



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 12, 2016

Mr. Diego Fonseca  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268

Subject: Label Amendment – Revise plant back interval and make other minor labeling changes  
Product Name: MCP Ester  
EPA Registration Number: 62719-573  
Application Date: 12/17/2015  
Decision Number: 512654

Dear Mr. Fonseca:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

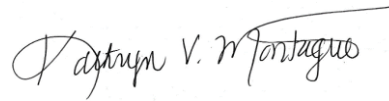
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 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.

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.

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Decision No. 512654

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Karen Samek by phone at (703) 347-8825, or via email at [samek.karen@epa.gov](mailto:samek.karen@epa.gov).

Sincerely,

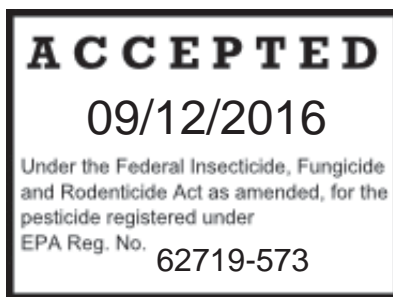
A handwritten signature in cursive script that reads "Kathryn V. Montague". The signature is written in black ink and is positioned above the typed name.

Kathryn Montague, Product Manager 23  
Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

(Base label):

# MCP Ester HERBICIDE



**For selective control of many broadleaf weeds in wheat, barley, oats, rye, flax, peas, sod farms, grasses grown for seed, pasture and rangeland, and non-cropland areas.**

<b>Group</b>	<b>4</b>	<b>HERBICIDE</b>
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Active Ingredient:

2-methyl-4-chlorophenoxyacetic acid, 2-ethylhexyl ester .....	68.7%
Other Ingredients .....	31.3%
Total .....	100.0%

Acid equivalent: 44.1% - 3.7 lb per gallon.  
Contains petroleum distillates

**Keep Out of Reach of Children**

## WARNING                      AVISO

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

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

**Causes Moderate Eye Irritation • Causes Skin Irritation • Harmful If Swallowed Or Absorbed Through The Skin • Prolonged or frequently repeated skin contact may cause allergic skin reaction**

**Do not get on skin or on clothing. Avoid contact with eyes.**

#### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below.

**Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber >14 mils, Neoprene Rubber >14 mils, or viton >14 mils.
- Chemical-resistant footwear plus socks.
- Chemical-resistant headgear for overhead exposure.

**Additional PPE requirements for mixers loaders supporting aerial application to rangelands, pasture lands, or noncropland. These mixers/loaders also must wear:**

- A chemical-resistant apron.

- a NIOSH-approved particulate filter with any N, R, or P filter with NIOSH approval number prefix TC – 84A; or a NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC – 21C.

See Engineering Controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Engineering Controls

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

### 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.

### First Aid

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

**If swallowed:** Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

### Environmental Hazards

This pesticide is toxic to fish, aquatic invertebrates and aquatic plants. Do not apply directly to water, 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**Mixing and Loading:** Most cases of groundwater contamination involving phenoxy herbicides such as MCP Ester have been associated with mixing/loading and disposal sites. Caution should be exercised when handling MCP Ester pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

**Cleaning of Equipment:** When cleaning equipment, do not pour washwaters on the ground. Spray or drain over a large area away from wells and other water sources.

### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

#### (Storage and Disposal for rigid containers 5 gal or less)

##### Storage and Disposal

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20°F may result in formation of crystals. If product crystallizes, store at 50° to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

#### (Storage and Disposal for refillable rigid containers larger than 5 gal)

##### Storage and Disposal

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20°F may result in formation of crystals. If product crystallizes, store at 50° to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

#### (Storage and Disposal for nonrefillable rigid containers larger than 5 gal)

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**Refer to label booklet for Directions for Use.**

**Notice:** Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-573

EPA Est. \_\_\_\_\_

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**Produced for  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268**

**NET CONTENTS \_\_\_\_\_**

(cover):

# MCP Ester HERBICIDE

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Active Ingredient:

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**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

**Refer to label booklet for additional precautionary information including Directions for Use.**

**Notice:** Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

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(Page 1 through end):

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## Precautionary Statements

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### Hazards to Humans and Domestic Animals

## WARNING

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**Do not get on skin or on clothing. Avoid contact with eyes.**

### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below.

#### Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber >14 mils, Neoprene Rubber >14 mils, or viton >14 mils.
- Chemical-resistant footwear plus socks.
- Chemical-resistant headgear for overhead exposure.

#### Additional PPE requirements for mixers loaders supporting aerial application to rangelands, pasture lands, or noncropland. These mixers/loaders also must wear:

- A chemical-resistant apron
- a NIOSH-approved particulate filter with any N, R, or P filter with NIOSH approval number prefix TC – 84A; or a NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC – 21C.

See Engineering Controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Engineering Controls

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

### 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.

### First Aid

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

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Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

## Environmental Hazards

This pesticide is toxic to fish, aquatic invertebrates and aquatic plants. Do not apply directly to water, 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**Cleaning of Equipment:** When cleaning equipment, do not pour washwaters on the ground: Spray or drain over a large area away from wells and other water sources.

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## Directions for Use

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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. Do not allow people or pets to enter the treated area until sprays have dried. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

## Agricultural Use Requirements

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 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 over short-sleeved shirt and short pants
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber >14 mils, Neoprene Rubber >14 mils, or viton >14 mils.
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

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## • Non-Agricultural Use Requirements

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- The requirements of 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.
- **Entry Restrictions for Non-WPS Uses:** Keep unprotected persons out of the treated area until sprays have dried.

**(Storage and Disposal for rigid containers 5 gal or less)**

**Storage and Disposal**

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20°F may result in formation of crystals. If product crystallizes, store at 50° to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**(Storage and Disposal for refillable rigid containers larger than 5 gal)**

**Storage and Disposal**

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20°F may result in formation of crystals. If product crystallizes, store at 50° to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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## Product Information

MCP Ester herbicide is an emulsifiable concentrate for selective control of many broadleaf weeds in wheat, barley, oats, rye, flax, peas, sod farms, grasses grown for seed, pasture, rangeland, and non-cropland areas.

## Precautions and Restrictions

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

### Avoiding Injury to Non-target Plants

**Avoid contact with susceptible crops and other desirable broadleaf plants.** This product is injurious to most broadleaf plants. Therefore, do not apply directly to or otherwise permit even minute amounts (as in spray mist) to contact cotton, grapes, tobacco, fruit trees, vegetables, flowers, ornamentals or other desirable plants. Do not use in or near a greenhouse.

**Do not apply this product in the vicinity of cotton, grapes, tobacco, tomatoes, or other desirable susceptible crops or ornamental plants.**

**Do not spray when wind is blowing toward susceptible crops or ornamental plants.**

### SPRAY DRIFT PRECAUTIONS

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and grower are responsible for considering all of these factors when making decisions.

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Apply only when the wind speed is 2-10 mph at the application site.

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

**Aerial Application:** The following drift management requirements must be followed to avoid off-target drift movement from aerial applications.

1. The distance between the outer most nozzles on the boom must not exceed 75% the length of the wingspan or 90% of rotor.
2. Nozzles must always point backward parallel to the air stream and never downward more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

Do not make applications into temperature inversions.

**Ground Application:** With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 or more gallons of spray per acre; by using no more than 20 psi spraying pressure with large-droplet producing nozzle tips; by spraying when wind velocity is low; and by stopping all spraying when wind exceeds 8 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce hazardous amounts of fine spray droplets.

**Determine Air Movement and Direction Before Application:** Use a smoke generator or other means at or near the application site to detect air movement, air stability, or temperature inversion. A temperature inversion is indicated when smoke does not rise in a column, but layers above the ground, and is most likely to occur in early morning or evening under calm or nearly calm conditions. Do not apply when there is a temperature inversion. Use appropriate drift control measures or avoid application when smoke indicates wind direction is toward desirable susceptible plants or sensitive areas.

