



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

524-582

Date of Issuance:

OCT 15 2008

NOTICE OF PESTICIDE:

- x Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: conditional

Name of Pesticide Product:

M1691 Herbicide

Name and Address of Registrant (include ZIP Code):

Monsanto Company
1300 I (Eye) Street, N.W.
Suite 450 East
Washington, D.C. 20005

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

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

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

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Make the following label changes:
a. Revise the EPA Registration Number to read: "EPA Reg. No. 524-582."

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

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

Enclosure

Signature of Approving Official:

Joanne I. Miller
Product Manager 23
Herbicide Branch
Registration Division (7505P)

Handwritten signature: Joanne I. Miller

Date:

OCT 15 2008

MASTER LABEL FOR EPA REG. NO. 524-NEW

Registered Brand Names:

M1691 Herbicide

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** See each label part for more detailed table of contents **

[INSERT BRAND NAME]

Herbicide

Complete Directions for Use

EPA Reg. Number: 524-new

For weed control in asparagus, conservation reserve programs, corn, cotton, fallow croplands, general farmstead (noncropland), sorghum, grass grown for seed, hay, proso millet, pasture, rangeland, small grains, soybean, sugarcane, and turf.

Not all products recommended on this label are registered in California. Check the registration status of each product in California before using.

Read the entire label before using this product.

Use only according to label instructions.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

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1.0 INGREDIENTS

ACTIVE INGREDIENT:

Diglycolamine salt of dicamba (3,6-dichloro-o-anisic acid)*56.8%

OTHER INGREDIENTS:43.2%

TOTAL:100.0%

* contains 38.5%, 3,6-dichloro-o-anisic acid (4 pounds acid equivalent per U.S. gallon or 480 grams per liter).

2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT, CALL TOLL-FREE,

1-800-332-3111.

2. IN CASE OF EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT,

(314)-694-4000.

3.0 PRECAUTIONARY STATEMENTS

3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

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

ACCEPTED
with COMMENTS
In EPA Letter Dated:
OCT 15 2008
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

524-582

FIRST AID: Call a poison control center or doctor for treatment advice.	
IF SWALLOWED:	<ul style="list-style-type: none"> • 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 ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes.
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eye.
<ul style="list-style-type: none"> • Have the product container or label with you when calling a poison control center or physician, or going for treatment. • You may also contact (314) 694-4000, collect, day or night, for emergency medical treatment information. • This product is identified as [insert brand name], EPA Reg. No. 524-new. 	

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

All mixers, loaders, applicators and other handlers must wear: long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (except for applicators using groundboom equipment, pilots or flaggers).

See "Engineering Controls" for additional requirements and exceptions.

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.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use cockpits in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6).

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

3.2 Environmental Hazards

Keep out of lakes, streams or ponds. For terrestrial uses, 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. Apply this product only as directed on label.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination - To prevent point source contamination, do not mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil - Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate recommendations as affected by soil type in the general information section of this label.

Movement by water erosion of treated soil - Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Monsanto supplemental labeling. Supplemental labeling can be found on the Internet at www.cdms.net or www.greenbook.net or obtained from your Authorized Monsanto Retailer or Monsanto Company Representative. This labeling must be in the user's possession during application.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 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 worn over short sleeved shirt and short pants
- Chemical resistant footwear plus socks
- Chemical resistant gloves made of any waterproof material
- Chemical resistant headgear for overhead exposure, if applicable
- Protective eyewear

4.0 STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. This product may not be mixed, loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sinkholes.

PESTICIDE STORAGE

Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides.

Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law.

CONTAINER DISPOSAL

[CONTAINER LABEL DISPOSAL STATEMENTS]

[FOR PLASTIC ONE-WAY CONTAINERS AND BOTTLES]

Do not reuse container. Triple rinse the container, then puncture and place into a pesticide container recycling program, if available, or dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

[FOR ONE-WAY PLASTIC DRUMS]

Do not reuse container. Return container per the Monsanto container return program. If not returned, triple rinse the container, then puncture and place into a pesticide container recycling program, if available, or dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

[FOR METAL CONTAINERS (non-aerosol)]

Triple rinse the container (or equivalent), 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 REFILLABLE PORTABLE (MINI-BULK) CONTAINERS]

This container must only be refilled with pesticide product. **Do not reuse this container for any other purpose.**

Final disposal must be in compliance with State and local regulations. If not refilled, returned or recycled, triple rinse or pressure rinse, puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Do not transport this container if it is damaged or leaking. If this container is damaged, leaking or obsolete, or to obtain information about recycling portable refillable containers, contact Monsanto Company at [insert contact number].

Users: When this container is empty, replace the cap and seal all openings that have been made during usage, and return the container to the point of purchase, or to an alternate location

designated by the manufacturer at the time of purchase of this product. If not returned, triple rinse or pressure rinse the empty container and offer it for recycling, if available.

Refillers: Do not reuse this mini-bulk container except for refill in accordance with a valid Monsanto Agreement for Repackaging and Toll Repackaging. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, and worn-out threads and closure devices. Check for leaks after refilling and before transporting.

[FOR REFILLABLE STATIONARY BULK CONTAINERS]

This container must only be refilled with pesticide product. **Do not reuse this container for any other purpose.**

Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, and worn-out threads and closure devices.

Final disposal must be in compliance with State and local regulations. If not refilled, triple rinse or pressure rinse the container and offer for recycling or reconditioning, if possible. If burned, stay out of smoke.

IN CASE OF SPILL

In case of large-scale spillage regarding this product, call:

MONSANTO 314-694-4000

Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

5.0 GENERAL INFORMATION

M1691 herbicide is a water-soluble formulation intended for control and suppression of many annual, biennials, and perennial broadleaf weeds, as well as woody brush and vines listed in **Section 11, General Weed List, Including ALS- and Triazine-Resistant Biotypes.** **M1691 herbicide** may be used for control of these weeds in asparagus, corn, cotton, conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (noncropland), small grains, sorghum, soybean, sugarcane, and turf.

MODE OF ACTION

M1691 herbicide is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. **M1691 herbicide** interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

RESISTANCE MANAGEMENT

M1691 herbicide has a low probability of selecting for resistant weed biotypes.

CLEANING SPRAY EQUIPMENT

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner, according to the manufacturer's directions, and then triple rinsing the equipment before and after applying this product.

6.0 APPLICATION INSTRUCTIONS

M1691 herbicide can be applied to actively growing weeds as aerial, broadcast, band, or spot spray applications using water or sprayable fertilizer as a carrier. For general **M1691 herbicide** application rates for control or suppression by weed type and growth stage see **Table 1, General M1691 Herbicide Application Rates for Control or Suppression by Weed Type and Growth Stage**. For crop-specific application timing and other details, refer to **Section 10. Crop-Specific Information**.

To avoid uneven spray coverage **M1691 herbicide** should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid off-target movement. Use extreme care when applying **M1691 herbicide** to prevent injury to desirable plants and shrubs.

APPLY SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE DESIRED VOLUMES.

CULTIVATION

Do not cultivate within 7 days after applying **M1691 herbicide**.

SENSITIVE CROP PRECAUTIONS

M1691 herbicide may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to **M1691 herbicide** during their development or growing stage.

DRIFT MANAGEMENT RECOMMENDATIONS

Use coarse sprays (volume median diameter of 400 microns or more) to avoid potential herbicide drift. Select nozzles, which are designed to produce minimal amounts of fine, spray particles (less than 200 microns). Examples of nozzles designed to produce coarse sprays via ground applications are Delavan® Raindrops, Spraying Systems XR (excluding 110° tips) flat fans, Turbo Teejets®, Turbo Floodjets®, or large capacity flood nozzles such as D10, TK10, or greater capacity tips. Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gallons per acre (for ground broadcast applications), unless otherwise required by the manufacturer of drift-reducing nozzles. Consult your spray nozzle supplier concerning the choice of drift-reducing nozzles.

Agriculturally approved drift-reducing additives may be used.

6.1 AERIAL APPLICATION METHODS AND EQUIPMENT

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS SPECIFIED IN THIS LABEL.

