbicide(s) used. The highlights of successful integrated weed management include:

1. Correctly identify weeds and look for trouble areas within field to identify resistance indicators.
2. Rotate crops.
3. Start the growing season with clean fields.
4. Rotate herbicide modes of action by using multiple modes of action during the growing season and apply no more than 2 applications of a single herbicide mode of action to the same field in a 2-year period. One method to accomplish this is to rotate herbicide tolerant trait systems.
5. Apply listed rates of herbicides to actively growing weeds at the correct time with the right application techniques.
6. Control any weeds that may have escaped the herbicide application.
7. Thoroughly clean field equipment between fields.
8. Scout before and after application.

Contact your local agronomic advisor for more specific information on integrated weed management for your area. Users should report lack of performance to registrant or their representative. For mixtures including this herbicide note that each listed weed may not be controlled by multiple mechanisms of action. Refer to crop specific directions (below) for maximum application rates and number of applications.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ANSI/ASABE S641 MAY 2018).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ANSI/ASABE S641 MAY 2018).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ANSI/ASAE S572.3 FEB 2020).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ANSI/ASAE S572.3 FEB 2020).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a Medium or coarser droplet size (ANSI/ASAE S572.3 FEB 2020) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

• Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

• Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

• Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

• Adjust Nozzles - Follow nozzle manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Boom-less Ground Applications:

-Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

-Take precautions to minimize spray drift.

Windblown Soil Particles

This product has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying this product if prevailing local conditions may be expected to result in off-site movement.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

APPLICATION INFORMATION

FALLOW Use Rates

Apply this product at 0.1 ounce per acre.

Application Timing

This product may be used as a fallow treatment, in the spring or fall when the majority of weeds have emerged and are actively growing.

Tank Mixtures in Fallow

This product may be used as a fallow treatment, and may be tank mixed with other herbicides that are registered for use in fallow. If those instructions conflict with this label, do not tank mix that product with this product. Read and follow all label instructions on timing, precautions, and warnings for any companion products before using these tank mixtures. Follow the most restrictive labeling.

WHEAT, BARLEY and TRITICALE

Use Rates

Wheat (including durum), Barley and Triticale

Apply 0.1 ounce of this product per acre to wheat, barley or triticale once per season.

Application Timing

Dryland Wheat, Barley and Triticale (Except Durum Variety)

Make applications after the crop is in the 2-leaf stage but before boot once per season.

Durum Variety Spring Wheat

Make applications after the crop is tillering but before boot once per season. Applications to durum varieties should be made in combination with 2,4-D.

Irrigated Wheat and Barley

Make applications after the crop begins tillering but before boot. First post-treatment irrigation should be delayed for at least 3 days after treatment and should not exceed 1 inch of water.

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

WEEDS CONTROLLED

Unless otherwise directed, treat when weeds are less than 4" tall or in diameter and are actively growing.

Effectiveness may be reduced if rainfall occurs within 4 hours after application.

Cereals and Fallow
All Crops

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

Weeds Suppressed ‡*

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

*See the **Specific Weed Problems** Section

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

conditions following treatment.

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

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

Canada Thistle and Sowthistle: Apply either this product plus surfactant or this product plus 2,4-D or MCPA in the spring after the majority of thistles have emerged and are small (rosette stage to 6" elongating stems) and actively growing. The application will inhibit the ability of emerged thistles to compete with the crop.

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

Kochia, Russian Thistle, Prickly Lettuce: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use this product in a tank mix with Dicamba and 2,4-D, or bromoxynil and 2,4-D (such as 0.75 to 1 pint Buctril + 0.25 to 0.375 pound active 2,4-D ester). This product should be applied in the spring when kochia, Russian thistle, and prickly lettuce are less than 2" tall or 2" across and are actively growing (refer to the TANK MIXTURES section of this label for additional details).

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

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

TANK MIXTURES IN CEREALS (WHEAT, BARLEY AND TRITICALE)

Read and follow all manufacturers' label instructions for any companion herbicides, fungicides, and/or insecticides. If those instructions conflict with this label, do not tank mix that product with this product. Read and follow all label instructions on timing, precautions, and warnings for any companion products before using these tank mixtures. Follow the most restrictive labeling.

This product may be tank mixed with other suitable registered herbicides to control weeds listed under **Weeds Suppressed**, weeds resistant to this product, or weeds not listed under **Weeds Controlled**.

