

3125-288

04/26/89

26 APR 1989

1/10

241 395 - 330

John S. Thornton, Manager
Registration Research & Development
Mohay Chemical Corporation
P.O. Box 4913
Kansas City, MO 64120

Dear Mr. Thornton:

SUBJECT: Conditional Amendment for Cherries
Mesuroi 75% Wettable Powder
EPA Registration No. 3125-288

The Agency is conditionally approving an amendment pertaining to cherry use to the registration of the above referenced product under the authority of section 3(c)(7)(B) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Your request for the conditional amendment for use on blueberries is rejected for the reasons explained below. This amendment for cherry use, effective on the date of this letter, allows sale, distribution, and use of the subject product on cherries for a limited time period. In accordance with your request, this amendment will expire automatically on September 15, 1989. To maintain this amendment and to qualify for consideration for subsequent amendments you must meet the following conditions:

1. Place the following statements on the front panel of the label of each product bearing directions for use on cherries.

Not for sale or distribution after September 15, 1989.

Not for use after September 15, 1989.

2. Delete all directions for use on blueberries and all label references to the use of the product on blueberries. As noted above, the request for an amendment for blueberry use is rejected; the rationale for this rejection follows.

Based on the available information, the residues of concern on blueberries may exceed both the interim tolerance and the current NOEL for cholinesterase inhibition, and as such cannot be toxicologically supported. As explained in the attached copy of the Toxicology Branch's evaluation of the subject amendment, because the available toxicity data provide a suggestive rather than a definitive basis for establishing an NOEL, a 30-day dog study was requested. As was previously explained in a letter dated August 22, 1988 from Ms. Chesslin (Attorney, EPA) to Mr. Schatzow (legal representative for the Mobay Corporation), in regards to toxicological concerns, the existing tolerance of 5.0ppm would continue on an interim basis pending receipt and evaluation of this requested study. It may be necessary to lower the current 5.0ppm interim tolerance if an unacceptable margin of safety is calculated based on results of the study.

As described in the attached copy of the Dietary Exposure Branch's evaluation of the subject amendment, modification of your new analytical residue method (Mobay report No. 45089) is needed to allow for quantitative extraction of weathered residues (item 3(a) of this letter). In the event that your reanalysis of the stored blueberry samples using the new method appropriately modified as described above shows residues of concern to be lower than 5ppm, consideration of a request for a conditional amendment for blueberries may be given.

3. Submit the required studies/data reports listed below by the noted deadlines conducted in accordance with the Good Laboratory Practice Standard, 40 CFR Part 160, and appropriate test guidelines (171-2) as referenced in EPA's Data Requirements for registration 40 CFR Part 158.240.

- (a) Submit the data listed below no later than November 1, 1989.
 - ° Submit the new analytical residue method, Mobay report no. 45089, modified to allow for quantitative extraction of weathered residue. Specifically, the method must incorporate the method validation procedure (i.e. refluxing the filter cake with methanol/hydrochloric acid) or an alternative extraction technique to remove the remaining residues of methiocarb sulfoxide from the filter cake.

The modified method, once received and successfully evaluated, will be forwarded for EPA method validation.

As explained in item 2 b. (i) of our April 29, 1989 letter, your method validation split samples are to be held until requested by EPA's Biological and Economic Analysis Division (BEAD), formerly EPA's Benefits and Use Division (BUD). The split samples will not be analyzed, however, until the aforementioned methodology deficiency is resolved.

- Independent laboratory validation of the proposed new enforcement method (The method may then be carried through an EPA validation of the method of analysis).

(b) Submit the data listed below no later than February 1, 1990.

- Additional field residue data on cherries harvested in CA, OR, or WA, MI, NY or PA, using the appropriate methodology (i.e., the newer validated method for weathered residues).

These data should cover the whole period allowed by the proposed use. Samples should be split with BEAD, which may wish to spot check some samples at random.

Note: The samples generated for residue data must be stored properly until the method issue has been resolved.

4. Submit five (5) copies of your final printed labeling before you release the product for shipment.

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

You should note that there are two distinct timeframes for amendments to your registration:

- The conditional registration for cherry use referenced in this letter will expire automatically on September 15, 1989. If you fail to satisfy the conditions imposed on this amendment (items 1, 2 and 4 above), EPA may issue a Notice of Intent to Cancel the registration under Section 6(e) of FIFRA.
- Once the itemized data required under items 3a and 3b and the aforementioned dog study have been submitted, they will be reviewed. If the Agency finds that they are acceptable, EPA will consider an application to amend the registration of the subject product to

allow use on cherries without any special time restriction on the duration of the amendment should it receive such application.

Finally, once this conditional amendment to registration for cherries expires on September 15, 1989, any sale or distribution of the subject product bearing labeling for use on cherries after that date will be illegal, as will any use of such product on cherries. The tolerance authorizing residues of the subject product in cherries will be extended to September 30, 1991 and will expire automatically on that date. After that date, sale or distribution of cherries in interstate commerce, containing any residue of methiocarb, will be a violation of the Federal Food Drug and Cosmetic Act.