The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling, as well as applicable state and local regulations and ordinances.

Do not use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Water Volume: Use 1-10 gallons of water per acre (2-20 gallons of diluted spray per treated acre for preharvest uses). Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate

for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller droplets, etc.).

Temperature Inversions: Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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.

6.2 GROUND APPLICATION (BANDING)

When applying **M1691 herbicide** by banding, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{Bandwidth in inches}}{\text{Row width in inches}} \times \text{Broadcast rate per acre} = \text{Banding herbicide rate per acre}$$

$$\frac{\text{Bandwidth in inches}}{\text{Row width in inches}} \times \text{Broadcast volume per acre} = \text{Banding water volume per acre}$$

6.3 GROUND APPLICATION (BROADCAST)

Water Volume: Use 3 - 50 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as practical for good weed coverage.

6.4 GROUND APPLICATION (WIPERS)

M1691 herbicide may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part **M1691 herbicide** to 1 part water. Do not contact desirable vegetation with herbicide solution. Wiper application should only be made to crops (including pastures) and non-cropland areas described in this label with the exception of cotton, sorghum, and soybean.

Table 1. General M1691 Herbicide Application Rates for Control or Suppression by Weed Type and Growth Stage

Use rate limitations are given in sections 9 and 10. Crop Specific Information

Weed Type and Stage	Rate Per Acre	Weed Type and Stage	Rate Per Acre
Annual		Perennial	
Small, actively growing	8 – 16 fluid ounces	Top growth suppression	8 – 16 fluid ounces
Established weed growth	16 – 24 fluid ounces	Top growth control and root suppression	16 – 32 fluid ounces
		Noted perennials (footnote 1 in Section 10.0).	32 fluid ounces
		Other perennials ³	32 fluid ounces

Biennial		Woody Brush & Vines	
Rosette diameter 1 – 3"	8 – 16 fluid ounces	Top growth suppression	16 – 32 fluid ounces
Rosette diameter 3" or more	16 – 32 fluid ounces	Top growth control ^{2,3}	32 fluid ounces
Bolting	32 fluid ounces	Stems and stem suppression ³	32 fluid ounces
¹ Rates below 8 fluid ounces per acre may provide control or suppression but should typically be applied with other herbicides that are effective on the same species and biotype. ² Species noted in Table 1 will require tank mixes for adequate control. ³ Do not broadcast apply more than 32 fluid ounces per acre in any single application. A sequential application of up to 32 fluid ounces may be required for adequate control. Use the higher level listed rate ranges when treating dense vegetative growth or perennial weeds with well established root growth.			

7.0 ADDITIVES

To improve postemergence weed control, agriculturally approved surfactants, sprayable fertilizers (urea ammonium nitrate, or ammonium sulfate), or crop oil concentrate may be added, particularly in dry growing conditions. (Refer to **Table 2 Additive Rate Per Acre.**)

Nitrogen Source

- **Urea ammonium nitrate (UAN):** Use 2 - 4 quarts of UAN (commonly referred to as 28%, 30%, or 32% nitrogen solution) per acre. Do not use brass or aluminum nozzles when spraying UAN.
- **Ammonium sulfate (AMS):** AMS at 2.5 pounds per acre may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. Monsanto does not recommend applying AMS, if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.

Nonionic Surfactant

The standard label recommendation is 1 pint of an 80% active nonionic spray surfactant per 100 gallons of water. For certain weeds, a higher spray surfactant rate is recommended.

Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be nonphytotoxic,
- contain only EPA-exempt ingredients,
- provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see **Compatibility Test for Mix Components.**

Adjuvants containing crop oil concentrates may be used in preplant, pre-emergence, and preharvest application, as well as in pastures and noncropland. Do not use crop oil concentrate for postemergence in-crop applications unless specifically allowed in **section 10 Crop-Specific Information** of this label.

Table 2. Additive Rate Per Acre

Additive	Rate Per Acre
Nonionic Surfactant	1 - 2 pints per 100 gallons
AMS	2.5 pounds
UAN Solution	2 - 4 quarts
Crop Oil Concentrate	1 quart*
* see manufacturer's label for specific rate recommendations	

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume use 3.3 cups (800 ml) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

Mixing Order

1. **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2. **Agitation.** Maintain constant agitation throughout mixing and application.
3. **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
4. **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until half water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5. **Water-dispersible products.** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
6. **Water-soluble products.** (such as **M1691 herbicide**)
7. **Emulsifiable concentrates** (such as oil concentrate when applicable).
8. **Water-soluble additives** (such as AMS or UAN when applicable).
9. **Remaining quantity of water.**
Maintain constant agitation during application.

8.0 GENERAL TANK MIXING INFORMATION

Tank Mix Partners/Components

The herbicide products listed may be applied with **M1691 herbicide** according to the specific tank mixing instructions in this table and respective product labels.

See **Section 10. Crop-Specific Information** for more details. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

M1691 herbicide may also be used in tank mixtures with foliar applied insecticides including synthetic pyrethroids such as Ambush[®], Asana[®], Pounce[®] and Warrior[®] insecticides or with the carbamate insecticide Furadan[®]. Do not apply **M1691 herbicide** in tank mixtures with Lorsban[®] insecticide.

Some tank mixture products have the potential to cause crop injury under certain conditions, at certain growth stages and/or under other circumstances. Read all labels for products used in the tank mixture prior to use to determine the potential for crop injury.

Tank mixtures with other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers may result in physical incompatibility, reduced weed control or crop injury and are NOT recommended for applications of this product unless otherwise noted in this product label, or in separate supplemental labeling or Fact Sheets published by Monsanto. Monsanto has not tested all tank-mix product formulations for compatibility, antagonism or reduction in product performance. Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly recommended in this labeling, or in separate supplemental labeling or Fact Sheets published by Monsanto for this product. Local agricultural authorities may be a source of information when using tank mixtures other than those recommended by Monsanto.

- Accent® (nicosulfuron)
- Acquire™ (glyphosate)
- Ally® (metsulfuron-methyl)
- Amber® (triasulfuron)
- Asulox® (asulam)
- Atrazine
- Axiom™ (flufenacet + metribuzin)
- Banvel® SGF (dicamba)
- Basagran® (bentazon)
- Beacon® (primisulfuron-methyl)
- Bicep II Magnum® (s-metolachlor + atrazine)
- Blade® (cyanazine)
- Bronate® (bromoxynil + MCPA)
- Bronco® (alachlor + glyphosate)
- Buctril® (bromoxynil)
- Bullet® (alachlor + atrazine)
- Canvas® (thifensulfuron + tribenuron + metsulfuron)
- Caparol® (prometryn)
- Crossbow® (2,4-D + triclopyr)
- Curtail® (clopyralid + 2,4-D)
- Cyclone® (paraquat)
- Dakota® (fenoxaprop + MCPA)
- Degree™ (acetochlor)
- Degree Xtra™ (acetochlor + atrazine)
- DoublePlay® (acetochlor + EPTC)
- Dual Magnum™ (s-metolachlor)
- Dual II Magnum® (s-metolachlor + atrazine)
- Eradicane® (EPTC)
- Evik® (ametryn)
- Exceed® (primisulfuron + prosulfuron)
- Express® (thifensulfuron + tribenuron-methyl)
- Extrazine® II (cyanazine + atrazine)
- Fallow Master® (glyphosate + dicamba)
- Field Master™ (acetochlor + atrazine + glyphosate)
- Finesse® (chlorsulfuron + metsulfuron-methyl)
- Frontier® (dimethenamid)
- FulTime™ (acetochlor + atrazine)
- Garlon® (triclopyr)
- Glean® (chlorsulfuron)
- Gramoxone® Extra (paraquat)
- Guardman® (dimethenamid + atrazine)
- Harmony® Extra (thifensulfuron + tribenuron-methyl)
- Harness® (acetochlor)
- Harness® Xtra (acetochlor + atrazine)
- Hornet™ (flumetsalam + clopyralid)
- Karmex® (diuron)
- Kerb® (pronamide)
- Laddok® S-12 (bentazon + atrazine)
- Landmaster® BW (glyphosate + 2,4-D)
- Lariat® (alachlor + atrazine)
- Lasso® (alachlor)
- Lexone® (metribuzin)
- Liberty® (glufosinate)
- Lightning® (imazethapyr + imazapyr)
- Marksman® (dicamba + atrazine)
- MCPA
- Outlook™ (dimethenamid-P)
- Paramount® (quinclorac)
- Partner® (alachlor)
- Peak® (prosulfuron)
- Permit® (halosulfuron)
- Princep® (simazine)
- Prowl® (pendimethalin)
- Python™ (flumetsulam)
- Ramrod® (propachlor)
- Roundup Ultra® (glyphosate)
- Roundup Ultra® RT (glyphosate)
- Sencor® (metribuzin)
- Spirit™ (primisulfuron + prosulfuron)
- Stinger® (clopyralid)
- Surpass® (acetochlor)
- Sutan® + (butylate)
- Tiller® (fenoxaprop-ethyl + MCPA + 2,4-D)
- TopNotch™ (acetochlor)
- Tordon® 22K (picloram)
- Touchdown® (sulfosate)
- Tough® (pyridate)
- 2,4-D