With 2,4-D (Amine or Ester) or MCPA (Amine or Ester)
This product can be used as a tank-mix treatment with 2,4-D or MCPA (ester formulations provide best results) herbicides after weeds have emerged. For best results, use 0.1 ounce of this product per acre; add 2,4-D or MCPA herbicides to the tank at 0.25 to 0.5 pound active ingredient. Surfactant may be added to the mixture at 0.5 to 1 quart per 100 gallons of spray solution; however, adding surfactant may increase the potential for crop injury.

Apply This product plus MCPA after the 3 to 5-leaf stage but before boot (with Durum and Wampum varieties do not apply before tillering). Apply this product plus 2,4-D after tillering (refer to appropriate 2,4-D manufacturer's label), but before boot.

With Dicamba
For best results, apply this product at 0.1 ounce per acre; add 0.063 to 0.125 pound active ingredient dicamba. Surfactant may be added to the mixture at 0.5 to 1.0 quart per 100 gallons of spray solution; however, adding surfactant may increase the potential for crop injury. Also refer to dicamba labels for application timing and

With 2,4-D (Amine or Ester) and Dicamba
This product may be applied in a 3-way tank mix with formulations of dicamba and 2,4-D. Observe all applicable directions, restrictions and precautions on labels of all products used.

Make applications at 0.1 ounce of this product + 0.063to 0.083pound active ingredient dicamba + 4.0 to 6.0 ounces active 2,4-D Ester or Amine per acre. Use higher rates when weed infestation is heavy. Add 1 to 2 pints of surfactant to the 3 way mixture, where necessary, as deemed by local recommendations. Use of additional surfactant may not be needed with the higher phenoxy rates and ester phenoxy formulations. Consult the specific 2,4-D or dicamba label, or local recommendations for more information.

Apply this 3-way combination to winter wheat after the crop is tillering and prior to jointing (first node). In Spring Wheat (including Durum wheat) apply after the crop is tillering and before it exceeds the 5-leaf stage.

Do not apply this 3-way mixture at high rates more than once a year or more than twice per year at the low rates.

With Bromoxynil (such as Buctril, Bronate)
This product may be tank mixed with bromoxynil containing herbicides registered for use on wheat, barley, or fallow. For best results, add bromoxynil containing herbicides to the tank at 3 to 6 ounces active ingredient per acre (such as Bronate or Buctril at 0.75 to 1.5 pints per acre).

With Starane
For improved control of Kochia (2 to 4" tall), Russian thistle, mustard species, and wild buckwheat, this product may be tank mixed with 0.33 to 1.33 pints per acre of Starane.

With Colt + Salvo
For improved control of Kochia (2 to 4" tall), Russian thistle, mustard species and wild buckwheat, this product may be tank mixed with 0.66 to 2 .66 pints per acre of Colt + Salvo.

With Colt +Sword
For improved control of Kochia (2 to 4" tall) Russian thistle, mustard species and wild buckwheat, this product may be tank mixed with 0.75 to 2.75 pints per acre of Starane + Sword.

With Maverick
This product can be tank mixed with Maverick herbicide for improved control of weeds in wheat.

With Aim
This product can be tank mixed with Aim herbicide for improved control of weeds in wheat and barley.

With Stinger, Curtail, or Curtail M or Widematch
This product can be tank mixed with Stinger, Curtail, or Curtail M herbicides for improved control of weeds in wheat and barley.

With Express
This product may be tank mixed with Express based on local recommendations.

With Harmony Extra
This product may be tank mixed with Harmony Extra based on local recommendations.

With Grass Control Products
Tank mixtures of this product and grass control products may result in poor grass control. Loveland Products, Inc. recommends that you first consult your state experiment station, university, or extension agent, agricultural dealer, or Loveland Products, Inc. representative as to the potential for antagonism before using the mixture. If no information is available, limit the initial use of this product and the grass product to a small area.

Do not tank mix this product with Hoelon 3EC, as grass control may be reduced.

With Assert herbicide or Avenge herbicide
This product can be tank mixed with Avenge or Assert. When tank mixing this product with Assert, always include another broadleaf weed herbicide with a different mode of action (for example: 2,4-D ester, MCPA ester, Buctril or Bronate). Tank mixed applications of Express plus Assert may cause temporary crop discoloration, stunting, or injury when heavy rainfall occurs shortly after application.

With Puma
This product can be tank mixed with Puma herbicide for improved control of weeds in wheat and barley.

