

APR -9 1993

Dr. Richard D. Costlow
Product Registration Manager
Rohm and Haas Company
Independence Mall West
Philadelphia, PA 19105

Dear Dr. Costlow:

Subject: Revised Labeling to Delete Agricultural Uses and Add
Greenhouse Ornamental Use
Karathane LC Fungicide/Miticide
EPA Reg. No. 707-71
Your Submissions Dated 12/16/91, 1/29/93, and 3/25/93

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

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

2. Make the following changes before you release the product for shipment:

a. Change the term "wetlands" under Environmental Hazards statement to "areas where surface water is present or to intertidal areas below the mean high water mark."

b. Since all agricultural uses are being deleted, you must remove any reference to "agricultural" use from the label, including product name on the front panel, and under Compatibility and Spray Adjuvant statements.

c. Delete the text referring to field application on fruits and vegetables under Personal Protective Equipment statement.

d. Since this label is not for use in California and Arizona, delete the reference to use in California under Compatibility statement.

e. Delete the Chemigation statement, since it implies agricultural use.

f. Directions for use should clearly state that product is meant for indoor greenhouse use only.

3. Submit five (5) copies of the final printed labeling within 30 days from the date of this letter.

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 bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely,

DHE

Dennis H. Edwards, Jr.
Product Manager 19
Insecticide & Rodenticide Branch
Registration Division (H7505C)

**NOT FOR SALE, DISTRIBUTION OR USE
IN ARIZONA AND CALIFORNIA.**

**FOR AGRICULTURAL USE ONLY OR ONLY FOR SALE
TO, USE, AND STORAGE BY SERVICEPERSONS**

KARATHANE LIQUID CONCENTRATE

Agricultural Fungicide & Miticide

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase. **USE OF THIS PRODUCT MAY BE HAZARDOUS TO YOUR HEALTH. THIS PRODUCT HAS BEEN DETERMINED TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMALS.**

KEEP OUT OF REACH OF CHILDREN WARNING AVISO

PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta haya sido explicada ampliamente.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Harmful if swallowed, absorbed through the skin or inhaled. Causes severe eye irritation. May cause allergic skin reaction in susceptible individuals. Avoid breathing vapors or spray mist. Do not get in eyes, or on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating or smoking.

When mixing/loading and spraying wear midforearm- to elbow-length chemical-resistant gloves, boots or overshoes, one-piece overalls that have long sleeves and long pants, and face shield or goggles. Mixer/loaders should, in addition, wear a chemical-resistant apron.

Instead of clothing and equipment specified above, the applicator can use an enclosed tractor cab with filtered air supply. See Re-entry and Worker Protection Statements for additional precautions.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED — Dilute by giving 2 glasses of water to drink. Call a physician. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN — Because of the presence of xylene (petroleum distillates) it may not be advisable to induce emesis. Careful gastric lavage may be indicated depending on the extent of involvement.

IF INHALED — Remove the victim to fresh air. Treat the person symptomatically. Call a physician.

IF ON SKIN — Wash exposed areas with plenty of soap and water. If irritation persists, call a physician.

IF IN EYES — Flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water or wetlands. Do not apply when weather conditions favor drift from areas treated. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

PHYSICAL AND CHEMICAL HAZARDS FLAMMABLE

Do not use, pour, spill or store near heat or open flame. Do not use in the vicinity of pilot lights.

ACTIVE INGREDIENTS	
2,4-Dinitro-6-octyl [®] phenyl carbonate	... 37.2%**
2,6-Dinitro-4-octyl [®] phenyl carbonate	...
Mitrooctyl [®] phenols (principally dinitro)	0.2%
INERT INGREDIENTS	62.6%
Total	100.0%

*A mixture of 1-methylheptyl, 1-ethylhexyl, and 1-propylpentyl isomers.
**Equivalent to 48% or 4 lbs. Technical Karathane.
EPA Reg. No. 707-71



DIRECTIONS FOR USE

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

RE-ENTRY AND WORKER PROTECTION STATEMENTS

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Do not apply this product in such a manner as to directly or through drift, expose workers or other persons. The area being treated must be vacated by unprotected persons.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Written warnings must include the following information:

WARNING

(Insert area or field description) treated with KARATHANE LIQUID CONCENTRATE fungicide-miticide on (insert date of application). Do not enter treated areas without protective clothing until sprays have dried. In case of accidental exposure: Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to KARATHANE LIQUID CONCENTRATE fungicide-miticide and describe his condition. For further information see the "Statement of Practical Treatment."

