

APR 8 1993

Elizabeth D. Owens, Ph.D.
ISK Biotech Corporation
P.O. Box 8000
Mentor, OH 44061-8000

Dear Dr. Owens:

Subject: Amended Labeling - Adding New Uses
DSMA Liquid
EPA Registration Number 50534-27 ✓
Your Submission Dated March 25, 1993

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:

a. Modify the Environmental Hazards Section to include the following statements:

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 by disposal of equipment washwaters.

b. Add the statement "Do not feed treated foliage to livestock or graze treated areas" and position it so it is clear that it applies to both over-the-top and directed application to cotton.

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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.

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

Sincerely yours,



Cynthia Giles-Parker
Product Manager (22)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

Net Contents

ISK BIOTECH™

DSMA Liquid

DSMA Plus Surfactant For Postemergence Weed Control

Product Contains 3.6 Pounds Disodium Methearsonate Hexahydrate Equivalent Per Gallon

Active Ingredient: Disodium Methearsonate	21.8%
Inert Ingredients:	78.2%
Total:	100.0%
Total Arsenic, all in water-soluble form, expressed as elemental ...	8.9%

Keep Out of Reach of Children

CAUTION: ■ See side panel for additional
■ precautionary statements

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Mentor, Ohio 44061-8000

EPA Reg. No. 50534-27

3206-Q001-8019-9103



type change per
this flap



Precautionary Statements

Hazards to Humans and Domestic Animals

Caution

Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapors or spray mist.

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Seek medical attention.

In case of contact, flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Wash exposed skin gently with plenty of soap and water.

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

Wear protective clothing when handling or applying this product including long pants, long-sleeve shirt, and impermeable gloves and boots. Mixer-loaders should include an apron and full-face shield when handling or mixing concentrate. Flagmen should be fully protected during spray operations or mechanical flagmen used. Pilots and ground spray rig applicators should wear a mask or respirator approved by the Mining Enforcement and Safety Administration and the National Institute for Occupational Safety and Health.

Environmental Hazards

Do not apply directly to water.

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

Do not spray or allow drift onto vegetables, ornamentals or other desirable plants. Do not apply when weather conditions favor drift from target area.

Do not contaminate water by cleaning of equipment or disposal of wastes.

DSMA Liquid

Read entire label before using this product.

General Information

DSMA Liquid is a postemergence herbicide for use in cotton, turf and non-crop areas. DSMA Liquid contains a surfactant (wetting agent) in proper ratio for best results. It is not necessary to add additional surfactant to the spray tank. Local conditions and recommendations vary; consult local agricultural experiment station or extension service weed specialists for recommendations in your area.

Mixing Instructions: DSMA Liquid herbicide must be thoroughly dissolved. Fill the spray tank with half the required amount of water and, with pump or agitator operating, add the recommended amount of DSMA Liquid herbicide and continue filling the tank with balance of water.

Do not store spray solution in tank overnight. Clean application equipment thoroughly after use by flushing with water in a safe place.

Application Methods: DSMA Liquid should be applied with a low-volume, properly calibrated sprayer having satisfactory pumping and bypass action. Adjust Nozzles to Keep Spray Off Cotton Foliage and in a Manner to Allow Maximum Coverage of Weeds. Adequate coverage is very important for effective weed control.

Apply during warm weather when weeds are in an active stage of growth.

ACCEPTED
with COMMENTS
In EPA Letter Dated:

APR 8 1993

for the Federal Insecticide
and Rodenticide Act
and, for the pesticide
registered under EPA Reg. No.

50534-27

EPA EST. NO.

me-to 9729-128

Directions for Use

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

Do not apply this product through any type of irrigation equipment.

Cotton: DSMA Liquid is useful as a directed postemergence spray for controlling weeds in cotton such as barnyardgrass, cocklebur, smooth and large crabgrass, dallisgrass, goosegrass, johnsongrass and nutsedge.

PREPLANT OR POSTPLANT UP TO CRACKING APPLICATION ON COTTON: A single ground or aircraft application of DSMA Liquid can be made to prepared cotton seedbeds when planting has been delayed and weeds have emerged, or as a post-plant treatment, but no later than initial cracking of soil in field before emergence of cotton.

Planting of cotton may immediately follow the preplant application. Mix at a rate of 1 gallon of DSMA Liquid in 40 gallons of water for broadcast ground application or in 5 to 10 gallons of water for aircraft application and apply to one acre using a properly calibrated sprayer.

