



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 11 1994

Judy Oldham
HELENA CHEMICAL CO.
6975 Popular Ave. - Suite 500
Memphis, TN 38119

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 07/22/93 in Response to PR Notice 93-7
EPA Reg. No. 5905-250
HELENA BRAND CYTHION 8 LB EMULSION

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is **accepted**. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- **BEFORE** selling or distributing any product bearing the final printed labeling
- AND**
- **WITHIN** one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

Latest EPA-stamped, approved label (11/19/90)

CYTHION® 8 LB. EMULSION

THE PREMIUM GRADE MALATHION

ACTIVE INGREDIENT:

Malathion*: O,O-dimethyl phosphorodithioate of
diethyl mercaptosuccinate..... 81.43%

INERT INGREDIENTS:.....18.57%

TOTAL.....100.00%

ACCEPTED
with COMMENTS
In EPA Letter Dated

JAN 14 1994

This product contains 8 lbs. of malathion per gallon.

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
5905-250

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONS AND DIRECTIONS FOR USE.

EPA REG. NO. 5905-250
EPA EST. NO.

NET CONTENTS:

Manufactured by
HELENA CHEMICAL COMPANY
MEMPHIS, TN. 38119

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Causes eye irritation. Do not get in eyes, skin or clothing.

**STATEMENT OF PRACTICAL TREATMENT
Organophosphate**

If swallowed, do not induce vomiting. Get medical attention. In case of contact, immediately flush eyes and skin with plenty of water for at least 15 minutes. Call a physician.

NOTE TO PHYSICIAN: This product may cause cholinesterase inhibition.. Atropine is antidotal. 2-PAM may be effective as an adjunct to atropine.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

Long-sleeved shirt and long pants

Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or viton

Shoes plus socks

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.

When handlers used closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians. Do not apply directly to water or wetlands (i.e., swamps, bogs, marshes, and potholes). Drift and runoff may be hazardous to aquatic organisms in areas near the application site. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read directions carefully. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

CHEMIGATION PROHIBITION

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

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 the 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 Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, such as barrier laminate, butyl rubber, nitrile rubber, or viton

Shoes 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, nurseries, or greenhouses. Do not enter treated area until spray has dried.

STORAGE AND DISPOSAL

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

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

CONTAINER DISPOSAL: 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.

GENERAL INFORMATION

Pour specified amount of this product into nearly filled spray tank. Add balance of water to filled tank. Keep agitator running during filling and spraying operations. If mixture does not mix readily, but tends to separate as an oily layer, do not use as injury to plants may result. Do not combine with wettable powders unless previous use of this mixture has proven physically compatible and safe to plants. Always thoroughly emulsify this product with at least half of total water before adding wettable powder.

SUGGESTED WATER RATES FOR AIRCRAFT AND GROUND APPLICATION: (The actual rate required to provide thorough, uniform coverage varies with plant growth at time of application. Except as specified for certain, uses, the following rates are therefore intended to cover a broad range of conditions.)

CROP	GAL. WATER/ACRE	
	AIRCRAFT	GROUND
Vegetable and Field Crops	1 - 20	5 - 125
Orchard, Grapes	5 - 25	
Orchard Crops (see exceptions below).....		300-800
Citrus		500-3000
Grapes		100-200

RECOMMENDATIONS

Unless otherwise indicated, dosages are given in pints of **CYTHON 8 LB.** per acre in sufficient water to provide thorough coverage of vegetable and field crops and pints of **CYTHON 8 LB.** per 100 gallons of water for thorough coverage sprays of fruit crops. Begin applications when insects first appear and repeat at 7-10 day intervals as needed to maintain control, but observe use limitation given for specific crops. Maximum permissible rate per acre, expressed as **CYTHON 8 LB.** given

CROP USES

TREE FRUIT CROPS

APRICOTS: Aphids, Codling Moth, European Lecanium Scale, Orange Tortrix, Soft Brown Scale - 1-1/4 pints. Do not apply within 7 days of harvest. (10 pints)