Oral warnings must include the same information that is in the written warnings.

PERSONAL PROTECTIVE EQUIPMENT — For Mixers, Loaders, when used on Apples, Field Cucurbits, Grapes and Pears.

During the mixing and loading of KARATHANE LIQUID CONCENTRATE, wear a protective suit of one or two pieces that covers all parts of the body except the head, hands, and feet. Wear chemical-resistant gloves, chemical-resistant apron, and chemical-resistant shoes, shoe coverings, or boots. Wear goggles or a face shield. A hood or hat may also be worn.

When used on field cucurbits, grapes and pears, application MUST be made from a vehicle with a completely enclosed cab. All vents and windows of the cab should remain closed during application. During application from a vehicle with a completely enclosed cab, wear a long-sleeved shirt and long pants. A clean set of protective clothing and equipment as defined here must be available in case you must exit the cab in treated areas for repairs or other reasons. Always wear protective gloves upon exiting the cab. Remove protective clothing and equipment before re-entering the cab to prevent cab contamination.

When used on apples, it is recommended that application be made from a vehicle with a completely enclosed cab. When used on apples, if application from a vehicle with a completely enclosed cab is not possible or during repair and cleanup of equipment or re-entry into treated areas prior to drying of the spray, wear a protective suit of one or two pieces that covers all parts of the body except the hands, feet, and head. Wear chemical-resistant gloves and chemical-resistant shoes, shoe coverings or boots. A hood or hat may also be worn. During airblast or mist blower application a protective hood or wide brim hat must be worn.

WARNING: Wearing the protective suit for the prolonged periods required for application may produce heat stress at temperatures above 85°F on a cloudy day or 90°F on a sunny day. Application of this product must be conducted from enclosed cab vehicles when the temperature exceeds 85°F (80°F on sunny days) or delayed until the temperature drops.

IMPORTANT: After application of the pesticide is completed, remove all clothes and shoes. Shower using soap and water. Redress only in clean clothes. Do not use contaminated clothing. Wash non-disposable protective clothing and protective equipment with soap or detergent and water after each use. Personal and non-disposable protective clothing worn during use must be laundered separately from household articles. Clothing or protective equipment heavily contaminated or drenched with KARATHANE LIQUID CONCENTRATE must be destroyed according to state or local regulations.

HEAVILY CONTAMINATED OR DRENCHED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

change

ACCEPTED with COMMENTS in EPA Letter Dated

APR - 9 1993

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 707-71

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

GENERAL USE INFORMATION

KARATHANE LIQUID CONCENTRATE fungicide-miticide will protect against and eradicate powdery mildew when used according to the label directions.

KARATHANE LIQUID CONCENTRATE fungicide-miticide also provides effective control or suppression of the following mites, including those that may be resistant to other miticides:

Citrus Red Clover	European Red Peach Silver	Plum Nursery Red Spider (two-spotted)
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KARATHANE LIQUID CONCENTRATE fungicide-miticide possesses short residual activity and is effective only against mobile mite forms. Although of short residual activity, effective reduction of motile mite populations may provide economic mite control for many weeks. When used alone, application should be repeated every 7 to 10 days to kill mites emerging from eggs unaffected by previous sprays. Alternating sprays or tank-mix combinations with other miticides will delay the development of mite resistance to other miticides and improve initial mite kill.

USE RATE DETERMINATION

Carefully read, understand, and follow label rates and use limitations.

Label use rates are for single strength (dilute) sprays. KARATHANE LIQUID CONCENTRATE fungicide-miticide may be used in concentrate or airblast sprayers but correct use rates must be maintained.