### **Mixing and Loading**

Most cases of groundwater contamination involving phenoxy herbicides such as MCP Ester have been associated with mixing/loading and disposal sites. Caution should be exercised when handling MCP pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

### **Cleaning of Equipment**

To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same containers used for this product. Do not apply other agricultural chemicals or pesticides with equipment used to apply this product unless equipment has been thoroughly cleaned to remove all traces of this product. Local regulations may affect the use of herbicides. Consult your state agricultural experiment station or extension service weed specialist for cleaning methods which are in compliance with local regulations.

**Disposal of Washwaters or Rinsate:** When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area or treatment site away from wells and other water sources.

### **Weed Resistance Management:**

MCP Ester, the active ingredient in this product, is a Group 4 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain or

develop plants resistant to Group 4 herbicides. Resistant weeds may dominate the weed population if these herbicides are used repeatedly in the same field. Such resistant weed plants may not be effectively managed using Group 4 herbicides but may be effectively managed utilizing other herbicides alone or in mixtures from a different herbicide Groups that are labeled for control of these weeds and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

### **Best Management Practices:**

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistant weeds. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant weed populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in reducing the spread of resistant weed seed.

### **Weeds Controlled**

#### **Susceptible (Most Areas)**

beggarticks  
 cocklebur  
 goatsbeard  
 hemlock, poison  
 hempnettle  
 lambsquarters  
 marshelder  
 mint, dragonhead  
 mustards, annual  
 pepperweed, field  
 puncturevine  
 radish, wild  
 ragweed  
 shepherdspurse  
 sowthistle, annual  
 stinkweed  
 yellow rocket  
 many others

#### **Less Susceptible**

buttercup  
 chervil  
 dandelion  
 kochia  
 lettuce, miner's  
 nettle, stinging  
 pigweed, Russian  
 plantains  
 purslane  
 sowthistle, perennial  
 sunflower  
 thistle, Canada  
 vetch  
 whitetop (hoary cress)

Local conditions may affect the use of this product. Consult your state agricultural experiment station or extension service weed specialist in selecting treatments from this label to best fit local conditions.

### **Mixing Instructions**

Mix MCP Ester only with water. Fill the mixing tank or spray tank about 3/4 full, then add the required amount of MCP Ester with agitation, and then add the rest of the water with continuing agitation. **Note:** Adding oil, wetting agent or other surfactant to the spray mixture may reduce selectivity to crops, possibly resulting in crop injury.

### **Application Directions**

Apply MCP Ester when weeds are young and actively growing. Where a rate range is given, use lower rates for young, succulent growth of sensitive weed species and higher rates for less sensitive species and when growing conditions are less favorable. Uniform spray coverage is necessary. Use moderate spray pressure (20 psi) and enough spray volume for good coverage, 5 or more gallons per acre for ground application and at 3 or more gallons per acre for aerial application. Increase spray volume to improve coverage of dense foliage. To avoid increasing spray drift, always use larger nozzle tips to increase spray volume rather than increasing spray pressure.

**Spot Spraying:** Hand-held sprayers may be used for spot applications. Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table (fl oz/ml) are equivalent to the indicated broadcast application rate (pt/acre) when mixed with 1 to 3 gallons of water and applied to an area of 1,000 sq ft. To calculate the amount of product required for areas larger than 1,000 sq ft, multiply the table value (fl oz/ml) by the "thousands" of sq ft to be treated (e.g., 3,500 sq ft ÷ 1,000 = 3.5 thousands).

