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(MANNA PRO (R)
SIMIL-8(R) HORSE MINERAL 12-12/RABON(R))

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS

CAUTION. KEEP OUT OF THE REACH OF CHILDREN. Harmful if swallowed. Avoid contact with skin and eyes. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating or smoking. If in eyes, flush with plenty of water. If irritation persists see a physician. Wear long-sleeved shirt and pants, chemical resistant gloves, shoes and socks for protection when handling.

ENVIRONMENTAL HAZARDS:

This pesticide is toxic to fish. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or disposal of waste.

STORAGE AND DISPOSAL

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

STORAGE

Store in a dry, cool place in original container.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Completely empty into mineral feeder by shaking and tapping sides and bottom to loosen clinging particles. Then dispose of bag in a sanitary landfill or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

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

Proper consumption prevents the development of face flies, horn flies, house flies and stable flies in the manure of treated horses but is not effective against existing adult flies.

Start feeding Simil-8 Horse Mineral 12-12/Rabon in the spring before flies begin to appear and continue feeding throughout the summer into fall until cold weather restricts fly activity. Resume feeding an appropriate Simil-8 Mineral until spring.

When fed, this product passes through the digestive system into the manure where it kills fly larva on contact shortly after fly eggs hatch.

In some cases, supplemental fly control measures may be needed in and around lots and barns to control adult house flies and stable flies which can breed not only in manure but in other decaying vegetable matter or silage on the premises. In order to achieve optimum fly control Manna Pro(R) Simil-8(R) Horse Mineral 12-12/Rabon(R) should be used in conjunction with other good management and sanitation practices.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

CHEMINOVA makes no other express or implied warranty including any other express or implied warranty of FITNESS or of MERCHANTABILITY.

The sale of this product does not include a license under any patent owned by CHEMINOVA.

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 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 without protective clothing until sprays have dried.

STORAGE AND DISPOSAL

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

Storage: FYFANON ULV should be stored at temperatures not exceeding 25°C (77°F). It should never be heated above 55°C (131°F), and also local heating above this temperature should be avoided.

Pesticide Disposal: Pesticide, spray mixture, or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.

MANUFACTURING USES

FYFANON ULV may be used for the preparation of malathion insecticides. Before using for this purpose, manufacturers should consult CHEMINOVA for manufacturing and safe handling instructions.

AGRICULTURAL USES

Do not use this product for any uses other than those specified on this label.

FARM WORKER SAFETY

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. 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. Warnings must include the following information: **CAUTION.** Area treated with Malathion on (date of application). Do not enter without appropriate protective clothing until spray has dried.

FYFANON ULV is used undiluted in specially designed aircraft or ground equipment capable of applying ultra low volumes for control of the insects indicated. Aerial applications are most effective when made at a boom height of 5 feet and a swath width of 55 feet. Apply only when weather conditions are favorable and rising air currents may cause undesirable spray drift and reduce insect control.

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

Mist blowers with a pump capable of producing up to 40 psi and blower speeds of 2600 rpm 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 median diameter of 40 to 100 microns. Swath widths should not exceed 30 feet. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Boom sprayers with a filtered rotary air compressor, either PTO or gas engine driven or an air pump capable of producing at least 12 psi are satisfactory. Use air pressure on chemical tanks and an accurate metering valve to assure a calibrated flow of the pesticide. Air should be regulated with relief valve and gauge for proper air and liquid mixture. Pneumatic-type spray nozzles, as suggested by equipment manufacturer, should be used for spray particles with mass median diameter of 30 to 100 microns. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Repeat applications should be made as necessary unless otherwise specified.

IMPORTANT

Undiluted spray droplets of FYFANON ULV will permanently damage automobile paint. Cars should not be driven if accidental exposure does occur. The car should be washed immediately.

Consult your state extension station or state extension service for proper timing of sprays.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protect bee information may be obtained from your Cooperative Agricultural Extension Service.

CROP	PESTS CONTROLLED	FLUID OUNCES PER ACRE	DAYS TO HARVEST or GRAZING and COMMENTS
Apples	Apple Leafroller	8	0 day. Apply when larvae are small.
	Western yellow-striped armyworm	12	5 days. Apply when larvae are large or when damage is done.
	Apple webworm	16	5 days. Apply when day temperatures are high and to exceed 85°F and when 50-70% of leaves show feeding damage.
	Beech armyworm	8	0 day. Apply when larvae are small.
		16	5 days. Apply when larvae are large or when damage is done.
	Grasshoppers	8	0 day.
Do not apply to alfalfa in bloom. Do not apply to dairy alfalfa.			
Beans (late green snap, heavy red kidney, and dry blackeye)	Mexican Bean Beetle, Leafhoppers, Green Cloverworm, Japanese Beetle, Lygus Bug	8	1 day.
Blueberries	Blueberry Maggot	10	0 day.
Cherries	Cherry Fruit Fly	12-16	1 day. Apply by aircraft only. Use higher rate when damage is heavy or infestation is severe. Make first application as soon as fruit appears.
Cereal Crops (barley, corn, oats, wheat and grain)	Cereal leaf beetle	4-8	Barley, oats, wheat: 7 days. Corn: 5 days. Grasses: 3 days.
Clover, Pasture and Range Grass, Grass, Grass Hay, Grain, Agricultural Land (include tame pastures)	Grasshoppers	8-12	0 day. Do not apply to clover in bloom.
Corn	Adult Corn Rootworm	4	5 days.
Cotton	Early Season Insects: Tingo, Fleahoppers, Leafhoppers	4-8	0 day.
	Boll Weevil	8-12	
		16	
	Grasshoppers	8	
	Lygus Bugs	8-12	
		16	Very heavy migrating populations.
Grain Crops (barley, corn, oats, rice, grain sorghum and wheat)	Grasshoppers	8	7 days except corn: Corn: 5 days.