CHERRIES: Black Cherry Aphid, Bud Moth, Cherry Fruit Fly, Fruit Tree Leaf Roller, Lesser Peach Tree Borer (apply to trunks and scaffold limbs at 21 day intervals beginning with emergence). Forbes and San Jose Scales (apply 3 weeks before and immediately after harvest) - 1 pint. Do not apply within 3 days of harvest. Caution: May cause injury on certain varieties of sweet cherries in the Northeast. (8 pints)

CITRUS: California Red Scale, Yellow Scale, Purple Scale, Black Scale, (Single and Off-Brooded) Soft Scale, Thrips, Citricola Scale, Aphids - 1 pint. Do not apply within 7 days of harvest. Make no application when trees are in bloom. California - Do not apply unless parasite activity in the scale is at a low level or absent. (25 pints)

GRAPES: European Fruit Lecanium, Grape Leafhopper, Mealybug, Spider Mites - 1 pint. Do not apply within 3 days of harvest. Injury may occur to Ribler, Cardinal and Almeria varieties when applications are made after the clusters appear. (2-3/4 pints)

PEACHES: Black Cherry Aphids, Black Peach Aphid, Green Peach Aphid, Japanese Beetle, Rusty Plum Aphid - 3/4 pint. Oriental Fruit Moth, Plum Curculio and Scales (European Fruit Lecanium, Terrapin, Cottony Peach - 1-1/4 pints. Do not apply within 7 days of harvest. (9 pints)

VEGETABLE AND FIELD CROPS

ALFALFA, CLOVER: Alfalfa Weevil Larvae, Aphids, Armyworms, Clover Leaf Weevil, Grasshoppers, Lygus Bugs, Pea Aphid, Potato Leafhoppers, Spider Mites, Spittlebugs, Vetch Bruchid - 1-1/4 - 1-1/2 pints. Use higher rate for Armyworm control. May be applied on day of harvest or grazing. Do not apply during full bloom. (1-1/2 pints).

ASPARAGUS: Asparagus Beetle, Thrips - 1 1/4 pints. Do not apply within 1 day of harvest. (1 1/4 pints.)

BEANS : Aphids, Cucumber Beetle, Japanese Beetle, Mexican Bean Beetle, Nitidulid Beetle, Pea Leaf Weevil, Potato Leafhopper, Spider Mites - 1-1/2 pints. Lygus Bugs (on dry beans in California) - 1 - 1-1/2 pints. Do not apply within 1 day of harvest.

BEETS, GARDEN (Seed Crop): Lygus - 1-1/4 pints. Apply in seedball to hand seed stage. Repeat as needed. Do not apply within 7 days of harvest. (No limitation.)

BEETS, TABLE: Aphids, Beet Armyworm, Blister Beetles, Flea Beetle - 2-1/2 pints. Do not apply within 7 days of harvest. (2-1/2 pints.)

BEETS, SUGAR: Aphids, Spider Mites - 1 1/2 pints. Do not apply within 3 days of harvest. If tops are to be used as food or feed, do not apply within 7 days of harvest.

BERRIES (Blackberry, Blueberry, Boysenberry, Dewberry, Loganberry, Raspberry): Aphids, Japanese Beetle, Rose Leafhopper, Rose Scale, Two-Spotted Spider Mites, Sap Beetle - 2 pints. Do not apply within 1 day of harvest.

CARROTS: Aphids and Leafhoppers. Do not apply within 7 days of harvest. 2 pints.

CELERY: Aphids, Leafhoppers, Spider Mites, Whiteflies - 1-1/2 pints. Do not apply within 7 days of harvest. (1-1/2 pints.)

COLE CROPS (Broccoli, Brussels Sprouts, Cabbage, Kale, Turnips): Aphids, Cabbage Loopers, Imported Cabbage Worm - 1-1/2 - 2 pints. Use higher rate for loopers and worms. Do not apply within 3 days of harvest on Broccoli and Turnips, 7 days on others.

CORN: Aphids, Corn Rootworm Adults, Sap Beetles, Thrips, Young Grasshoppers - 1-1/4 pints. Do not apply within 5 days of harvest for forage use. Caution: Injury may occur in the whorl and silk stages with emulsifiable liquids (1-1/4 pints.)