Finally, any sale, distribution, or use of methiocarb for or on blueberries remains unlawful.

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

Sincerely yours,



William H. Miller
Product Manager (16)
Insecticide-Rodenticide Branch
Registration Division (H7504C)

Enclosure:

Revised:H7505C:RD:IRB:WHMiller:gck:rm211,72600:4-25-89

5/10

288-6635.YLD

Base Pre-Reg. (6635)

U.S. LABEL

Reason to Issue: To revise Sale, Distribution and Use limitation for cherries and blueberries.

Date of Draft: 2/27/89 (Pre-Reg) (M)

EPA Reg. No. 3125-288

RESTRICTED USE PESTICIDE
Due to Avian Toxicity and Fish and Aquatic Organism Toxicity

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

MESUROL[®]
 75% Wettable Powder
INSECTICIDE - MOLLUSCICIDE - BIRD REPELLENT

ACCEPTED
 with COMMENTS
 in EPA Letter Dated:

APR 26 1989

AFTER SEPTEMBER 15, 1989 - NOT FOR SALE, USE,
 OR DISTRIBUTION ON BLUEBERRIES AND CHERRIES

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

3125-288

FOR CONTROL OF CERTAIN INSECTS
 AND MOLLUSKS, AND FOR BIRD
 REPELLANCY ON BLUEBERRIES
 AND CHERRIES

ACTIVE INGREDIENT:
 methiocarb (4-methylthio-3,5-
 xylylmethylcarbamate) 75%

KEEP OUT OF REACH OF CHILDREN

INERT INGREDIENTS: 25%
 100%

WARNING

(See Rear Panel for Statements of
 Practical Treatment and Other
 Precautionary Statements)

EPA Reg. No 3125-288

AVISO

PRECAUTION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

STOP - READ THE LABEL BEFORE USE

NET CONTENTS _____ POUNDS

MOBAY CORPORATION
 A Bayer USA INC. COMPANY
 AGRICULTURAL CHEMICALS DIVISION
 Box 4913, Kansas City, Missouri 64120

6/10

MESUROL 75% Wettable Powder insecticide-molluscicide

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Poisonous if swallowed, inhaled, or absorbed through the skin. Rapidly absorbed through the skin. Do not get in eyes or on skin. Wear protective clothing, natural rubber gloves, and goggles.

Do not breathe dust, or spray mist. Wear a mask or respirator similar to those used for protection against organocarbamate insecticides jointly approved by the Mining Enforcement and Safety Administration (formerly the U. S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part 11.

Do not contaminate feed or food. Keep out of reach of children. Keep all unprotected persons out of the operating area or vicinity where there may be danger of drift. Wash hands, arms, and face thoroughly with soap and warm water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

SYMPTOMS OF POISONING: A sense of "tightness" in the chest. Sweating. Contracted pupils. Stomach pains. Vomiting and diarrhea.

TO PHYSICIAN:

ANTIDOTE - Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance.

Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

STATEMENTS OF PRACTICAL TREATMENT

If swallowed, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (1/2 oz. or 15 ml.) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Professional medical assistance should be secured immediately. In case of poisoning, call a physician immediately. Have patient lie down and keep quiet.

If on skin, remove contaminated clothing and wash skin immediately with soap and warm water.

If eyes are contaminated, wash with flowing water for at least 15 minutes.

ENVIRONMENTAL HAZARDS

Do not use on other crops used for food or forage. Use only according to label directions. Applications at rates above those shown may result in illegal crop residues.

MESUROL 75% Wettable Powder insecticide-molluscicide

ENVIRONMENTAL HAZARDS (Continued)

This pesticide is toxic to fish and very highly toxic to birds. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

DIRECTIONS FOR USE

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

IMPORTANT: Read these entire Directions and Conditions of Sale before using MESUROL 75% Wettable Powder insecticide - molluscicide - bird repellent.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MOBAY OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

FOR INSECT CONTROL:

MESUROL 75% Wettable Powder effectively controls certain specified destructive pests on cherries, blueberries, and ornamentals. Use specified quantities of MESUROL 75% Wettable Powder in sufficient water to give complete coverage of foliage. The type of equipment used will determine the concentration required. Thorough coverage is necessary for maximum insect control.

FOR USE AS A BIRD REPELLENT ON CHERRIES AND BLUEBERRIES: MESUROL 75% Wettable Powder will aid in the prevention of feeding damage to ripening cherries and blueberries by certain specified pest birds.

The product mixes readily with water to form a suspension usable in all conventional spray equipment. Maintain adequate agitation in the spray tank to keep the wettable powder in suspension. Do not apply with oil.

Schedule applications in accordance with local conditions.