With Discover NG
This product can be tank mixed with Discover NG herbicide for improved control of weeds in spring wheat.

With Everest
This product can be tank mixed with Everest herbicide for improved control of weeds in spring wheat.

With Insecticides and Fungicides
This product may be tank mixed or used sequentially with insecticides and fungicides registered for use on cereal grains.

However, under certain conditions (drought stress, cold weather, or if the crop is in the 2 to 4 leaf stage), tank mixes or sequential applications of this product with organophosphate insecticides (such as parathion, Di-Syston) may produce temporary crop yellowing or, in severe cases, crop injury.

The potential for crop injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application.

Test these mixtures in a small area before treating large areas.

Do not apply this product within 60 days of crop emergence where an organophosphate insecticide (such as Di-Syston) has been applied as an in-furrow treatment as crop injury may result.

Do not use this product plus Malathion as crop injury will result.

With Liquid Nitrogen Solution Fertilizer

Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing this product in fertilizer solution.

This product must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while this product is added. Use of this mixture may result in temporary crop yellowing and stunting.

If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at 0.5 pint to 1.0 quart per 100 gallons of spray solution (0.06 to 0.25% v/v) based on local recommendations.

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

If 2,4-D or MCPA is included with this product and fertilizer mixture, ester formulations tend to be more compatible (see manufacturer's label). Do not add surfactant when using this product in tank mix with 2,4-D ester or MCPA ester and liquid nitrogen fertilizer solutions.

Note: In certain areas east of the Mississippi River unacceptable crop response may occur with use of straight or dilute nitrogen fertilizer carrier solutions where cold temperatures or widely fluctuating day/night temperatures exist. In these areas consult your agricultural dealer, consultant, field advisor, or Loveland Products, Inc. representative for a specific recommendation before using nitrogen fertilizer carrier solutions.

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

LPI METSULFURON METHYL WITH MCPA, 2, 4-D AND/OR DICAMBA FOR SUPPRESSION OF WINTER ANNUAL BROADLEAF WEEDS IN WINTER WHEAT TO BE GRAZED OUT IN THE STATES OF TEXAS, OKLAHOMA, NEW MEXICO and KANSAS

GENERAL INFORMATION

This product can be tank mixed with MCPA, 2,4-D and/or dicamba for suppression of winter annual broadleaf weeds in winter wheat to be grazed out and not harvested for grain, in the States of Texas, Oklahoma, New Mexico and Kansas.

DIRECTIONS FOR USE

For the suppression of winter annual broadleaf weeds (such as henbit and mustards) in winter wheat in the states of Texas, Oklahoma, New Mexico and Kansas, This product at 0.05 ($^1/_{20}$) ounces per acre should be tank mixed with MCPA, 2,4-D and/or dicamba at label rates. Winter annual broadleaf weeds should be less than 1" tall or in the rosette stage for suppression. Add a Loveland Products, Inc. recommended nonionic surfactant having at least 80% active ingredient at 1 to 2 quarts per 100 gallons of spray solution (0.25 to 0.5% v/v).

Rotation Intervals For Crops in Non-Irrigated Land Following Use of This Product at 0.05 Ounces Per Acre on Wheat That Will be Grazed Out

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

Rotation Intervals for crops not covered above following the use of this product at 0.05 (ounces per acre on wheat that will be grazed out.

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

- to any crop not listed in the ROTATION INTERVALS table above
- if the soil pH is not in the specified range

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

IMPORTANT RESTRICTIONS

This treatment is for use on winter wheat that will be grazed out and will not be harvested for grain.

IMPORTANT PRECAUTIONS

This product suppresses weeds by postemergence activity. For best results, apply this product to young, actively growing weeds. The degree and duration of suppression at 0.05 ounce per acre may depend upon the following factors:

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

WHEAT, BARLEY AND TRITICALE HARVEST AID

Use Rates

Apply 0.1ounce of this product per acre in combination with 2,4-D or glyphosate containing products to aid in dry down of many broadleaved weeds, thereby aiding grain harvest.

Application Timing

Make applications after the crop has reached the hard dough stage, but no later than 10 days before harvest.

Tank Mixtures in Harvest Aid

A tank mix of this product plus 2,4-D and surfactant, or glyphosate, will typically aid in dry down of many broadleaved weeds, thereby aiding grain harvest. Postemergence application should be made to actively growing weeds after the crop is in the hard dough stage. If weeds are not dry within 10 days after application, delay harvest until weeds are dry.