9.0 RESTRICTIONS AND LIMITATIONS

Maximum single application rate: 32 fluid ounces per acre of **M1691** Herbicide

Maximum number of applications per year: 2

Maximum annual application rate: 64 fluid ounces of **M1691 herbicide** (2 pounds acid equivalent) per acre.

Refer to **Table 3. Crop-Specific Restrictions and Limitations** for crop-specific maximum annual use rates.

Preharvest Interval (PHI): Refer to **section 10. Crop-Specific Information** for preharvest intervals.

Restricted Entry Interval (REI): 24 hours

Crop Rotational Restrictions: The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

Planting/replanting restrictions for M1691 herbicide applications of 24 fluid ounces per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including corn, cotton, sorghum, and soybean, follow the preplant use directions in **section 10. Crop-Specific Information**. For barley, oat, wheat, and other grass seedings, the interval between application and planting is 15 days per 8 fluid ounces per acre applied east of the Mississippi River and 22 days per 8 fluid ounces per acre west of the Mississippi River.

Planting/replanting restrictions for applications of more than 24 fluid ounces and up to 32 fluid ounces of M1691 herbicide per acre: *Corn, sorghum, cotton (east of the Rocky Mountains)* and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat, and other grass seedings, may be planted if the interval from application to planting is 30 days per 16 fluid ounces per acre east of the Mississippi River and 45 days per 16 fluid ounces per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of **M1691 herbicide**.

Stress: Do not apply to crops under stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, insects, or widely fluctuating temperatures as injury may result.

Do not apply through any type of irrigation equipment. Do not treat irrigation ditches or water used for crop irrigation or domestic purposes.

Table 3. Crop-Specific Restrictions and Limitations¹

Crop	Maximum Rate Per Acre Per Application (fl oz)	Maximum In-Crop Rate Per Acre Per Season (fl oz)	Livestock Grazing or Feeding	Aircraft Application Allowed
Asparagus	16	16	Yes	Yes
Barley; Fall Spring	8 8	12 11	Yes	Yes
Corn	16	24	Yes	Yes
Cotton	8	8	Yes	Yes
Fallow Ground	32	64	Yes	Yes
Grass grown for seed	32	64	Yes	Yes
Proso Millet	4	4	Yes	Yes
Pastureland	32	32	Yes	Yes
Conservation Reserve Program (CRP)	32	64	Yes	Yes
Oats	4	4	Yes	Yes
Sorghum	8	16	Yes	Yes
Soybean	32	64	Yes	Yes
Sugarcane	32	64	Yes	Yes

Turf	32	32	Yes	Yes
Triticale	4	4	Yes	Yes
Wheat	8	16	Yes	Yes
¹ Refer to section 10. Crop-Specific Information for more details. ² Once the crop reaches the ensilage (milk) stage or later in maturity				

10.0 CROP-SPECIFIC INFORMATION

10.1 Asparagus

Apply **M1691 herbicide** to emerged and actively growing weeds in 40 - 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting. Up to 2 applications may be made per growing season.

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

Rates: Apply 8-16 fluid ounces of **M1691 herbicide** to control annual sowthistle, black mustard, Canada and Russian thistle, and redroot pigweed, (carelessweed).

Apply 16 fluid ounces of **M1691 herbicide** to control common chickweed, field bindweed, nettleleaf goosefoot, and wild radish. Up to 2 applications may be made per growing season. Do not exceed a total of 16 fluid ounces of **M1691 herbicide** per treated acre, per crop year.

Do not harvest prior to 24 hours after treatment.

Do not use in the Coachella Valley of California.

Asparagus Tank Mixes

Apply 8-16 fluid ounces of **M1691 herbicide** with glyphosate (**Roundup®-Ultra**) or 2,4-D to improve control of Canada thistle and field bindweed.

Between Crop Applications

Preplant Directions (Postharvest, Fallow, Crop Stubble, Set-Aside) for Broadleaf Weed Control:

M1691 herbicide can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply **M1691 herbicide** as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See **Crop-Rotational Restrictions** in section 9. **General Restrictions and Limitations** for the recommended interval between application and planting to prevent crop injury.

Rates and Timings:

Apply 4 – 32 fluid ounces of **M1691 herbicide** per acre. Refer to **Table 3** to determine use rates for specific targeted weed species. For best performance, apply **M1691 herbicide** when annual weeds are less than 6" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if **M1691**

herbicide is applied when the majority of weeds have at least 4 - 6" of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for **M1691 herbicide**. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of **M1691 herbicide**, refer to the small grain section for details.

Between Crop Tank Mixes

In tank mixes with one or more of the following herbicides, apply 4 - 16 fluid ounces of **M1691 herbicide** per acre for control of annual weeds, or 16 - 32 fluid ounces of **M1691 herbicide** per acre for control of biennial and perennial weeds:

- | | |
|-----------------------------|------------------|
| Acquire™ | Gramoxone® Extra |
| Ally® | Kerb® |
| Amber® | Landmaster® BW |
| Atrazine | Paramount® |
| Curtail® | Sencor® |
| Cyclone® | Tordon® 22K |
| Fallow Master® | Touchdown® |
| Finesse® | 2,4-D |
| Glyphosate (Roundup Ultra®) | |

10.2 Corn (Field, Pop, Seed, And Silage)

Direct contact of **M1691 herbicide** with corn seed must be avoided. If corn seeds are less than 1.5" inches below the surface, delay application until corn has emerged.

Applications of **M1691 herbicide** to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

Up to 2 applications of **M1691 herbicide** may be made during a growing season. Sequential applications must be separated by 2 weeks or more.

Do not apply **M1691 herbicide** to seed corn or popcorn without first verifying with your local seed corn company (supplier) the selectivity of **M1691 herbicide** on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Avoid using crop oil concentrates after crop emergence as crop injury may result. Use crop oil concentrates only in dry conditions when corn is less than 5" tall and when applying **M1691 herbicide** alone or tank mixed with atrazine.

Use of sprayable fluid fertilizer as the carrier is not recommended for applications of **M1691 herbicide** made after corn emergence.

M1691 herbicide is not registered for use on sweet corn.

Preplant and Preemergence Application in No-Tillage Corn:

Rates: Apply 16 fluid ounces of **M1691 herbicide** per acre on medium- or fine-textured soils containing 2.5% or greater organic matter. Use 8 fluid ounces per acre on coarse soils (sand, loamy sand, and sandy loam) or medium- and fine-textured soils with less than 2.5% organic matter.

Timing: **M1691 herbicide** can be applied to emerging weeds before, during, or after planting a corn crop. When planting into a legume sod (e.g., alfalfa or clover), apply **M1691 herbicide** after 4 - 6" of regrowth has occurred.