When spray volumes of less than 100 gallons are required to provide a thorough full coverage spray, the following table may be used to determine the proper use rate:

Recommended KARATHANE LIQUID CONCENTRATE Label Use Rate Per 100 Gals. Spray	Milliliters KARATHANE LIQUID CONCENTRATE Required in Varied Single-Strength Spray Gallonages*				
	(Oz.)	1 gal.	2 gals.	3 gals.	5 gals.
3	0.9	1.8	2.6	4.4	8.9
4	1.2	2.4	3.5	5.9	11.8
6	1.8	3.6	5.4	9.0	18.0
8	2.4	4.8	7.0	11.8	23.6

*15 milliliters = 1 teaspoon

COMPATIBILITY

KARATHANE LIQUID CONCENTRATE fungicide-miticide is compatible with DIKAR®, DITHANE®, captan, ferbam, gyodan, and thiram fungi-

ORNAMENTALS

Crop	Control of:	Timing and Remarks
African violets Asters Beonias Calendulas Chrysanthemums Cinerarias Dahlias Delphiniums Euonymus Gardenia Hydrangeas Larkspur Lilacs	Clover mites Powdery mildew Red spider mites	GENERAL USE DIRECTIONS: Greenhouse — Use 4 to 6 ozs./100 gals. water or 2 level tablespoons per 12½ gals. water. Begin applications when first signs of powdery mildew or mites are observed and apply thorough coverage sprays at 7 to 10 day intervals. Do not apply when greenhouse temperatures are expected to reach or exceed 90°F.

icides, fungicides, and pesticides. Labels and use directions are those which specify use directions. Do not use in combination with phosphate insecticides or nutritional sprays in California. When preparing tank-mixes, user should consult current spray compatibility charts or State Cooperative Extension Service Specialists prior to actual use.

SPRAY ADJUVANT:

The addition of agricultural surfactants, to KARATHANE LIQUID CONCENTRATE fungicide-miticide sprays, will improve initial spray deposits, redistribution, and weatherability. The following spray adjuvants have been especially formulated to optimize the performance of foliar applied agricultural chemicals:

- LATRON AG-98™ A low foam nonionic general purpose spray adjuvant. May be used in dilute or concentrate sprays applied by aircraft or ground equipment.
- LATRON B-1956™ A water-dispersible, resin-based nonionic surfactant which resists re-wetting and removal by rain. Effective with dilute sprays applied by ground equipment.
- LATRON CS-7™ A spreader-binder designed specifically for use in concentrate and low volume sprays applied by aircraft or ground equipment.

Place KARATHANE LIQUID CONCENTRATE fungicide-miticide into solution prior to adding an adjuvant. Read and carefully observe the precautionary statements and all other information appearing on both product labels prior to spray preparation.

APPLICATION:

Thorough full coverage foliar sprays generally result in optimum powdery mildew and mite control. To achieve good foliar coverage use proper spray pressure, gallonage per acre, spray nozzles, discs, nozzle spacing, and tractor speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration. When applied with hand pressurized sprayers, thoroughly spray plant foliage until runoff.

PEST MONITORING:

KARATHANE LIQUID CONCENTRATE fungicide-miticide should be applied when the first signs of powdery mildew are noted or when adult mites are observed on plant foliage.

RESTRICTIONS:

Users should carefully read, understand, and follow all use restrictions prior to using KARATHANE LIQUID CONCENTRATE.

STORAGE AND DISPOSAL

STORAGE — Do not store at temperatures above 90°F for periods longer than 48 hours.

PESTICIDE DISPOSAL — Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. 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 — Triple rinse (or equivalent). Then 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.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED — Eliminate ignition sources. Ventilate area. Avoid breathing vapors. Use approved self-contained breathing apparatus or air respirators for large spills in confined areas. Dike or contain liquid. Scoop or shovel into a suitable container for recovery or disposal. Remove contaminated clothing promptly and wash exposed skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water. REFER TO PRECAUTIONARY STATEMENTS.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. **ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.** Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. **IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.**

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