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

MESUROL 75% Wettable Powder insecticide-molluscicide

RECOMMENDED APPLICATIONS

CROP	PEST	DOSAGE MESUROL 75% WP		REMARKS
<u>BEARING FRUIT</u>	Blueberry maggot (control of adult flies)	1 to 1-3/4 pounds	Apply specified dosage per acre by air or ground in a minimum of 5 gallons of water per acre. Repeat as necessary with a minimum of 7 days between applications. A maximum of 4 pounds of product may be applied per season for maggot control and/or bird repellency.	
Blueberries	<u>Repellency of:</u> Robins Starlings Grackles Redwings Baltimore orioles Bluejays Finches and other pest birds	2 pounds	Applications may be made up to 7 days before harvest. NOTE: For maximum repellency of birds, apply as berries first begin to ripen and repeat if necessary to maintain repellency with at least 7 days between applications. For Blueberry maggot control, use the higher rate under high population infestations. Schedule applications accordance with local conditions.	
Cherries	Cherry Fruit flies European red mite McDaniel mite	<u>PER ACRE</u> 1 to 1-1/3 pounds	<u>PER 100 GLS</u> 5.3 to 6.9 ounces	For ground application apply specified dosage per 100 gallons of water based on 300 gallons per acre. This concentration is calculated for conventional hydraulic type sprayers. When lower or higher volumes of water are applied, increase or decrease the concentration of MESUROL 75% Wettable Powder in the spray mixture in order to apply amount of MESUROL 75% Wettable Powder per acre equivalent to a full coverage spray. For aerial application apply specified dosage in a minimum of 5 gallons of water per acre. Repeat as necessary with a minimum of 7 days between applications. A maximum of 4 pounds of product may be applied per acre per season regardless of the method of application. Applications may be made up to 14 days prior to harvest. If only 1 application (2 pounds of product maximum) is made in a season, application may be made up to 3 days before harvest. DO NOT GRAZE OR FEED COVER CROPS UNDER TREATED ORCHARDS.
	Plum curculio	1-1/3 pounds	6.9 ozs.	
	<u>Repellency of:</u> Robins Starlings Finches Grackles Sparrows Bluejays Cedar Waxwings	2 pounds	10.6 ozs.	

MESUROL 75% Wettable Powder insecticide-molluscicide

RECOMMENDED APPLICATIONS

CROP	PEST	Dosage MESUROL 75% WP	REMARKS
ORNAMENTALS (Nurseries and Greenhouse Only)	Aphids Mites	1/2 to 1 pound	Apply specified dosage per acre in 50 gallons of water. Spray plants and foliage until thoroughly wet. Repeat as necessary applying up to 4 applications per season (8 pounds of product per acre). NOTE: Do not apply in conjunction with foliar fertilizer applications.
Shrubs Flower Trees	Snails Slugs	2 pounds	

RE-ENTRY STATEMENTS

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. Do not enter treated areas for 24 hours after application unless protective clothing is worn. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

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 should include those statements found under the label heading "Precautionary Statements" and "Re-entry Statements" included on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: WARNING, area treated with MESUROL 75% Wettable Powder on (date of application). Do not enter treated areas for 24 hours after application unless protective clothing is worn. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes. If swallowed, vomiting should be induced. (See Precautionary Statements on label).

PROTECTIVE CLOTHING AND WORK SAFETY STATEMENTS

REPEATED OR PROLONGED EXPOSURE TO CHOLINESTERASE INHIBITORS SUCH AS ARE CONTAINED IN THIS PRODUCT MAY CAUSE SUSCEPTIBILITY TO ADVERSE EFFECTS FROM VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.

Keep all unprotected persons, livestock, and pets away from treated areas or where there is danger of drift.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away, See First Aid (Practical Treatment) Section of the label.

WEAR THE FOLLOWING PERSONAL PROTECTIVE EQUIPMENT DURING MIXING, LOADING, APPLICATION, REPAIR AND CLEANING OF MIXING/LOADING/APPLICATION EQUIPMENT, DISPOSAL OF THE SPRAY SOLUTION, AND EARLY REENTRY INTO TREATED AREAS BEFORE SPRAYS HAVE DRIED: long sleeve shirt, long pants, shoes, socks, chemical-resistant gloves.

IMPORTANT! Always wash hands, face, and arms with soap and water before smoking, eating, drinking, or toileting.

PROTECTIVE CLOTHING AND WORK SAFETY STATEMENTS (Continued)

AFTER WORK: Before removing gloves, wash them with soap and water. Wash hands, face, and arms with soap and water. Launder all clothing worn during use with this product before reusing. Launder this clothing separately from household clothing. Clothing or gloves that have been heavily contaminated or drenched must be destroyed according to state and local regulations. HEAVILY CONTAMINATED OR DRENCHED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

DURING AERIAL APPLICATION, HUMAN FLAGGERS MUST BE IN TOTALLY ENCLOSED VEHICLES.

Aerial applicators are not required to wear chemical resistant gloves if in an enclosed cockpit.

STORAGE AND DISPOSAL

Pesticide Disposal: Do not contaminate water, food or feed by storage or disposal.

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

Container Disposal: Do not use container in connection with food, feed, or drinking water. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed above. In spill or leak incidents, keep unauthorized people away. You may contact the Mobay Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Mobay Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

MESUROL is a Reg. TM of Bayer AG, Germany.