Preemergence Application in Conventional or Reduced Tillage Corn:

Rates: Apply 16 fluid ounces of **M1691 herbicide** per treated acre on medium- or fine-textured soils containing 2.5% organic matter or more. Do not apply to coarse textured soils (sand, loamy sand, or sandy loam) of any soil with less than 2.5% organic matter until after corn emergence (See **Early Postemergence** uses below).

Timing: **M1691 herbicide** may be applied after planting and prior to corn emergence. Pre-emergence application of **M1691 herbicide** does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrates treated soil over seed furrow as seed damage could result.

Pre-emergence control of cocklebur, jimsonweed, and velvetleaf may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

Early Postemergence Application in All Tillage Systems:

Rates: Apply 16 fluid ounces of **M1691 herbicide** per treated acre. Reduce the rate to 8 fluid ounces per treated acre if corn is growing on coarse textured soils (sand, loamy sand, and sandy loam).

Timing: Apply between corn emergence and the 5-leaf stage or 8" tall, whichever occurs first. Refer to **Late Postemergence Applications** if the sixth true leaf is emerging from whorl or corn is greater than 8" tall.

Late Postemergence Application:

Rate: Apply 8 fluid ounces of **M1691 herbicide** per treated acre.

Timing: Apply **M1691 herbicide** from 8 - 36" tall corn or 15 days before tassel emergence, whichever comes first. For best performance, apply when weeds are less than 3" tall.

Apply directed spray when corn leaves prevent proper spray coverage; sensitive crops are growing nearby; or tank mixing with 2,4-D. Do not apply **M1691 herbicide** when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24" tall
- soybeans are more than 10" tall
- soybeans have begun to bloom

Corn Tank Mixes Or Sequential Uses

When using tank mix or sequential applications with **M1691 herbicide**, always follow the companion product label to determine specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

Apply **M1691 herbicide** prior to, in tank mix with, or after one or more of the following herbicides:

- | | |
|-----------------------------|------------------------------|
| Accent ^{®1} | Eradicane [®] |
| Acquire [™] | Exceed ^{®1} |
| Atrazine | Extrazine [®] II |
| Axiom [™] | Field Master [®] |
| Banvel ^{®1} | Frontier [®] |
| Beacon ^{®1} | FulTime [®] |
| Bicep [®] | Gramoxone [®] Extra |
| Bladex [®] | Guardsman [®] |
| Bullet [®] | Harness [®] |
| Degree [™] | Harness [®] Xtra |
| Degree Xtra [™] | Hornet ^{™1} |
| DoublePlay ^{®2} | Laddok [®] S-12 |
| Dual Magnum [™] | Lasso [®] |
| Dual II Magnum [®] | Liberty ^{®3} |

Lightning^{®5}
 Marksman^{®1}
 Outlook[™]
 Permit^{®1}
 Princep[®]
 Prowl[®]
 Python[™]
 Roundup Ultra^{®4}
 Roundup Ultra[®] RT

Spirit^{™1}
 Stinger^{®1}
 Surpass[®]
 Sutan[®] +²
 TopNotch[™]
 Touchdown[®]
 Tough[®]
 2,4-D¹

- ¹ See **Table 4. Specific Guidelines for Tank Mixes or Sequential Use Programs** for additional limitations or restrictions that apply for tank mix or sequential use programs with these products.
- ² Sequential use only.
- ³ Use only on **Liberty Link[®]** (glufosinate tolerant) corn hybrids.
- ⁴ Includes postemergence use on **Roundup Ready[®]** (glyphosate tolerant) corn hybrids.
- ⁵ Use only **CLEARFLELD[®]** (imidazolinone tolerant) corn hybrids.

Table 4. Specific Guidelines for Tank Mixes or Sequential Use Programs

Tank Mix Partner	Rate Per Acre
Accent [®] or Beacon [®]	When tank mixing, applications immediately following extreme day or night temperature fluctuations or applications when daytime temperatures do not exceed 50° F may result in decreased weed control or crop injury. Delay application until the temperatures warm and both weeds and crop resume normal growth.
2,4-D	To provide maximum crop safety after corn emergence, use this tank mix only after corn is greater than 8" tall and when application can be made with drop pipes that direct spray beneath corn leaves and away from the whorl of the corn. The maximum rate of 2,4-D recommended in this tank mix is 0.25 pints per acre (0.125 pounds of acid equivalent per acre).
Banvel [®] or Marksman [®]	Tank mixes with these products that contain dicamba must not exceed a total combined rate of 0.50 pounds of dicamba acid equivalent per acre (0.25 pound on coarse-textured soils or on any soil when corn is greater than 8" tall). Sequential applications of these products must be separated by a minimum of 2 weeks (unless the combined rate is less than 0.5 pounds of dicamba acid equivalent and corn is 8" tall or less) and must not exceed a combined total of 0.75 pounds dicamba acid equivalent per acre for in-crop use.
Exceed, Spirit, Stinger, Homet, or Permit	For improved control of velvetleaf, tank mix 0.25-0.5 ounce of Exceed, 0.5 ounce of Spirit, or 0.17-0.33 ounce Permit per acre with M1691 herbicide . For improved control of Canada thistle, Stinger at 1.5-3 fluid ounces per acre or Hornet at 0.6-1.2 ounces per acre may be tank mixed with M1691 herbicide . Use the higher rate in the range for heavier infestations of these weeds.

10.3 Cotton

Preplant Application:

Apply up to 8 fluid ounces of **M1691 herbicide** per acre to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems.

For best performance, apply **M1691 herbicide** when weeds are in the 2 - 4 leaf stage and rosettes are less than 2" across.

Following application of **M1691 herbicide** and a minimum accumulation of 1" of rainfall or overhead irrigation, a waiting interval of 21 days is required per 8 fluid ounces per acre or less. These intervals must be observed prior to planting cotton.

Do not apply preplant to cotton west of the Rockies.

Do not make **M1691 herbicide** preplant applications to cotton in geographic areas with average annual rainfall less than 25".

If applying a spring preplant treatment following application of a fall preplant (postharvest) treatment, then the combination of both treatments may not exceed 2 pounds acid equivalent per acre.

Cotton Tank Mixes

For control of grasses or additional broadleaf weeds, **M1691 herbicide** may be tank mixed with Bladex[®], Caparol[®], Gramoxone[®] Extra, and Roundup Ultra[®] RT herbicides.

10.4 Grass Grown For Seed

Apply 8 - 16 fluid ounces of **M1691 herbicide** per treated acre on seedling grass after the crop reaches the 3 - 5 leaf stage. Apply up to 32 fluid ounces of **M1691 herbicide** on well-established perennial grass. For best performance, apply **M1691 herbicide** when weeds are in the 2 - 4 leaf stage and rosettes are less than 2" across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

To suppress annual grasses such as brome (downy and ripgut), rattail fescue, and windgrass, apply up to 32 fluid ounces of **M1691 herbicide** per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

Do not apply **M1691 herbicide** after the grass seed crop begins to joint.

Refer to the **Pasture, Hay, Rangeland, and General Farmstead** section for grazing and feeding restrictions.

Grass Seed Tank Mixes

M1691 herbicide may be applied in tank mixes with one or more of the following herbicides:

Buctril [®]	MCPA amine
Curtail [®]	Sencor [®]
Express [®]	Stinger [®]
Karmex [®]	2,4-D amine or ester

10.5 Proso Millet

For use only within Colorado, Nebraska, North Dakota, South Dakota, and Wyoming.

M1691 herbicide combined with 2,4-D will provide control or suppression of the annual broadleaf weeds listed in **Section 11**.

Apply 4 fluid ounces of **M1691 herbicide** with 0.375 pounds a.i. of 2,4-D. Apply the tank mix of **M1691 herbicide** + 2,4-D as a broadcast or spot treatment to emerged and actively growing weeds and when proso millet is in the 2 - 5 leaf stage. Use directions for 2,4-D products vary with manufacturers. Refer to a 2,4-D product with labeling consistent with the crop stage timing for **M1691 herbicide**. Some types of proso millet may be affected adversely by a tank mix of **M1691 herbicide** + 2,4-D.