Table values are the amount of product to be mixed with 1 to 3 gallons of spray and applied to 1,000 sq ft.			
Equivalent Broadcast Rate (pt/acre)			
1/2 pt/acre	1 pt/acre	2 pt/acre	3 pt/acre
1/5 fl oz (5.4 ml)	3/8 fl oz (11 ml)	3/4 fl oz (22 ml)	1.1 fl oz (33 ml)

†1 fl oz = 29.6 (30) ml

## Weed Control in Crops

### Flax

For control of susceptible weeds, apply MCP Ester at a rate of 1/4 to 1/2 pint per acre using ground or aerial equipment. Apply when weeds have emerged and flax is 4 to 8 inches tall, but **before** buds have formed. Treatment after bud stage may result in severe crop injury. If Canada thistle is present, up to 1/2 pint per acre may be required to prevent seedhead production, but some injury to flax may result.

#### Restriction:

- Do not forage or graze meat animals on treated areas within seven days of slaughter.
- Do not graze dairy animals on treated areas until seven days after treatment.
- Do not apply more than 0.5 pints/A/year of this product (0.25 lb ae/acre of MCP Ester per year).
- Flax treated with MCPA may be replanted with any crop specified on an MCPA label or any crop for which a residue tolerance exists for MCPA. For crops not listed on an MCPA label, or on crops for which no residue tolerances for MCPA have been established, a 1-year plantback interval must be observed.

### Small Grains (Wheat, Oats, Barley, and Rye)

#### Restrictions (Small Grains):

- Do not apply from boot to dough stage.
- Do not graze dairy animals on treated areas until seven days after treatment.
- Do not forage or graze meat animals on treated areas within seven days of slaughter.
- Do not apply more than 1.6 pints/A/year of this product (0.75 lb ae/acre of MCP Ester per year).
- Wheat, oats, barley, rye treated with MCPA may be replanted with any crop specified on an MCPA label or any crop for which a residue tolerance exists for MCPA. For crops not listed on an MCPA label, or on crops for which no residue tolerances for MCPA have been established, a 1-year plantback interval must be observed.

### **Wheat, Barley, Oats or Rye Not Underseeded to Legumes**

Apply as a broadcast spray using aircraft or ground equipment. Use a spray volume of 3 or more gallons per acre by air and 10 or more gallons per acre by ground. Apply MCP Ester at a rate of 1/2 to 1 pint per acre for the more susceptible weeds after crop has reached the 3 to 4 leaf stage up to boot stage. Do not apply during the boot to dough stage of crop growth. Do not apply if crop is underseeded with a legume.

**Emergency Treatment for Perennial Broadleaf Weeds:** Apply after crop is tillered and at least 8 to 10 inches tall up to early boot stage. Apply MCP Ester at 1 ½ pints per acre for perennial and less susceptible weeds. Perennial weeds are most susceptible when approaching the bud stage of growth. Do not apply during boot to dough stage of crop growth. These higher rates can produce crop injury and should be used only where the severity of the weed infestation justifies the risk of potential crop damage. Where weeds are scattered, consider spot application.

### **Peas (For Use in Idaho, Oregon and Washington Only)**

**Use only where recommended by local agricultural extension service or experiment station specialists.** For control susceptible weeds apply MCP Ester at a rate of 1/4 to 1/3 pint per acre. Use a spray volume of 15 or more gallons per acre for ground application or 5 or more gallons per acre if applied by aircraft. Apply before first flowering when peas are 3 to 7 inches tall and when weeds are small. Higher rates of 1/2 to 3/4 pint per acre may be used to improve control of difficult weeds but crop injury is more likely to occur. Do not apply if peas are taller than 7 inches or when peas are stressed for lack of soil moisture. Do not apply when air temperature is over 90°F. **Note: This product can cause injury and delayed maturity in the pea crop.**

#### **Restrictions:**

- Do not allow livestock to forage or graze treated fields or feed treated vines to livestock.
- Do not treat bean-type peas such as Crowder, Blackjack, etc.
- Do not apply more than 3/4 pints/A/year of this product (.375 lb/acre/year).
- Peas treated with MCPA may be replanted with any crop specified on an MCPA label or any crop for which a residue tolerance exists for MCPA. For crops not listed on an MCPA label, or on crops for which no residue tolerances for MCPA have been established, a 1-year plantback interval must be observed.