See weeds listed in WEEDS CONTROLLED chart of this label.

With 2,4-D

Use 0.1 ounce of this product plus 0.25 to 0.5 pound active ingredient 2,4-D per acre on moderate weed infestations; higher rates of 2,4-D may be used on large weeds if permitted by the 2,4-D brand labeling. Include 1 to 2 quarts surfactant per 100 gallons spray solution.

In addition to the weeds listed in the WEEDS CONTROLLED chart of this label, the 2,4-D combination will also dry down common cocklebur, marestail, puncturevine and common and wild sunflower. In areas where 2,4-D use is restricted, apply this product with surfactant only; however, this treatment may be less effective.

With Glyphostae

Use 0.1 ounce of this product plus the locally directed rate of glyphosate (see glyphosate label for maximum seasonal rate). This product requires the use of an adjuvant for optimum activity. Consult the glyphosate label or local

recommendations for the amount of adjuvant to include.

GRAIN SORGHUM

PRODUCT INFORMATION

This product is labeled for use on irrigated or dryland grain sorghum in Colorado, Kansas, Nebraska, Oklahoma and Texas (north of I-20).

Use Rates: Apply this product at 0.05 ounce per acre plus 0.25 pound active ingredient 2,4-D amine per acre. Do not use surfactant or crop oil.

Crop Stage: For optimum performance and crop safety, apply this product plus 2,4D amine when grain sorghum is 3 to 15” in height. If sorghum is taller than 10” to the top of the canopy, use drop nozzles and keep spray off the foliage. Apply only before the boot stage. Read and follow all other use instructions, warnings and precautions on companion herbicide labels.

Sorghum varieties vary in sensitivity to 2,4-D amine. Spray only varieties known to be tolerant to 2,4-D amine. Contact seed company and local county extension service for this information.

Pest Stage: Application of this product plus 2,4-D amine should be made when all or a majority of the weeds have germinated and emerged. For best results, spray when weeds are less than 6” tall.

Weeds Controlled with Tank Mix of this product plus 2,4-D amine:
Pigweed species
Puncture vine
Velvetleaf

APPLICATION INFORMATION

This product may be applied to grain sorghum by properly calibrated ground or aerial equipment.

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

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

IMPORTANT RESTRICTIONS

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

SURFACTANTS

SPRAY ADJUVANTS

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

Antifoaming agents may be needed. Consult your Ag dealer, applicator, or Loveland Products, Inc. representative for a listing of recommended surfactants.

Nonionic Surfactant (NIS)

- Apply 0.06 to 0.50% v/v (0.5 to 4 pints per 100 gallons of spray solution) See TANK MIXTURES section for additional information.

- When using a nonionic surfactant (NIS) Loveland Products, Inc. recommends Activator 90 or Liberate.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

Exceptions: On all spring wheat and spring or winter barley use ½ to 1 quart per 100 gallons.

Petroleum Crop Oil Concentrate (COC) or Modified Seed Oil (MSO)

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.
- When using a petroleum crop oil concentrate (COC) or modified seed oil (MSO) Loveland Products, Inc. recommends using Herbimax or MSO Concentrate with Leci-Tech

Ammonium Nitrogen Fertilizer

- Use 2 quarts per acre of a high-quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 pounds per acre of a spray-grade ammonium sulfate (AMS). Use 4 quarts per acre UAN or 4 pounds/acre AMS under arid conditions.
- Do not use liquid nitrogen fertilizer as the total carrier solution.

Special Adjuvant Types

- Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.
- In addition to the adjuvants specified above, other adjuvant types may be used if they provide the same functionality and have been evaluated and approved by Loveland Products, Inc. product management.
- Loveland Products, Inc. recommends the use of Quad 7 at 1% v/v.

Antifoaming agents may be used if needed.

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

GROUND APPLICATION

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

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

With Raindrop RA nozzles, use at least 30 GPA and ensure that nozzle spray patterns overlap 100%.

For flat-fan nozzles, use at least 3 GPA for applications to wheat or barley.
Use 50-mesh screens or larger.

AERIAL APPLICATION

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

Wheat, barley, triticale and fallow-use 1 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah.

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

PRODUCT MEASUREMENT

This product is measured using the LPI Metsulfuron Methyl volumetric measuring cylinder. The degree of accuracy of this cylinder varies by +/7.5%. For more precise measurement, use scales calibrated in ounces.

WITH LIQUID NITROGEN SOLUTION FERTILIZER

Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing this product in fertilizer solution.