Do not apply unless possible proso millet crop injury will be acceptable.

Restrictions for proso millet that is grazed or cut for hay are indicated in **Table 5** in **Pasture, Hay, Rangeland, and General Farmstead** section of this label.

10.6 Pasture, Hay, Rangeland, And General Farmstead (Noncropland)

M1691 herbicide is recommended for use on pasture, hay, rangeland, and general farmstead (non-cropland) (including fencerows and non-irrigation ditchbanks) for control or suppression of broadleaf weed and brush species listed in **Section 11**.

M1691 herbicide may also be applied to non-cropland areas to control broadleaf weeds in noxious weed control programs, districts, or areas including broadcast or spot treatment of roadsides and highways, utilities, railroad, and pipeline rights-of-way. Noxious weeds must be recognized at the state level, but programs may be administered at state, county, or other level.

M1691 herbicide uses described in this section also pertain to small grains (forage sorghum, rye, sudangrass, or wheat) grown for pasture use only. Some perennial weeds may be controlled with lower rates of either **M1691 herbicide** or **M1691 herbicide** plus 2,4-D (refer to **Table 1**).

Rates and Timings

Refer to **Table 1** for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Rates above 32 fluid ounces of **M1691 herbicide** per acre are for spot treatments only. Do not broadcast apply more than 32 fluid ounces per acre.

Retreatments may be made as needed; however, do not exceed a total of 32 fluid ounces of **M1691 herbicide** per treated acre during a growing season.

Crop-Specific Restrictions and Limitations

Do not apply more than 16 fluid ounces of **M1691 herbicide** per acre to small grains grown for pasture.

Newly seeded areas may be severely injured if more than 16 fluid ounces of **M1691 herbicide** is applied per acre.

Established grass crops growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, carpetgrass, buffalograss, and St. Augustingrass may be injured if more than 16 fluid ounces of **M1691 herbicide** is applied per acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

Table 5 lists the timing restrictions for grazing or harvesting hay from treated fields. There are no grazing restrictions for animals other than lactating dairy animals.

Table 5. Timing Restrictions for Lactating Dairy Animals Following Treatment

M1691 Rate per Treated Acre (pts)	Days Before Grazing (days)	Days Before Hay Harvest (days)
Up to 1	7	37
Up to 2	21	51
Up to 4	40	70

M1691 herbicide can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier (refer to the **Compatibility Test for Mix Components**).

To prepare oil in water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil) or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers. **M1691 herbicide** may be applied broadcast using either ground or aerial application equipment.

Aerial Application:

- **Spray Volume:** Use 2 - 40 gallons of diluted spray per treated acre in a water-based carrier.

Ground Application:

- **Spray Volume:** Use 3 - 600 gallons of diluted spray per treated acre. The volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used.
- **Spot Treatments:** **M1691 herbicide** may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.

Cut Surface Treatments:

M1691 herbicide may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees.

Rate: Mix 1 part **M1691 herbicide** with 1 - 3 parts water to create the application solution. Use the lower dilution rate when treating difficult-to-control species.

- **For Frill or Girdle Treatments:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with the solution.
- **For Stump Treatments:** Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

Note: For more rapid foliar effects, 2,4-D may be added to the solution.

Applications For Control of Dormant Multiflora Rose:

M1691 herbicide can be applied when plants are dormant as an undiluted spot treatment directly to the soil or as a Lo-Oil basal bark treatment using an oil-water emulsion solution.

- **Spot treatments:** Spot treatment applications of **M1691 herbicide** should be applied directly to the soil as close as possible to the root crown but within 6 - 8" of the crown. On sloping terrain, apply **M1691 herbicide** to the uphill side of the crown. Do not apply when snow or water prevents applying **M1691 herbicide** directly to the soil. The use rate of **M1691 herbicide** depends on the canopy diameter of the multiflora rose.

Examples: Use 0.25, 1.0, or 2.35 fluid ounces of **M1691 herbicide** respectively, for 5, 10, or 15 feet canopy diameters.

- **Lo-Oil basal bark treatments:** For Lo-Oil basal bark treatments, apply **M1691 herbicide** to the basal stem region from the ground line to a height of 12 - 18". Spray until runoff, with special emphasis on covering the root crown. For best results, apply **M1691 herbicide** when plants are dormant. Do not apply after bud break or when plants are showing signs of active growth. Do not apply when snow or water prevents applying **M1691 herbicide** to the ground line.

To prepare approximately 2 gallons of a Lo-Oil spray solution:

- 1) Combine 1.5 gallons of water, 1 ounce of emulsifier, 16 fluid ounces of **M1691 herbicide**, and 2.5 pints of No. 2 diesel fuel.
- 2) Adjust the amounts of materials used proportionately to the amount of final spray solution desired.

Do not exceed 8 gallons of spray solution mix applied per acre, per year.

Pasture Tank Mixes

M1691 herbicide may be applied in tank mixes with one or more of the following herbicides:

- | | |
|-----------|-------------------|
| Acquire™ | Gramoxone® Extra |
| Ally® | Roundup Ultra® RT |
| Amber® | Stinger® |
| Crossbow® | Tordon® 22K |
| Curtail® | 2,4-D |
| Garlon® | |

10.7 Conservation Reserve Program (CRP)

M1691 herbicide is recommended for use on both newly seeded and established grasses grown in Conservation Reserve or federal Set-Aside Programs. Treatments of **M1691 herbicide** will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

NEWLY SEEDED AREAS

M1691 herbicide may be applied either preplant or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3-leaf stage. Rates of **M1691 herbicide** greater than 16 fluid ounces per treated acre may severely injure newly seeded grasses.

Preplant applications may injure new seedlings if the interval between application and grass planting is less than 45 days per 16 fluid ounces of **M1691 herbicide** applied per treated acre west of the Mississippi River or 20 days per 16 fluid ounces applied east of the Mississippi River.

ESTABLISHED GRASS STANDS

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species (bentgrass, carpetgrass, smooth brome, buffalograss, or St. Augustinegrass) may be injured when treated with more than 16 fluid ounces of **M1691 herbicide** per treated acre.

When applied at recommended rates, **M1691 herbicide** will control many annual and biennial weeds and provide control or suppression of many perennial weeds.

Rates and Timings

Apply 4 - 32 fluid ounces of **M1691 herbicide** per acre. Refer to **Table 1** for rates based on target weed species. **M1691 herbicide** may be tank mixed or applied sequentially with other products labeled for use in Conservation Reserve Programs such as atrazine, Cyclone®, glyphosate (Acquire™, Roundup Ultra®), Gramoxone® Extra, Touchdown®, or 2,4-D. Retreatments may be made as needed; however, do not exceed a total of 32 fluid ounces (2 pints) of **M1691 herbicide** per acre.

10.8 Small Grains Not Underseeded To Legumes (fall- and spring-seeded barley, oat, triticale and wheat)

M1691 herbicide combinations with listed tank mix partners will provide control or suppression of the annual broadleaf weeds listed in **Section 11**. For improved control of listed weeds, tank mix **M1691 herbicide** with one or more of the herbicides listed.

M1691 herbicide used in a tank mix with other herbicides offers the best spectrum of weed control and herbicide tolerant or resistant weed management. Refer to the specific section crop for **M1691 herbicide** application rate and timing.

For applications prior to weed emergence or when sulfonylurea-resistant weeds are present or suspected, tank mix a minimum of 3 fluid ounces of **M1691 herbicide** per treated acre with a non-sulfonylurea herbicide such as 2,4-D or MCPA. Tank mixing **M1691 herbicide** with these products will offer more consistent control of sulfonylurea-resistant weeds.

Additives: When tank mixing **M1691 herbicide** with sulfonylurea herbicides (Ally[®], Amber[®], Canvas[®], Express[®], Finesse[®], Glean[®], Harmony[®] Extra, and Peak[®]), use 1 - 4 pints of an agriculturally approved surfactant (containing at least 80% active ingredient) per 100 gallons of spray or not more than 0.25 - 0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix or when treating more mature and difficult to control weeds or dense vegetative growth.

