

18 JUN 1992

Ms. Elizabeth D. Owens
ISK Biotech Corp.
5966 Heisley Road
P.O. Box 8000
Mentor, OH 44061-8000

Dear Ms. Owens:

Subject: 2 Plus 2 MCPP + 2,4-D Herbicide
EPA Registration No. 50534-11
Your Application of November 7, 1991

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

This indicates that the signal word should be Danger (without the skull and crossbones) instead of Caution. However, some acute toxicity data are needed to complete the requirements for this pesticide. Our conclusions are summarized as follows:

The submitted oral and dermal toxicity, and eye irritation studies are considered guideline data and acceptable. The dermal irritation test is considered core minimum data, but also accepted. The dermal sensitization test is considered supplementary data and is not acceptable. A new sensitization test as well as an inhalation test must be submitted. No inhalation data is included in the file, and it is one of the requirements for registration; therefore it must be submitted.

Ms. Elizabeth Owens
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You will find our complete toxicology review enclosed for your information.

Thank you.

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure (2)

H7505C:Mayes:jem:Rm235:305-5218:06/18/92

Net Contents: 2.5 Gallons ~~8.5 Liters~~

ISK·BIOTECH™

2 Plus 2 (MCP + 2,4-D Amine) Turf Care[®]

Herbicide

Active Ingredients:

Dimethylamine salt of 2,4-dichlorophenoxyacetic acid*	24.5%
Dimethylamine salt of 2-(2-methyl-4-chlorophenoxy) propionic acid**	24.2%

Inert Ingredients: 51.3%

Total: 100.0%

*2,4-dichlorophenoxyacetic acid equivalent 20.4% (1.7 lbs/gal)
 **2-(2-methyl-4-chlorophenoxy) propionic acid 20.0% (1.7 lbs/gal)
 †Some specific by A.O.A.C. Method

Keep Out of Reach of Children

DANGER: See side panel for additional precautionary statements

TURF CARE is a registered trademark of ISK Biotech Corporation.

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 5966 Hensley Road
 P.O. Box 8000
 Mentor, Ohio 44061-8000

EPA Reg. No. 50534-11

EPA Est. No. 42545-MO-1

3522-4060-9041-9108

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Precautionary Statements

Hazards to Humans and Domestic Animals

DANGER

May cause severe eye damage.
Do not get in eyes.

Harmful if swallowed or absorbed through the skin.

Avoid breathing spray mist.

Avoid contact with eyes, skin or clothing.

Wash thoroughly after handling.

Keep container closed.

First Aid:

If swallowed, have conscious person drink several glasses of water, then induce vomiting by tickling back of throat with finger. Keep airway clear. Never give anything by mouth to an unconscious person. Seek medical attention in case of contact.

— immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire surface. Seek medical attention

— wash exposed skin gently with plenty of soap and water. Seek medical attention if irritation persists.

Protective Clothing: Wear face shield or goggles, long pants, long-sleeved shirt, shoes and chemical resistant gloves when handling, mixing, loading or applying this product.

Environmental Hazards

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget 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. **Do not** contaminate irrigation ditches or water used for domestic purposes. Use care to avoid spray contact or drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, grapes, fruit trees and ornamentals. **Do not** permit spray mist containing **2 Plus 2 (MCP + 2,4-D Amine)** to drift onto them, since even very small quantities of the spray, which may not be visible, can cause severe injury during both growing and dormant periods. **Do not** spray when the wind is blowing towards susceptible crops or ornamental plants. Use coarse sprays to minimize drift. Spray drift can be lessened by keeping the spray boom as low as possible; by applying 20 gallons or more of spray per acre; by using no more than 20 pounds spray pressure with flat fan or flooding flat fan 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 a fine droplet spray. Flush sprayer on suitable non-crop area after use. **Do not** use the same spray equipment for applying other materials to 2,4-D susceptible crops as injury may result.

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2 Plus 2 (MCP + 2,4-D Amine)

Read entire label before using this product.

General Information

2 Plus 2 (MCP + 2,4-D Amine) is a post-emergence herbicide especially formulated for use on turfgrass for selective control of many broadleaf weeds commonly growing in lawns without injury to desirable grasses. This chemical may be used on all types of turf including Meron, Kentucky bluegrass, bermudagrass, fescues and rye grasses. (This product has been used successfully on bentgrass; however, it should not be used unless prior tests have shown it to be non-damaging under the particular conditions of use. To eradicate broadleaf weeds, it is better to use another selective herbicide for fine lawn grasses).

Note: MCP acts more slowly than 2,4-D so that some weeds will be controlled before others. Allow 3 to 4 weeks for complete weed control action to occur.

The following is a partial list of weeds controlled by 2 Plus 2 (MCP + 2,4-D Amine):

Buckhorn	Lambsquarters	Red clover
Clover	Mallow	*Red sorrel
Common chickweed	Mouseear chickweed	Stitchwort
Curly dock	Morningglory	*Speedwell
*Dandelion	Pigweed	White clover
*English daisy	Plantain	*Wild garlic
Ground ivy	Purslane	*Wild onion
Knotweed	Ragweed	Yarrow

Use high rate on chart for weeds marked with an asterisk () in the above list.

Note: Local conditions and application regulations vary and may affect use of this herbicide. Consult local agricultural experiment station or extension service weed specialists and state regulatory agencies for recommendations in your area.

Note: When stored at temperatures below freezing, it may be necessary to warm contents to 45°F and mix thoroughly before using.

Note: Do not use this product on sod farms in the state of Arizona.

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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.

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

Reentry Statements: **Do not** reenter or permit workers to reenter treated areas until sprays have dried.

Groundwater Contamination: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D and MCPP have been associated with mixing, loading and disposal sites. Caution should be exercised when handling 2,4-D and MCPP 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 the wastewater on the ground; spray or drain over a large area away from wells and other water sources.

Preparation of the Spray: This product must be mixed with water prior to use. For best results use 2 to 4 gallons of water per 1,000 sq. ft. for smaller areas, 20 to 40 gallons of water per acre for larger areas. Apply by means of a sprayer to give uniform coverage. Repeat applications may be necessary especially with heavy infestations of the less susceptible weeds indicated with an asterisk in above list.

Either before or after application, it is wise to properly fertilize the lawn so as to encourage the lawn to heal as rapidly as possible, filling in the bare areas where the weeds have died away. Once the weeds have been removed, the bare areas should be reseeded. Bare areas may be reseeded 3 to 4 weeks after application.

Time of Application: Apply in spring or fall when weeds are actively growing. Knotweed is controlled more easily in spring or early summer when weeds are young. **Do not** apply when turf is suffering from drought conditions or during very hot weather or damage to grass may result. **Do not** mow for several

Jays before or after application. Withhold sprinkling for 24 hours after application. **Do not** apply during periods of heavy rainfall. **Do not** use on newly seeded areas. **Do not** use if you want clover in your turf. In some areas bent, carpet, buffalo and St. Augustine grasses may be injured; therefore, **do not** use on turf where these grasses predominate.

Amount to Apply	Per 1,000 Sq. Ft.	Per Acre
Low rate	2 fl. ozs.	2½ qts.
High rate	2½ fl. ozs.	3 qts.

Storage and Disposal

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

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or residue is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal: **Do not** reuse empty container. Triple rinse (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.

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 except in writing with a specific reference to this warranty.** In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.