This product must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the this product is added. Use of this mixture may result in temporary crop yellowing and stunting.

If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at 0.25 pint per 100 gallons of spray solution (0.03% v/v).

When using high rates of liquid nitrogen fertilizer in the spray solution, adding surfactant increases the risk of crop

injury. Consult your agricultural dealer, consultant, fieldman, or Loveland Products, Inc. representative for a specific recommendation before adding an adjuvant to these tank mixtures.

If 2,4-D or MCPA is included with this product and fertilizer mixture, ester formulations tend to be more compatible (see manufacturer's label). Do not add surfactant when using this product in tank mix with 2,4-D ester and liquid nitrogen fertilizer solutions.

Note: In certain areas east of the Mississippi River unacceptable crop response may occur with use of straight or dilute nitrogen fertilizer carrier solutions where cold temperatures or widely fluctuating day/night temperatures exist. In these areas consult your agricultural dealer, consultant, field advisor, or Loveland Products, Inc. representative for a specific recommendation before using nitrogen fertilizer carrie solutions.

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

CROP ROTATION

Before using this product, carefully consider your crop rotation plans and options.
For rotational flexibility, do not treat all of your wheat, barley, triticale or fallow acres at the same time.

Minimum Rotational Intervals

Minimum rotation intervals* are determined by the rate of breakdown of this product applied. This product 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 this product's breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow this product's 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

This product 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, this product 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 this product.

Checking Soil pH

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

BIOASSAY

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

Field Bioassay

To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with this product. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) grown in the test strips.

If a field bioassay is planned, check with your local agricultural dealer or Loveland Products, Inc. representative for information detailing the field bioassay procedure.

All Areas - Following Use of LPI Metsulfuron Methyl

Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Winter and spring wheat	7.9 or lower	No restrictions	1
Durum wheat, barley, spring/winter oat	7.9 or lower	No restrictions	10

Rotation Intervals For Crops in Non-Irrigated Land Following Use of LPI Metsulfuron Methyl

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
		IR Corn	7.9 or lower	No restrictions	4
		STS Soybeans	7.9 or lower	No restrictions	4
Idaho	Southern Idaho	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Statewide	Peas Lentils Canola	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	15
		Lentils	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas	7.3 or lower	10	10
		Chickpeas	7.4 or higher	28	34

Following Use of LPI Metsulfuron Methyl

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	**County or Area**				
Kansas	Statewide	Grain sorghum,	7.9 or lower	No restrictions	1 0
		Flax, Safflower,	7.9 or lower	No restrictions	2 2
	Central and Western Kansas (W. of the Flint Hills)	Field corn	7.9 or lower	1 5	1 3
		IR Corn	7.9 or lower	15	4
	Western Kansas W. of Hwy. 183	Soybeans	7.5 or lower 7.6 to 7.9	2 2 3	2 2 3
	Central Kansas; generally E. of Hwy. 183 and W. of the Flinthills	Soybeans	7.9 or lower	1	1
		STS Soybeans	7.9 or lower	1 5	4
Montana	Statewide	Grain sorghum,	7.9 or lower	2 2	2 2
		Alfalfa (hay only)	7.6 to 7.9	No restrictions	34
			7.5 or lower	No restrictions	2
		Flax, Safflower,	7.9 or lower	No restrictions	2 2
Nebraska	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	1 0
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	2 2
		IR Corn STS Soybeans	7.9 or lower	No restrictions	4
	Generally W. of Hwy. 77 and E. of the	Field corn	7.9or lower	15	1 2
		Soybeans	7.5 or lower 7.6 to 7.9	2 3	2 3
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower,	7.9 or lower	No restrictions	2 2
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	3 0	2 2
North Dakota	W. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Soybean, Sunflower	7.9 or lower	2 2	2 2

	E. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Soybean, Sunflower	7.9 or lower	3 4	3 4
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	1 0
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	2 2
		Field corn	7.9 or lower	1 5	1 2
		IR Corn STS Soybean	7.9 or lower	No restrictions	4
	Panhandle	Cotton (dryland only)	7.9 or lower	30	2 2
	E. of the Panhandle	Cotton (dryland only)	7.9 or lower	2 5	1 4

