

APR 11 2000

Daniel J. Erasmus, Ph.D.
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268-1054

Dear Dr. Erasmus:

Subject: Add Use on Cotton
MSMA 51%
EPA Registration No. 62719-343
Your Submission Dated April 4, 2000

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- It is understood that on page 3 of the label booklet the duplicate Agricultural Use Requirements referral box replaces the box on the container label that is covered by the booklet. If any other text on the base label is covered by the booklet, you must get this office's approval prior to marketing this product. Based on your company's submissions, we must assume that all of the base label appears on the container label and is readable by the purchaser.

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3. Submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

Sincerely yours,



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

Enclosure

3912

(Base Label):

00XXXXXX

(Logo) Dow AgroSciences LLC

MSMA 51%

For selective post-emergence weed control

Active Ingredient:	
monosodium acid methanearsonate	51.0%
Inert Ingredients	49.0%
Total	100.0%

Total arsenic (as elemental) all in water-soluble form 23.6%
Product contains 6.6 pounds of MSMA per gallon

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

APR 11 2000

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
62289-343**

Keep Out of Reach of Children **CAUTION PRECAUCION**

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 • Harmful If Swallowed, Inhaled, Or Absorbed Through Skin

Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant apron when mixing or loading
- For exposures outdoors, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or NIOSH approved respirator with any N, R, P, or HE filter.
- For exposures in enclosed areas, use a respirator with either an organic-vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.

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

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

User Safety Recommendations

Users should:

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

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First Aid

If swallowed: Call a Poison Control Center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a Poison Control Center or doctor.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a Poison Control Center or doctor for further treatment advice.

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. Call a Poison Control Center or doctor for treatment advice.

If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment.

Note: Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target area. Do not contaminate water when disposing of equipment washwaters.

Agricultural Use Requirements

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

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies".

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

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

EPA Reg. No. 62719-343

EPA Est. XX XX
Superscripts correspond to places 7 & 8 of lot number
900-000000 / 00000000

[Manufactured in Israel/South Africa]
Dow AgroSciences LLC • Indianapolis, IN 46268

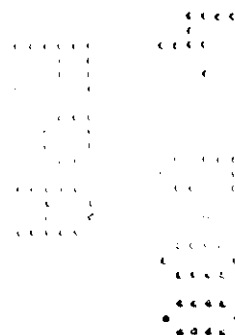
Herbicide

Net Contents __gal

[Insert Bar Code FPO]

[Insert DOT shipping classification and diamond(s)]

Lot



3712

Label Booklet:

(Logo) Dow AgroSciences LLC

MSMA 51%

For selective post-emergence weed control

Active Ingredient:

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Inert Ingredients	49.0%
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Total arsenic (as elemental) all in water-soluble form 23.6%
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Agricultural Use Requirements
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Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

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XX XX
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Superscripts correspond to places 7 & 8 of lot number
900-000000 / 00000000

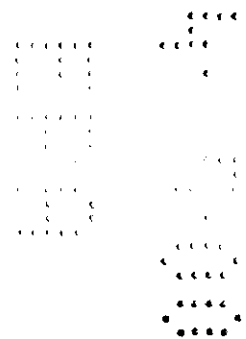
[Manufactured in Israel/South Africa]
Dow AgroSciences LLC • Indianapolis, IN 46268

Herbicide

Net Contents __gal

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Lot



6712

(Page 1 through end):

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Precautionary Statements

Hazards to Humans and Domestic Animals

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Note: Have the product container or label with you when calling a Poison Control Center or doctor going for treatment.

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Directions for Use

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. 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 Protections 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
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks

Non-Agricultural Use Requirements

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

Keep children and domestic animals off treated areas until this material has been washed into the soil.

Storage and Disposal

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

Storage: Store in a dry location away from children, animals, foods, feeds, seeds, or other agricultural chemicals. Handle in accordance with information given under Precautionary Statements. In the event of spillage or leakage, soak up material with absorbent clay, sand, sawdust, or other absorbent material. Scrape up and dispose of in accordance with information given under Disposal. Repackage and re-label usable product in a sound container.

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

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

MSMA 51% herbicide is a selective post-emergent product for weed control in cotton, turf, and noncrop areas. This product does not contain a surfactant. A suitable non-ionic surfactant labeled and cleared for application to growing crops should be added to the spray tank. Local conditions and recommendations vary. Consult local agricultural experiment station or extension service weed specialists for recommendations in your area.

General Use Precautions and Restrictions

- Best results are obtained on young, actively growing weeds at air temperatures above 70°F.
- Do not contaminate waters used for domestic consumption or by animals, wildlife, and aquatic life, or water for irrigation purposes.
- Do not spray or allow spray drift onto vegetables, ornamentals, or other desirable plants.
- Do not feed treated foliage to livestock or allow livestock to graze treated areas.
- Do not apply when weather conditions favor drift from target area.

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- Do not apply by aircraft.
- **Chemigation:** Do not use this product through any type of irrigation system.