Refer to the specific crop sections below for use rates. When treating difficult to control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce or when dense vegetative growth occurs, use the 3 - 4 fluid ounces of **M1691 herbicide** per acre.

Timings: Apply **M1691 herbicide** before, during, or after planting small grains. See specific small grain crop uses below for maximum crop stage. For best performance, apply **M1691 herbicide** when weeds are in the 2 - 3 leaf stage and rosettes are less than 2" across. Applying **M1691 herbicide** to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Applications to small grains may be made with aerial applications with 1 gallon of water or more per acre. Where dense foliage is present, 2 - 3 gallons of water per acre should be used.

Restrictions for small grain areas that are grazed or cut for hay are indicated in **Table 5** in **Pasture, Hay, Rangeland, and General Farmstead** section of this label.

10.9 Small Grains: Barley (fall- and spring-seeded)

Early season applications:

Apply 2 - 4 fluid ounces of **M1691 herbicide** to fall-seeded barley prior to the jointing stage. Apply 2 - 3 fluid ounces of **M1691 herbicide** before spring-seeded barley exceeds the 4-leaf stage.

Note: For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for spring-seeded barley.

Do not tank mix **M1691 herbicide** with 2,4-D in early season applications on spring-seeded barley.

Preharvest applications:

M1691 herbicide can be used to control weeds that may interfere with harvest of fall and spring-seeded barley. Apply 8 fluid ounces of **M1691 herbicide** per acre as a broadcast or spot treatment to annual broadleaf weeds when barley is in the hard dough stage and the green color is gone from the nodes (joints) of the stern. Best results will be obtained if application can be made when weeds are actively growing, but before weeds canopy.

A waiting interval of 7 days is required before harvest. Do not use preharvest-treated barley for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

For control of additional broadleaf weeds or grasses, **M1691 herbicide** may be tank mixed with other herbicides, such as 2,4-D, that are labeled for preharvest uses in barley.

Do not make preharvest applications in California.

Barley Tank Mixes

Table 6.

Tank Mix Partner	Rate Per Acre
Ally [®]	0.05 - 0.1 ounce ¹
Amber [®]	0.14 - 0.28 ounce ¹
Bronate [®]	0.75 - 1.5 pints
Buctril [®]	1 - 1.5 pints
Canvas [®]	0.2 - 0.4 ounce ¹
Express [®]	0.083 - 0.167 ounce ¹
Finesse [®]	0.167 - 0.33 ounce ¹
Glean [®]	0.167 ounce ¹
Harmony [®] Extra	0.167 - 0.33 ounce ¹
MCPA amine or ester	8 - 12 fluid ounces ² (0.25 - 0.375 pound a.e.)
Metribuzin (Sencor [®] , Lexone [®])	0.125 - 0.47 pound a.i.
2,4-D amine or ester ^{2,3}	8 fluid ounces (0.25 pound a.e.)

¹ Do not use low rates of sulfonylureas (Ally, Amber, Canvas, Express, Finesse, Glean, and Harmony Extra) on more mature weeds or on dense vegetative growth.
² When using formulations other than 4 pounds per gallon use pounds of a.e. per acre listed.
³ This tank mix is for fall-seeded barley only

10.10 Small Grains: Oats (fall- and spring-seeded)

Early season applications:

Apply 2 - 4 fluid ounces of **M1691 herbicide** per acre to fall-seeded oat prior to the jointing stage.
 Apply 2 - 4 fluid ounces of **M1691 herbicide** before spring-seeded oat exceed the 5-leaf stage.

M1691 herbicide may be tank mixed with MCPA amine or ester for applications in oat.

Do not tank mix **M1691 herbicide** with 2,4-D in oat.

10.11 Small Grains: Triticale (fall- and spring-seeded)

Early season applications:

Apply 2 - 4 fluid ounces of **M1691 herbicide** to triticale.

Early season applications to fall-seeded triticale must be made prior to the jointing stage.

Early season applications to spring-seeded triticale must be made before triticale reaches the 6-leaf stage.

Triticale Tank Mixes:

For best performance, should be used in tank mix combination with bromoxynil (Buctril, Moxy 2E) herbicide.

10.12 Small Grains: Wheat (fall- and spring-seeded)

Early Season Applications:

Apply 2 - 4 fluid ounces of **M1691 herbicide** to wheat unless using one of the fall-seeded wheat specific programs below.

Early season applications to fall-seeded wheat must be made prior to the jointing stage.

Early season applications to spring-seeded wheat must be made before wheat exceeds the 6-leaf stage.

Early developing wheat varieties such as TAM 107, Madison, or Wakefield must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

To improve control of Russian thistle, flaxweed, gromwell, or mayweed, add 2,4-D amine or ester to a tank mix with one of the following herbicides: Ally[®], Amber[®], Canvas[®], Express[®], Finesse[®], Glean[®], Harmony[®] Extra, or Peak[®].

Specific use programs for fall-seeded wheat only:

M1691 herbicide may be used at 6 fluid ounces on fall-seeded wheat in Western Oregon as a spring application only. In Colorado, Kansas, New Mexico, Oklahoma, and Texas, up to 8 fluid ounces of **M1691 herbicide** may be applied on fall-seeded wheat after it exceeds the 3-leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. **M1691 herbicide** may be tank mixed with 2,4-D amine at 8 fluid ounces after wheat begins to tiller. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

Preharvest applications:

M1691 herbicide can be used to control weeds that may interfere with harvest of wheat. Apply 8 fluid ounces **M1691 herbicide** per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

A waiting interval of 7 days is required before harvest. Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

For control of additional broadleaf weeds or grasses, **M1691 herbicide** herbicide may be tank mixed with other herbicides such as Ally[®], Roundup[®] Ultra, and 2,4-D. Do not make preharvest applications in California.

Wheat Tank Mixes

Table 7.

Tank Mix Partner	Rate Per Acre
Ally [®]	0.05 - 0.1 ounce ¹
Amber [®]	0.14 - 0.28 ounce ¹
Bronate [®]	0.75 - 1.5 pints
Buctril [®]	1 - 1.5 pints
Canvas [®]	0.2 - 0.4 ounce ¹
Curtail [®]	2 - 2.67 pints
Dakota [®]	16 fluid ounces
Express [®]	0.083 - 0.167 ounce ¹
Finesse [®]	0.167 - 0.33 ounce ¹
Glean [®]	0.167 ounce ¹
Harmony [®] Extra	0.167 - 0.33 ounce ¹
Karmex ^{®3}	0.5 - 1.5 pounds
Glyphosate (Roundup Ultra [®] RT) ⁴	12 - 16 fluid ounces
MCPA amine or ester ⁵	8 - 12 fluid ounces (0.25 - 0.375 pound a.e.)
Metribuzin ³ (Sencor [®] , Lexone [®])	0.25 - 0.375 pound a.i.
Peak ^{®1}	0.25 - 0.38 ounce

Stinger [®]	4 - 5.33 fluid ounces
Tiller ^{®2}	1 - 1.7 pints
2,4-D amine or ester ⁵	8 - 12 fluid ounces (0.25 - 0.375 pound a.e.)
¹ Do not use low rates of sulfonylurea herbicides, such as Ally, Amber, Canvas, Express, Finesse, Glean, Harmony Extra, and Peak on more mature weeds or on dense vegetative growth. ² Do not use M1691 herbicide as a tank mix treatment with Dakota or Tiller on Durum wheat. Do not tank mix with Tiller if wild oat is the target weed. ³ Tank mixes with Karmex and metribuzin are for use in fall-seeded wheat only. ⁴ A tank mix of up to 4 fluid ounces of M1691 herbicide with Roundup Ultra RT or any glyphosate formulation labeled for use as a preplant application to small grains may be applied with no waiting period prior to planting. ⁵ Up to 32 fluid ounces of (1.0 pound a.e.) may be used on fall-seeded wheat if crop injury is acceptable. When using formulations other than 4 pounds per gallon, use the pounds of a.e. per acre listed.	