COTTON: Brown Cotton Leafworm, Cotton Aphid, Cotton Leafworm, Cotton Leafperforator, Spider Mite, Leafhoppers, Lygus Bugs, Thrips, Whiteflies - 3/4 - 1 pt. Fall Armyworms, Boll Weevil, Grasshoppers, Garden Webworms, Lygus - 1-1/4 - 2 pts. Cotton Fleahoppers - 3/4 to 1 pt. May be applied on the day of harvest. Consult local agricultural authorities for exact time of application.

CRANBERRIES: Black-headed Fireworm, Cranberry Fruitworm, Leafhoppers, Spittlebug Nymphs - 1 pint. Do not apply within 3 days of harvest.

CUCUMBERS, PUMPKINS, SQUASH: Spider Mites, Squash Vine Borer, Thrips - 1-3/4 pints. Do not apply within 3 days of harvest on pumpkins. Do not apply on Cucumbers and Squash unless plants are dry or within 1 day of harvest. (Pumpkins, 2 pints; others 1 3/4 pints.)

EGGPLANT: Aphids, Lace Bug, Spider Mites - 1-1/4 - 2 pints. use higher rate for Lace Bugs. Do not apply within 3 days of harvest.

GRASS AND CEREAL CROPS (Barley, Corn, Wheat, Barn Grass, Canary Grass, Fescue, Orchard Grass, Red Top, Timothy and Yellow Foxtail): Cereal Leaf Beetle - 3/4 - 1-1/4 pints. Do not apply within 7 days of harvest or forage use on Barley and Wheat; 5 days on Corn, Grass, Grass Hay Pastures and Range Land. Aphids, Leafhoppers - 1 - 1-1/4 pints, repeat application as necessary. (Grasses 1-1/4 pints; Corn 1 pint, other cereals 1-1/4 pints.)

HOPS: Aphids, Mites - 1 1/4 pints. Do not apply within 7 days of harvest. (1 1/4 pints)

HORSERADISH: Aphids, Diamond Back Moth, Flea Beetle, and Leafhoppers. Do not apply within 7 days of harvest. (2-1/2 pints.)

LETTUCE, ENDIVE: Aphids, Alfalfa Looper, Cabbage Looper, Leafhoppers, Mites - 2 pints. Do not apply within 14 days of harvest on leaf lettuce; 7 days on endive and head lettuce. (2 pints.)

MINT: Aphids, Flea Beetle Adults, Spider Mites - 1 pint. Do not apply within 7 days of cutting. (1 pint.)

ONION: Onion Maggots, Thrips - 2 pints. For Onion Maggots apply when flies first appear and repeat every 4 days. Do not apply within 3 days of harvest on Green Onions. (2 pints)

PARSNIPS - Aphids, Diamond Back Moth, Flea Beetle, Leafhoppers - 2 pints. Do not apply within 7 days of harvest.

PEAS: Aphids, Pea Weevils - 1-1/4 pints. Do not apply within 3 days of harvest; 7 day if Pea Vine Hay to be fed to livestock.

PEPPERS: Aphids, Pepper Maggots - 1-1/2 pints. Do not apply within 3 days of harvest. (1-1/2 pints)

POTATOES: False Chinch Bugs, Leafhoppers, Mealy Bugs - 1 pint. Aphids, Blister Beetles - 2-1/2 pints.

RADISHES: Aphids and Diamond Back Moth. Do not apply within 7 days of harvest. 2 pints.

RICE: Leafminers - 1-1/2 pts. Make first application when first rice blades appear on the surface of the water and repeat if necessary. Stink Bugs - 1 pint in a minimum of 2 gallons of water applied by aircraft during the early milk and dough stages of growing rice. Do not apply within 7 days of harvest. (1-1/2 pints.)

SAFFLOWER: Aphids, Lygus Bugs, Grasshoppers - 1/4 pints. Do not apply within 3 days of harvest. (1/4 pints.)

SALSIFY: Aphids, Diamond Back Moth, Flea Beetle, and Leafhoppers. Do not apply within 7 days of harvest. 2 pints.