Following Use of LPI Metsulfuron Methyl

State	County or Area	Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Oregon	Statewide	Peas Lentils Canola	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	1
		Lentils	6.9 to 7.9	18	3
		Canola	6.9 to 7.9	18	2
		Condiment	7.3 or lower	10	1
		Condiment	7.4 or higher	28	3
		Chickpeas	7.3 or lower	10	10
		Chickpeas	7.4 or higher	28	3
South Dakota	Statewide	Flax, Safflower, Soybean,	7.9 or lower	No restrictions	22
	S. of Hwy. 212 & E.of the Missouri River, & S. of Hwy. 34 & W. of Missouri River	Grain sorghum, Proso millet	7.9 or lower	13	1 2
	Generally E. of Missouri River & S. of Hwy. 14, & W. of Missouri River	Field corn	7.9 or lower	15	1 2
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	2 2
	Panhandle	Field corn	7.9 or lower	15	12
		Cotton (dryland only)	7.9 or lower	30	2 2
	N. Central Texas*	Field corn	7.9 or lower	15	1 2
		Cotton (dryland only)	7.9 or lower	25	1 4
	* The counties of N. Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Nafarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrent, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young.				
Washington	Statewide	Pea s	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	1
		Lentils	6.9 to 7.9	18	3
		Canola	6.9 to 7.9	18	2
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas	7.3 or lower	10	1

		Chickpeas	7.4 or higher	28	3
Utah	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	2 2
Wyoming	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	2 2
	Southern Wyoming	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
	Southern Wyoming (Goshen, Laramie, and Platte counties only)	Field corn	7.9 or lower	15	12
	Northern Wyoming	Grain sorghum,	7.9 or lower	22	22

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

- to any major field crop not listed (see the ROTATION INTERVALS table)
- if the soil pH is not in the specified range
- if the use rate applied is not specified in the table

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

RECROPPING INTERVALS FOR GRASSES ON CONSERVATION RESERVE PROGRAM (CRP)
Whenever this product has previously been used in wheat, barley, triticale or fallow, the following grasses may be planted after the intervals specified in the tables below. The planting of grass and legume mixtures is not recommended as injury to the legume may occur.

Bentgrasses
Blue grama
Bluestems - Big, Little, Plains, Sand, WW Spar
Buffalograss
Galleta
Green needlegrass
Green sprangletop
Indian ricegrass
Lovegrasses - Sand, Weeping
Orchardgrass (excluding Paiute)
Prairie sandreed Sand dropseed
Sheep fescue
Sideoats grama
Switchgrass
Wild-ryegrasses - Beardless, Russian Wheatgrasses - Crested, Intermediate, Pubescent, Slender, Streambank, Tall, Thickspike, Western

ROTATION INTERVALS

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

Soil pH	Use Rate (ounces per acre)	Minimum Interval for Planting Grasses
7.5 or lower	0.1	4 months (all grasses)
7.6 to 7.9	0.1	4 months (Wheatgrasses only)

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

Soil pH	Use Rate (ounces per acre)	Minimum Interval for Planting Grasses
7.9 or lower	0.1	2 months (all grasses)

GRAZING/HAYING
There are no grazing restrictions on this product.

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

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

Do not use this product with spray additives that reduce the pH of the spray solution to below 3.0.

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

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

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

Continuous agitation is required to keep this product in suspension.

SPRAYER CLEANUP
Spray equipment must be cleaned before this product is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined in AFTER SPRAYING LPI METSULFURON METHYL section of this label.

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

After Spraying this product and Before Spraying Crops Other Than Wheat, Barley, Triticale, Grain Sorghum or Fallow

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of this product as follows:
1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water.
2. Loosen and physically remove any visible deposits.
3. Fill the tank with clean water and 1 gallon of household ammonia* (contains 3% active) for every 100 gallon 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.

4. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
5. Repeat step 2.
6. Rinse the tank, boom, and hoses with clean water.
7. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) registered on this label. Do not exceed the maximum labeled
8. use rate. If other cleaners are used, consult the cleaner label for rinsate disposal

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

Notes:

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

STORAGE AND DISPOSAL

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

PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Non-refillable Containers. For Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **For Fiber Sacks:** Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by state and local authorities. **For Fiber Drums With Liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. **For Bags Containing Water Soluble Packets:** Do not reuse the outer box or the resealable plastic bag. When all water-soluble packets are used, the outer packaging should be clean and may be disposed of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by open burning. If burned, stay out of smoke. If the resealable plastic bag contacts the formulated product in any way, the bag must be triplerinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above. **For Metal Containers (non aerosol):** Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **For Paper and Plastic Bags:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke

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CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

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