10.13 Sorghum

M1691 herbicide may be applied preplant, postemergence, or preharvest in sorghum to control many annual broadleaf weeds and to reduce competition from established perennial broadleaf weeds, as well as control their seedlings.

Do not graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to **Pasture, Hay, Rangeland, and General Farmstead** section of this label for specific grazing and feeding restrictions.

Do not apply **M1691 herbicide** to sorghum grown for seed production.

Preplant Application:

Up to 8 fluid ounces of **M1691 herbicide** may be applied per acre if applied at least 15 days before sorghum planting.

Postemergence Application:

Up to 8 fluid ounces of **M1691 herbicide** per acre may be applied after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15" tall. For best performance, apply **M1691 herbicide** when the sorghum crop is in the 3 - 5 leaf stage and weeds are small (less than 3" tall). Use drop pipes (drop nozzles) if sorghum is taller than 8". Keep the spray off the sorghum leaves and out of the whorl to reduce the likelihood of crop injury and to improve spray coverage of weed foliage. Applying **M1691 herbicide** to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 - 14 days.

Preharvest uses in Texas and Oklahoma only: Up to 8 fluid ounces of **M1691 herbicide** per acre may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications, use at least 2 gallons of water-based carrier per treated acre. Delay harvest until 30 days after a preharvest treatment.

Split Application:

M1691 herbicide may be applied in split applications: preplant followed by postemergence or preharvest; or postemergence followed by preharvest. Do not exceed 8 fluid ounces per acre, per application or a total of 16 ounces per acre, per season.

Sorghum Tank Mixes and Sequential Treatments

M1691 herbicide may be applied prior to, in a tank mix with, or after one or more of the following herbicides:

- | | |
|------------------|----------------|
| Acquire™ | Guardsman® |
| Atrazine | Laddok® S-12 |
| Basagran® | Landmaster® |
| Bicep II Magnum® | Lasso® |
| Buctril® | Outlook™ |
| Cyclone® | Paramount® |
| Dual Magnum™ | Peak® |
| Dual II Magnum® | Permit® |
| Fallow Master® | Ramrod® |
| Frontier® | Roundup Ultra® |
| Gramoxone® Extra | |

10.14 Soybean

Preplant Applications:

Apply 4 -16 fluid ounces of **M1691 herbicide** per acre to control emerged broadleaf weeds prior to planting soybeans. Do not exceed 16 fluid ounces of **M1691 herbicide** per acre in a spring application prior to planting soybeans.

Following application of **M1691 herbicide** and a minimum accumulation of 1" rainfall or overhead irrigation, a waiting interval of 14 days is required for 8 fluid ounces per acre or less, and 28 days for 16 fluid ounces per acre. These intervals must be observed prior to planting soybeans or crop injury may occur.

Do not make **M1691 herbicide** preplant applications to soybeans in geographic areas with average annual rainfall less than 25".

Preharvest Applications:

M1691 herbicide can be used to control many annual and perennial broadleaf weeds and control or suppress many biennial and perennial broadleaf weeds in soybean prior to harvest (refer to **Section 10**). Apply 8 - 32 fluid ounces of **M1691 herbicide** per acre as a broadcast or spot treatment to emerged and actively growing weeds after soybean pods have reached mature brown color and at least 75% leaf drop has occurred.

Soybeans may be harvested 14 days or more after a preharvest application.

Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for **M1691 herbicide**. For seedling control, a follow-up program or other cultural practice could be instituted.

Do not use preharvest-treated soybean for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

Do not feed soybean fodder or hay following a preharvest application of **M1691 herbicide**.

Do not make preharvest applications in California.

Soybean Tank Mixes

Preplant Tank Mixes:

M1691 herbicide may be tank mixed with other herbicides registered for early preplant use in soybeans including burndown herbicides such as glyphosate (Acquire™, Roundup Ultra®) and 2,4-D or residual herbicides such as Outlook®, Frontier® or Dual Magnum™.

Preharvest Tank Mixes:

M1691 herbicide may be tank mixed with other herbicides registered for preharvest use in soybeans such as glyphosate (Roundup Ultra[®]) and Gramoxone[®] Extra.

10.15 Sugarcane

Apply **M1691 herbicide** for control of annual, biennial, or perennial broadleaf weeds listed in **Section 11**. Apply 8 - 24 fluid ounces of **M1691 herbicide** per acre for control of annual weeds, 16 - 32 fluid ounces for control of biennial weeds, and 32 fluid ounces for control or suppression of perennial weeds.

Use the higher level of listed rate ranges when treating dense vegetative growth.

A single retreatment may be made as needed, however, do not exceed a total of 64 fluid ounces of **M1691 herbicide** per treated acre during a growing season.

Timing: **M1691 herbicide** may be applied to sugarcane any time after weeds have emerged, but before the close-in stage of sugarcane. Applications of 32 fluid ounces of **M1691 herbicide** per acre made over the top of actively growing sugarcane may result in crop injury.

When possible, direct the spray beneath the sugarcane canopy to minimize the likelihood of crop injury. Using directed sprays will also help maximize the spray coverage of weed foliage.

Sugarcane Tank Mixes

M1691 herbicide may be tank mixed with other products registered for use in sugarcane such as Asulox[®], atrazine, Evik[®], and 2,4-D.

10.16 Turf And Lawns

For use in general farmstead (noncropland) and sod farms, apply 3 – 32 fluid ounces of **M1691 herbicide** per acre to control or suppress growth of many annual, biennial, and some perennial broadleaf weeds commonly found in turf. **M1691 herbicide** will also suppress many other listed perennial broadleaf weeds and woody brush and vine species. Refer to **Table 1** for rate recommendations based on targeted weed or brush species and growth stage. Some weed species will require tank mixes for adequate control.

Repeat treatments may be made as needed; however, do not exceed 32 fluid ounces of **M1691 herbicide** per acre, per growing season.

Apply 30 - 200 gallons of diluted spray per treated acre (3 - 17 quarts of water per 1,000 square feet), depending on density or height of weeds treated and on the type of equipment used.

To avoid injury to newly seeded grasses, delay application of **M1691 herbicide** until after the second mowing. Furthermore, applying more than 16 fluid ounces of **M1691 herbicide** per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustinegrass.

In areas where roots of sensitive plants extend, do not apply more than 4 fluid ounces of **M1691 herbicide** per treated acre on coarse-textured (sandy-type) soils, or in excess of 8 fluid ounces per treated acre on fine-textured soils. Do not make repeat applications in these areas for 30 days and until previous applications of **M1691 herbicide** have been activated in the soil by rain or irrigation.

Turf and Lawn Tank Mixes

Apply 3.2 - 8 fluid ounces of **M1691 herbicide** per acre in a tank mix with one of the products in Table 8 at the rates listed. Use the higher rates when treating established weeds.

Table 8.

Tank Mix Partner	Rate Per Acre
bromoxynil (Buctril®)	0.375 - 0.5 pound a.i
MCPA	0.5 - 1.5 pounds a.e.
MCPP	0.5 - 1.5 pounds a.e.
2,4-D	0.5 - 1.5 pounds a.e.