SMALL GRAINS (Barley, Rye, Wheat): Armyworms, English Grain Aphids, Grasshoppers, Greenbugs - 1 - 1-1/4 pints. Do not apply within 7 days of harvest. (1-1/4 pints.)

SPINACH: Aphids - 1 1/2 pinyd. Do not apply within 7 days of harvest.

STRAWBERRIES: Aphids (use at rate of 2 pints), Field Crickets, Lygus Bugs, Potato Leafhopper, Spider Mites, Spittlebugs, Strawberry Leafroller, Strawberry Root Weevil, Thrips, Whiteflies - 1 1/2-2 pints, (for Strawberry Root Weevil control , make applications to the soil surface before planting and work into the top 6-8 inches). Do not apply within 3 days of harvest. (2 pints.)

SWISS CHARD: Aphids, Blister Beetle - 2 pints. Do not apply within 7 days of harvest. (2 pints.)

TOMATOES: Aphids, Spider Mites - 1-1/2 pints. **Drosophila** - 2 pints in full coverage application to fruit and foliage. Do not apply within 1 day of harvest. At rates over 2 pints up to 3-1/3 pints, do not apply within 5 days of harvest. **California only:** These higher rates may be applied up to 3 days of harvest. (3-1/2 pints)

PASTURE AND RANGE LAND: Aphids, Grasshoppers, Leafhopper - 1-1/4 pints. Or use 1/4 pints in 1 gallon diesel fuel oil by means of airplane or a turbine blower type sprayer. May be applied on day of harvest or grazing. (1-1/4 pints.)

WASTELANDS, ROADSIDES, SOIL-BANK LANDS (Not Grazed): Grasshoppers - 1 - 2 pts. in 1 gallon fuel oil by means of an airplane or a turbine-blower type sprayer.

STORAGE PEST PROTECTION

For protection against: **Cereal Leaf Beetles, Confused Flour Beetle, Indian Meal Moth, Flat Grain Beetle, Granary Weevil, Lesser Grain Borer, Red Flour Beetle, Rice Weevil, Rusty Grain Beetle, Sawtoothed Grain Beetle.**

GRAINS: Barley, Corn, Grain Sorghums, Seeds, Oats, Rice, Rye, Wheat:

GRAINS - RESIDUAL SPRAY - BEFORE STORING: (For walls, floors, and machinery in grain elevators, in treating truck beds, boxcars, and ships holds before loading grain): Use 5 pints per 25 gallons of water. Make thorough application. Before applying spray, clean elevators, boxcars, truck beds, etc. thoroughly. Remove and burn all sweepings and debris.

GRAINS - GOING INTO STORAGE: Use 5/8 pint in 2-5 gallons of water per 1000 bushels. Apply as grain is being loaded or turned into final storage.

GRAINS - AFTER STORED: To protect clean or uninfested grain from **Indian Meal Moth**, use 3/8 pint in 1-2 gallons of water per 1000 square feet of grain surface area. Apply evenly over surface of grain. Apply immediately after grain is loaded into storage and repeat if necessary.

RESIDUAL SPRAY FOR BOXCARS FOR LOADING AND TRANSPORTING BAG FLOUR AND PACKAGED CEREALS. For control of the exposed stages of **Confused Flour Beetle, Rice Weevil, Granary Weevil, Saw-toothed Grain Beetle, Flat Grain Beetle, Red Flour Beetle, Rusty Grain Beetle, Lesser Grain Borer, Indian Meal Moth, and Mite** pests infesting boxcars. Apply as follows: Clean the boxcar thoroughly, then remove and burn all sweepings and debris. Spray walls and floor to the point of run-off with either 5 pints in 25 gallons of water, or 5 pints in 19 gallons of deodorized kerosene. (The deodorized kerosene solution should be made up of 4 parts kerosene-type solvent plus 1 part aromatic hydrocarbon-type solvent.) Let the sprayed boxcar stand empty with the doors open until the spray has thoroughly dried. Line the walls and floor of the boxcar with kraft paper before loading.