POSTEMERGENT, OVER-THE-TOP APPLICATION ON COTTON: A single ground or aircraft application may be made as an over-the-top broadcast spray to actively growing cotton as a salvage operation when cotton is 3 to 6 inches high or up to early first square stage, whichever occurs first. Mix DSMA Liquid at a rate of 3 to 4 pints in 40 gallons of water for ground application, or in 5 to 10 gallons of water for aircraft application and apply to one acre using a properly calibrated sprayer. Apply as an over-the-top broadcast spray only when cotton is 3 to 6 inches high or up to early first square stage, whichever occurs first.

Do not apply as an over-the-top broadcast spray after cotton is more than 6 inches high or after early first square stage.

Slight burning and reddish discoloration of cotton foliage may occasionally be seen following recommended treatment.

DIRECTED APPLICATION:

Apply as a directed spray at rate of 40 gallons per acre of a solution containing 1 gallon of DSMA Liquid in 40 gallons of water when weeds are small. For band applications, apply 1 gallon of above diluted spray per acre for each 1 inch band width to be treated of cotton grown on 40 inch row spacing. A second or repeat application, if needed, should be timed about 1 to 3 weeks after the first application. Keep spray off cotton foliage.

Apply Only When Cotton is 3 inches High to First Bloom. Do not Apply After First Bloom.

Slight burning and reddish discoloration of cotton foliage may occasionally be seen following recommended treatment; however, cotton plants will develop normally and yield will not be affected.

Ornamental Turfgrass: DSMA Liquid can be used for selective control of bahiagrass, barnyardgrass, chickweed, smooth and large crabgrass, dallisgrass, nutsedge, sandbur and wood sorrel with little or no injury to well-established, actively growing turfgrasses. Mow turfgrass to height of 1 to 1 1/2 inches before treatment. Mix 3 fluid ounces (6 tablespoons) of DSMA Liquid in 2 1/2 gallons of water for application to an area of 1,000 square feet. 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 applications 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 to properly applied DSMA Liquid. Injury may result if applied to bentgrasses and fescues. Do not apply to St. Augustinegrass, carpetgrass, centipedegrass or to Dichondra. Do not reseed until 2 weeks after last application. Do not apply with hose-end applicators.

Agricultural Plantings: DSMA Liquid is useful as a directed application in non-bearing vineyards and in non-bearing deciduous fruit, nut, and citrus orchards such as almond, apple, apricot, cherry, grapefruit, lemon, lime, orange, peach, pear, plum, prune and tangerine orchards. It should be applied at the rate of 3 1/2 to 7 quarts per acre.

Mix DSMA Liquid at the rate of 3 1/2 quarts to 50 gallons of water. Apply as a directed spray in interspaces and around bases of trees or vines. Spray unwanted vegetation to just short of run-off. If regrowth occurs, reapply as required. However, do not exceed 3 applications per year.

Do not allow spray solution to contact leaves, stems, or bark. Use a shield, if necessary, for nursery plantings or young trees. Do not apply around trees or vines from which fruit will be harvested within one year of treatment.

Non-Crop: DSMA Liquid is effective in controlling barnyard grass, cocklebur, smooth and large crabgrass, dallisgrass, goosegrass, johnsongrass, nutsedge and may similar weeds on drainage ditchbanks, fence rows, rights-of-way, storage yards and similar non-crop area. Application should be made when weeds are small and conditions are favorable for good weed growth. Mix at a rate of 1 gallon of DSMA Liquid in 40 gallons of water. Spray undesirable vegetation thoroughly to point of run-off. Adequate coverage and complete wetting of foliage 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.

Do not feed treated

foliage to livestock

graze treated

areas.

Clear applicator to both

over-the-top & Directed

Storage and Disposal

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

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

Container Refilling and Cleaning: This is a returnable dedicated container to be refilled only with ISK Biotech's Methanearsonate products, by an authorized Repackager. Return this container to the Repackager from which it was purchased for refilling. If the seals are intact, do not rinse this container between refills. If the seals are not intact, or, other evidence exists that tampering may have occurred, triple rinse (or equivalent) before returning container to authorized Repackager. Add rinsate to the spray tank as make-up water for normal spray dilution of concentrate product.

Warranty and Limitation of Damages

Seller warrants that this material conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use and Buyer assumes the risk of any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so.

In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material to which a claim is made.