11.0 WEEDS CONTROLLED

GENERAL WEED LIST, Including ALS- and Triazine-Resistant Biotypes

ANNUALS

Alkanet	Goosefoot, Nettleleaf	Radish, Wild
Amaranth, Palmer, Powell, Spiny	Hempnettle	Ragweed, Common, Giant (Buffaloweed), Lance- Leaf
Aster, Slender	Henbit	Rocket, London, Yellow
Bedstraw, Catchweed	Jacobs-Ladder	Rubberweed, Bitter (Bitterweed)
Beggarweed, Florida	Jimsonweed	Salsify
Broomweed, Common	Knawel (German Moss)	Senna, Coffee
Buckwheat, Tartary, Wild	Knotweed, Prostrate	Sesbania, Hemp
Buffalobur	Kochia	Shepherdspurse
Burclover, California	Ladysthumb	Sicklepod
Burcucumber	Lambsquarters Common	Sida, Prickly (Teaweed)
Buttercup, Corn, Creeping, Roughseed, Western Field	Lettuce, Miners, Prickly	Smartweed, Green, Pennsylvania
Carpetweed	Mallow, Common, Venice	Sneezeweed, Bitter
Catchfly, Nightflowering	Marestail (Horseweed)	Sowthistle, Annual, Spiny
Chamomile, Corn	Mayweed	Spanish Needles
Chevil, Bur	Morningglory, Ivyleaf, Tall	Spikeweed, Common
Chickweed, Common	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurge, Prostrate, Leafy
Clovers	Nightshade, Black, Cutleaf	Spurry, Corn
Cockle, Corn, Cow, White	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starbur, Bristly
Cocklebur, Common	Pepperweed, Virginia (Peppergrass)	Starwort, Little
Copperleaf, Hophornbeam	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sumpweed, Rough
Cornflower (Bachelor Button)	Pineappleweed	Sunflower, Common (Wild), Volunteer
Croton, Tropic, Woolly	Poorjoe	Thistle, Russian
Daisy, English	Poppy, Red-horned	Velvetleaf
Dragonhead, American	Puncturevine	Waterhemp, Common, Tall
Eveningprimrose, Cutleaf	Purslane, Common	Waterprimrose, Winged
Falseflax, Smallseed	Pusley, Florida	Wormwood
Fleabane, Annual		
Flixweed		
Fumitory		

BIENNIALS

Burdock, Common	Geranium, Carolina	Ragwort, Tansy
Carrot, Wild (Queen Anne's Lace)	Gromwell	Starthistle, Yellow
Cockle, White	Knapweed, Diffuse, Spotted	Sweetclover
Eveningprimrose, Common	Mallow, Dwarf	Teasel
	Plantain, Bracted	

Thistle, Bull, Milk, Musk,

Plumeless

PERENNIALS

Alfalfa¹
 Artichoke, Jerusalem
 Aster, Spiny, Whiteheath
 Bedstraw, Smooth
 Bindweed, Field, Hedge
 Blueweed, Texas
 Bursage, Woollyleaf¹ (Bur
 Ragweed, Povertyweed)
 Buttercup, Tall
 Champion, Bladder
 Chickweed, Field,
 Mouseear
 Chicory¹
 Clover¹, Hop
 Dandelion¹, Common
 Dock¹ Broadleaf
 (Bitterdock), Curly
 Dogbane, Hemp
 Dogfennel¹ (Cypressweed)
 Fern, Bracken
 Garlic, Wild

Goldenrod, Canada,
 Missouri
 Goldenweed, Common
 Hawkweed
 Henbane, Black¹
 Horsenettle, Carolina
 Ironweed
 Knapweed, Black, Diffuse,
 Russian¹, Spotted
 Milkweed, Climbing,
 Common, Honeyvine,
 Western Whorled
 Nettle, Stinging
 Nightshade, Silverleaf
 (White Horsenettle)
 Onion, Wild
 Plaintain, Broadleaf,
 Buckhorn
 Pokeweed
 Ragweed, Western
 Redvine

Sericia Lespedeza
 Smartweed, Swamp
 Snakeweed, Broom
 Sorrel¹, Red (Sheep Sorrel)
 Sowthistle¹, Perennial
 Spurge, Leafy
 Sundrops
 Thistle, Canada, Scotch
 Toadflex, Dalmatian
 Tropical Soda Apple
 Trumpet creeper (Buckvine)
 Vetch
 Waterhemlock, Spotted
 Waterprimrose, Creeping
 Woodsorrel¹, Creeping,
 Yellow
 Wormwood, Absinth,
 Louisiana
 Yankeeweed
 Yarrow, Common¹

¹ Noted perennials may be controlled using lower rates of **M1691 herbicide** than those recommended for other listed perennial weeds.

WOODY SPECIES

Alder
 Ash
 Aspen
 Basswood
 Beech
 Birch
 Blackberry²
 Blackgum²
 Cedar²
 Cherry
 Chinquapin
 Cottonwood
 Creosotebush²
 Cucumbertree
 Dewberry²
 Dogwood²
 Elm
 Grape
 Hawthorn (Thornapple)²

Hemlock
 Hickory
 Honeylocust
 Honeysuckle
 Hornbeam
 Huckleberry
 Huisache
 Ivy, Poison
 Kudzu
 Locust, Black
 Maple
 Mesquite
 Oak
 Oak, Poison
 Olive, Russian
 Persimmon, Eastern
 Pine
 Plum, Sand (Wild Plum)²
 Poplar

Rabbitbrush
 Redcedar, Eastern²
 Rose², McCartney,
 Multiflora
 Sagebrush, Fringed²
 Sassafras
 Serviceberry
 Spicebush
 Spruce
 Sumac
 Sweetgum²
 Sycamore
 Tarbush
 Willow
 Witchhazel
 Yaupon²
 Yucca²

²Growth suppression only

12.0 LIMIT OF WARRANTY AND LIABILITY

Monsanto Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label pamphlet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR

PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

To the fullest extent allowed by law, buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, and other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

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Spirit is a trademark of Novartis Corporation.

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Asulox is a registered trademark of Rh6ne-Poulenc Agriculture Ltd.

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Axiom is a registered trademark of Bayer Corporation.

Moxy is a trademark of Riverside.

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Delavan is a registered trademark of Garlock International, Inc.

All other trademarks are the property of their respective owners.

EPA Reg. No. 524-new

EPA Establishment No. [insert appropriate est. no.]

Packed for:
MONSANTO COMPANY
800 N. Lindbergh Blvd.
ST. LOUIS, MISSOURI, 63167 U.S.A.

© [DATE]

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SUPPLEMENTAL LABELS FOR EPA REG. NO. 524-NEW

M1691 Herbicide Supplemental Label

FOR USE ON DICAMBA-TOLERANT SOYBEAN MON 87708 GROWN FOR RESEARCH, FIELD TRIALS AND SEED PRODUCTION ONLY

EPA Reg. No. 524-NEW

Follow all applicable directions, restrictions, Worker Protection Standard requirements and precautions on the EPA-registered product label for **M1691 herbicide**, EPA Reg. No. 524-NEW.

This label must be in the possession of the user at the time of application.

Dicamba-tolerant soybean MON 87708 contains proprietary gene technology licensed exclusively to Monsanto Company. Planting of dicamba-tolerant soybean MON 87708 may only be done under agreement and following all instructions of Monsanto Company.

Directions For Use

It is a violation of federal law to use this product in any 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 at the time of application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Read the Precautionary Statements, Environmental Hazards, Storage and Disposal statements, and Conditions of Sale and Warranty statement appearing on the container label.

THIS PRODUCT MAY BE USED FOR WEED CONTROL AND FOR CONTROL OF NON-DICAMBA- . TOLERANT SOYBEAN IN RESEARCH, FIELD TRIALS AND SEED PRODUCTION FIELDS OF DICAMBA-TOLERANT SOYBEAN MON 87708. SEVERE INJURY OR DESTRUCTION OF THE SOYBEANS WILL RESULT IF SOYBEANS NOT DESIGNATED AS MON 87708 ARE SPRAYED WITH THIS PRODUCT

USE INSTRUCTIONS

This product will control labeled weeds and nondicamba- tolerant soybean in research and field trial plots and in seed production fields of dicamba-tolerant soybean MON 87708.

Apply up to 32 fluid ounces of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. A second application up to 32 fluid ounces per acre may be applied if needed to control weeds or nondicamba-tolerant soybean plants.

Application Timing. This product may be applied to dicamba-tolerant soybean MON 87708 preplant, preemergence and from emergence to harvest.

USE RESTRICTIONS

Maximum Seasonal Use Rate. DO NOT exceed a maximum rate of 64 fluid ounces of **M1691 Herbicide** per acre per year.

Avoid off-target movement. Use extreme care when applying **M1691 Herbicide** to avoid injury to desirable plants. Refer to **M1691 Herbicide** main label for information regarding aerial and ground application recommendations and restrictions.

Harvested dicamba-tolerant soybean MON 87708, grain, forage and hay may not be used or processed for food or feed.