### **Grasses Grown for Seed**

Apply MCP Ester as a broadcast spray at 1 to 2 pints per acre using ground equipment or aircraft. Use a spray volume of 10 or more gallons per acre by ground or 3 or more gallons per acre by air. Use a higher rate in rate range for heavy infestations or less susceptible weed species. In established grasses apply in spring before head comes into boot. On newly seeded areas, do not apply until grass is well established as indicated by development of tillering and a secondary root system. Where grass seed production is desired, do not apply from early boot to milk stage of crop development.

**Note:** Repeat applications may be required for less susceptible weeds. In some areas, bent, buffalo grasses may be injured.

#### **Restrictions:**

- Do not apply more than 1.5 lb ae/acre of MCP Ester per application.
- Do not make more than 2 applications per year with a minimum retreatment interval of 21 days.

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**Weed Control In Rangeland, Pasture,  
Ornamental Turf, and Non-Cropland Areas**

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## Established Pastures and Rangeland

Apply MCP Ester as a broadcast spray at a rate of 1 to 3 pints per acre using ground equipment or aircraft. Use sufficient spray volume for thorough coverage; 10 or more gallons per acre by ground or 3 or more by aircraft. For best results, apply when weeds are small and actively growing. Use higher rate dense weed infestations and for whitetop, Canada thistle, buttercup, and other less susceptible weeds. Spray perennials in early-bud to full bloom stage and regrowth in the fall. Treat other weeds in spring or fall. Legumes may be injured or killed. Do not use this treatment where legumes, especially alfalfa, are present and desirable. Do not use on newly seeded areas until grass is well established.

### Restrictions:

- Do not forage or graze livestock on treated areas within seven days of treatment.
- Do not graze dairy animals on treated areas until seven days after treatment.
- Do not apply more than 1.5 lb ae/acre of MCP Ester per application.
- Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.

## Ornamental Turf

### (Golf courses, cemeteries, parks, and similar established grass areas)

For broadcast application, apply MCP Ester at a rate of 1 to 3 pints per acre in a spray volume of 10 or more gallons of water. Use a higher rate in rate range for heavy infestations or less susceptible weed species. For best results, apply in spring or fall when weeds are rapidly growing and do not mow for 2 days before or after application. For spot treatment or treatment of small areas, use 1 fluid ounce per 1000 sq ft in 1 to 3 gallons of spray and apply uniformly.

**Note:** Repeat applications may be required for less susceptible weeds. In some areas, bent, buffalo, carpet, and St. Augustine grasses may also be injured.

Do not apply MCP Ester around houses, recreation sites, or similar areas.

### Restrictions:

- Do not apply more than 1.5 lb ae/acre of MCP Ester per application.
- Do not make more than 2 applications per year with a minimum retreatment interval of 21 days.

## Non-Cropland Areas

**For control of weeds such as Canada thistle, whitetop, meadow buttercup, field bindweed (morningglory) and Texas blueweed in non-crop areas such as fence rows, farm yards, shelter-belts and roadsides:** For spot treatment, use 2.2 fl oz of MCP Ester in 1 to 3 gallons of water per 1000 sq ft, or 6 pt per acre in a spray volume of 15 to more gallons to control weeds such as Canada thistle, whitetop, meadow buttercup and Texas blueweed. Apply when weeds are in bud to early bloom and growing vigorously. Treat fall regrowth if necessary.

### Restrictions:

**Broadcast Treatment:** Do not apply more than 1.5 lb ae/acre of MCP Ester per application. Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.

**Spot Treatment:** Do not apply more than 3.0 lb ae/acre of MCP Ester per year.

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## Terms and Conditions of Use

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If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, to the extent permitted by law, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.



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**Warranty Disclaimer**

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**Inherent Risks of Use**

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It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by Buyer.

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**Limitation of Remedies**

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To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

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