FIELD AND GARDEN SEEDS

FIELD AND GARDEN SEEDS: Field and garden seeds can be protected against the listed grain pests with a dosage of 3/8 pint in 1-2½ gallons of water per 500 bushels of seed. May be used under the requirements of the **Khopra Beetle** quarantine, where water or diesel oil emulsions are indicated, as prescribed by the current quarantine instructions.

PEANUTS

PEANUTS-RESIDUAL SPRAY-BEFORE STORAGE: Clean warehouse thoroughly of trash and remains of old peanuts 1-2 weeks before new peanut crop is stored. Then thoroughly spray the interior of the empty warehouse, especially cracks and protected places. Treat outside walls to a height of 6-8 feet and the ground to a distance of 6 feet from the warehouse. Use 5/8 pint in sufficient water to make 2½ gallons of spray or 5 pints with 19 gallons of water. Apply as a coarse spray at the rate of 2 gallons per 1,000 square feet of surface or to run-off.

PEANUTS-BULK SPRAY TREATMENT-GOING INTO STORAGE: Use 1-3/5 pints in 5 gallons of water for each 15 tons of farmers stock peanuts as they go into storage. Use good spray equipment. Apply coarse spray uniformly. Preferably, use a suitable mechanical spray applicator that regulates the rate of application to the flow of peanuts. Adjust the operating pressure of spray pump and size of nozzle opening to correlate to the flow of peanuts. Adjust the operating pressure of spray pump and size of nozzle opening to correlate the amount of spray delivered with the rate of flow of peanuts being treated. Avoid spraying with a fine mist that drifts away by using low nozzle pressure. Shield the nozzle against wind and air currents.

PEANUTS-SUPPLEMENTAL SURFACE SPRAY: After warehouse has been filled, level surface of peanuts before spraying. Apply surface spray using 1¼ pounds of **CYTHON 25%** wettable powder in 2 gallons of water and apply at the rate of 2 gallons per 1,000 square feet of surface. Apply first treatment as soon as bin is filled and leveled, but not later than the first week in October. Apply the second surface treatment 1 month later, followed by treatment at 2 month intervals. Use a piston-pump type power sprayer, equipped with an agitator, and with a nozzle capable of delivering a coarse spray. Use spray equipment with sufficient capacity and power to cover large surfaces thoroughly.

ORNAMENTALS

Dosages given are for use in 100 gallons of dilute spray -

Aphids, European Pine Shoot Moth, Four-Lined Leaf Bug, Japanese Beetle Adult, Mealybugs, Millipedes, Potato Leafhopper, Rosa Leafhopper, Scurfy Scale, Spider Mites, Springtails, Sowbugs, Tarnished Plant Bug, Thrips, Whitefly, Eunoymus Scale, Lace Bugs, Oyster Shell Scale1 Pint

Azalea Scale, Bagworms, Birch Leaf Miner, Boxwood Leaf Miner, Fletcher Scale, Florida-Red Scale, Juniper Scale, Magnolia Scale, Oak Kermes, Pine Leaf Scale, Tent Caterpillar1-1/4 pints

Black Scale Crawlers, Monterey Pine Scale1-3/5 pints

Pine Needle Scale, Wax Scale2 pints

For Oyster Shell, Fletcher, Juniper, Oak Kermes and Pine Needle Scales, apply when scale crawlers have settled on foliage.

CAUTION: Avoid use on certain ferns including Boston, Maidenhair and Pteris, as well as some species of Crassula and Canaetri Juniper.

POULTRY

POULTRY RANGES-Chiggers-Apply 1 pint. Make full-coverage application 1 day prior to placing poultry on range. Repeat applications every 2-3 weeks as needed. Avoid contamination of feeding troughs and water fountains.

ROOST PAINT-Chicken Red Mites, Poultry Lice-Mix 1-4 fluid ounces of this material per 1 gallon of water or diesel fuel oil. Brush on this solution as a roose paint at the rate of 1 pint per 150 feet of roost.

FLY CONTROL

For use in and around buildings which house domestic animals, around homes, around yards, and the outside of meat and food processing plants. Do not use in the edible product areas of meat and food processing plants.