Mixing Instructions

MSMA 51% must be thoroughly mixed. Fill the spray equipment reservoir with about half the required amount of water and, with the pump or agitator operating add the required amount of herbicide and continue filling the reservoir with the balance of the water and apply. Add the surfactant according to manufacturer's recommended rate and mix thoroughly before using.

Do not store spray solution in tank overnight. After use, clean equipment thoroughly by flushing with water.

Weeds Controlled

A partial list of weeds controlled includes:

bahiagrass	goosegrass
barnyardgrass	johnsongrass
beggartick, hairy	morningglory
beggarweed, Florida	mustard, wild
brachiaria spp.	nutsedge
broomsedge	oats, wild
chickweed	pigweed
cocklebur	puncturevine
crabgrass (smooth and large)	purslane, common
dallisgrass	ragweed
dandelion	sandbur
dayflower	sicklepod
fall panicum	sorrel, wood
fiddleneck	spurge
foxtail (green and yellow)	witchgrass

Application Instructions

Application Methods: MSMA 51% should be applied with a low volume, low pressure, properly calibrated sprayer having satisfactory pumping and bypass action. Apply during warm weather when weeds are actively growing. Adjust nozzles to keep spray off cotton foliage and in a manner to allow maximum of weeds. Adequate coverage is very important for effective weed control.

COTTON

MSMA 51% is useful as a directed postemergence spray in cotton for controlling weeds such as johnsongrass, nutsedge, dallisgrass, cocklebur, barnyardgrass, ragweed, sandbur, and puncturevine. Apply MSMA 51% at the rate of 2 ½ pints per acre. **Apply only when cotton is 3 inches high to first bloom. Do not apply after first bloom.**

Add 6 pints of MSMA 51% and 1 to 2 quarts of a suitable surfactant cleared for application to growing crops to 100 gallons of water and mix thoroughly. Apply spray solution at the rate of 40 gallons per acre. Weed control is most effective at temperatures above 70°F. For band application in 40-inch rows, apply 1 gallon of the MSMA spray solution per inch of band width. Direct the spray solution to the base of the cotton plant. Nozzles should be placed so as to avoid spraying the cotton foliage. A second application, after 1 to 3 weeks, may be required during humid growing conditions to control perennials such as johnsongrass and nutsedge.

Slight burning and reddish discoloration of the cotton leaves may occasionally occur following the recommended treatment; however, cotton plants will develop normally.

Do not feed treated foliage to livestock or graze treated areas.

ORNAMENTAL TURFGRASS

MSMA 51% is useful for selective control of listed weeds with little or no injury to well-established, actively growing turfgrasses. Mow turfgrasses to height of 1 to 1 ½ inches before treatment. Mix 1 fluid ounce (2 tablespoons) of MSMA 51% plus 2 to 3 fluid ounces of suitable surfactant in 1 to 2 ½ gallons of water for application to an area of 1000 sq ft. Application should be uniform and thorough to adequately wet all undesirable plants. Two or more repeat treatments at 14-day intervals may be necessary. Make application during warm weather when temperature is between 80 and 90°F. **Do not** water turf for at least 24 hours **after** application. Turfgrasses may be temporarily discolored. Bermudagrass, bluegrasses, and zoysiagrass have shown tolerance when MSMA 51% is properly applied.

Injury may result if applied to bentgrasses, fescues, and St. Augustinegrass. **Do not** apply to St. Augustinegrass except for commercial production. **Do not** apply to carpetgrass, centipedegrass, or to dichondra. **Do not** reseed until 2 weeks after last application. **Do not** apply with hose-end applicators. For application to St. Augustinegrass, application may be made to sod on sod farms with the last application approximately 4 to 5 weeks prior to lifting the sod for harvest to allow for full recovery before lifting. The St. Augustinegrass sod will be temporarily discolored following application. **Do not** apply to freshly mowed St. Augustinegrass.

NON-CROP AREAS (Including drainage ditchbanks, fencerows, rights-of-way, storage yards, and similar noncrop areas)

MSMA 51% is useful for selective control of listed weeds on drainage ditchbanks, fencerows, rights-of-way, storage yards, and similar noncrop areas. Application should be made when weeds are small and conditions are favorable for active weed growth. Mix at the rate of 3 pints MSMA 51% plus 1 ½ to 2 quarts of suitable surfactant in 50 gallons of water. Spray target vegetation to the point of runoff. Adequate coverage and complete wetting is important for effective control. Repeat applications may be necessary if regrowth occurs. Do not contaminate waters used for domestic purposes, or by animals, including wildlife and aquatic life, or water used for irrigation purposes.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences **MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant 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. All such risks shall be assumed by buyer.

Limitation of Remedies

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.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

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MSMA 51%

EPA Reg. No. 62719-343

Registration Notes:

Source label text based on EPA-accepted copy dated March 15, 2000.

Proposed Changes by Amendment:

1. Use on Cotton added to product label based on the product label for Pamol Target MSMA 6.6 from Luxemborg Pamol, Memphis TN 38137 (EPA-accepted Jan. 31, 1995).
2. Deleted reference to "aircraft" from "Engineering Controls" section.

[Editor's note: Added text is underlined and deleted text is denoted by strike-through.]