STRAIGHT CYTHION SPRAYS

<u>Amount of Spray</u>	<u>Amount CYTHION 8-E</u>
2 1/2 gal.	3/4 cup
12 gal.	1 1/4 pint
100 gal.	1 1/4 gal.

CYTHION BAIT SPRAYS

<u>Amount of Bait Spray</u>	<u>Amount CYTHION 8-E</u>	<u>Sugar (or)</u>	<u>Unsulfurized Molasses or Corn Syrup</u>
2 1/2 gal.	3/4 cup	1 cup	1 cup
12 gal.	1 1/4 pt.	2 1/2 lbs.	1 qt.
100 gal.	1 1/4 gal.	20 lbs.	2 gals.

Apply spray at rate of 1 gallon per 1,000 square feet on painted surfaces and 2 gallons per 1,000 square feet on unpainted surfaces where flies alight or congregate. In most cases, adding molasses or sugar to the spray prolongs the insecticidal activity and serves as a fly attractant.

CAUTION: Avoid contamination of milk, milk equipment and water. Avoid contamination of feed and food products; also drinking fountain and feed troughs. Remove calves under one month of age and lactating dairy animals from buildings before treating.

DROSOPHILA FLIES and DRIED FRUIT BEETLES: On or around cull fruit and vegetable dumps. Mix 7 1/2 pints in 100 gallons of water and apply as a drench, using 8-10 gallons of spray per 100 square feet for best results dumps should not be over 18 inches deep). Do not feed treated fruit and vegetables.

MOSQUITO, FLIES AND SMALL FLYING INSECTS: (Broadcast use only over intermittently flooded areas. Application may not be made around bodies of water where fish or shellfish are grown and/or harvested commercially.) For use by trained personnel as a 2-5% fog, aerosol or space spray. To make a 2% solution dilute 1 part in 45 parts of water, fuel oil or diesel oil. When using kerosene-type solvent as carrier, dilute 1 part in 45 parts of a mixture consisting of 4 parts kerosene-type solvent and 1 part aromatic hydrocarbon-type solvent. For a 5% solution, dilute 1 part in 18 parts of mixture using similar solvents.

MOSQUITO LARVAE IN STANDING WATER: Apply at the rate of 8 fluid ounces (approximately 1/2 pint) per acre. Mix in sufficient water or oil to obtain even coverage when applied by air or ground. Repeat applications as necessary. Avoid applying oil-based formulations to valuable ornamental plants as injury may occur. Keep out of any fish bearing waters.

ADULT MOSQUITO AND FLY CONTROL

Apply 2.4 to 4.8 fluid ozs. per acre for control of Adult Mosquitoes and 7.2 to 9.6 fluid ozs. per acre for control of Adult Flies and Mosquitoes. Repeat as necessary. Can be applied to alfalfa, clover, pasture and range grass, grass, and grass hay, grain crops, beans, rice, tomatoes and nonagricultural lands. Do not apply within 7 days of harvest on grain crops and rice; 5 days of harvest on corn; 1 day of harvest on beans and tomatoes. No time limitation on alfalfa, clover, pasture and range grass, grass and grass hay. Do not apply to alfalfa and clover in bloom. Do not use on seed alfalfa. Treat shrubbery and vegetation where mosquitoes may rest. Shrubby and vegetation around stagnant pools, marshy areas, ponds, and shorelines may be treated.

Mist blowers and boom sprayer utilizing a controlled air flow to facilitate particle size and spray deposition may be used at a vehicle speed of 4 to 10 m.p.h.

Mist blowers with a pump capable of producing up to 40 psi and blower speeds of 2600 r.p.m. are satisfactory. Use flat fan nozzles, 8001 to 8002, placed 30° into air blast or rotary atomizers into the air blast that produce an efficient spray particle with a mass medium diameter of 40 to 100 microns. Swath widths should not exceed 30 feet, and applications should not be made when winds exceed 5 m.p.h.

Repeat applications should be made as necessary unless otherwise specified.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

The directions on this label are believed to be reliable and should be followed carefully. 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 conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. The Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income.

The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.