CROP	PESTS CONTROLLED	FLUID OUNCES PER ACRE	INTERVAL BETWEEN LAST APPLICATION AND HARVEST
Grain Sorghum	Sorghum Midges	8-12	7 days. Apply during the bloom stage.
Rice (Northwest)	Boll Weevil	8	14 days.
Rice, Grain Form (Louisiana, Texas)	Rice Stem Bug	8	7 days. Apply by aircraft only. Apply during early milk and dough stage of growing rice.
Soybeans	Grasshoppers, Lygus Bugs	8	3 days of harvesting seeds.
Soybeans	Mexican Bean Beetle, Grasshoppers, Japanese Beetle, Green Cloverworm	8	7 days of harvest or forage use.
Sugar Beets	Grasshoppers, Sugar Beet Root Maggot, Arises	8	0 day. 7 days if tops are to be used for fruit.
Nonagricultural Lands	Beech Leafhopper (on wild host plants)	8	0 day.
Beef Cattle Feed Lots and Holding Pens	Adult Fleas and Mosquitoes	8-8	0 day.

OTHER AGRICULTURAL USES

Alfalfa, Clover, Pasture and Range Grass, Grass and Grass Hay, Grain Crops, Beans, Rice, Pastures and Nonagricultural Lands (include tame pastures and hay). Apply FYFANON ULV at the rate of 2 to 4 fluid ounces per acre for control of adult beet and mosquitoes. Repeat applications as necessary. On alfalfa, clover, pasture and range grass, grass and grain hay, may be applied on day of harvest or grazing. Do not apply to alfalfa and clover in bloom. Do not use on seed alfalfa. On grain crops, make no application within 7 days of harvest or forage use, or on corn, within 8 days of harvest or forage use, or on rice within 7 days of harvest, on beans and sorghum, within 1 day of harvest.

FOREST INSECTS

Apply with aircraft equipped for ultra low volume application. Make application when air is calm and temperature is below 85°F. Do not apply to conifer forests and mature deciduous forests. Do not apply to areas where extreme heat, drought and disease conditions exist.

TREE	PESTS CONTROLLED	FLUID OUNCES PER ACRE	DIRECTIONS
Thousand ft. True fir, Spruce	Spruce Barkworm	12	Apply when highest percentage of leaves are eaten. Apply by aircraft only.
Hemlock	Hemlock Looper	8	Apply when small larvae are present and when damage is done.
Pine	European Pine Sawfly	10	Apply when larvae are in the first or second instar and before they reach 1/2 inch in length.
	Sawtooth Snoutmoth	10	Apply when 55% of the population has become adult.
Larch	Larch Casebearer	8	Apply in spring by aircraft or ground to kill larvae and begin feeding on new foliage.

MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

IMPORTANT NOTICE: TO BE APPLIED ONLY BY TRAINED PERSONNEL OF PUBLIC HEALTH ORGANIZATIONS, MOSQUITO ABATEMENT DISTRICTS OR PEST CONTROL OPERATORS.

AERIAL APPLICATION

ADULT MOSQUITO CONTROL OVER CITIES, TOWNS AND OTHER AREAS WHERE AUTOMOBILES, TRAILERS, TRUCKS AND PLEASURE BOATS ARE PRESENT. Apply 2.6 to 3.0 fluid ounces of FYFANON ULV per acre. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

IMPORTANT - Undiluted spray droplets of FYFANON ULV will permanently damage vehicle paint finishes unless the aircraft used for the ultra low volume application meets all of the specifications listed below.

FIXED WING AIRCRAFT

1. Aircraft is operated at 150 mph or more.
2. There are no leaks in the ultra low volume spray system.
3. Nozzles are placed on the boom at a 45° angle down and into the wind.
4. Diaphragm check valves are used on all nozzles to insure positive cut-off of the spray.
5. Dosage of FYFANON ULV does not exceed 3 fluid ounces per acre.
6. The spray system produces droplets of this product in the 50 to 60 mass median diameter (MMD) micron range, with no more than 10% of the droplets exceeding 100 microns, as determined by readings made from microscope slides coated with DRI-FILM® or TEFLON®.

HELICOPTER

Equipment Specifications

1. Rotary nozzle equivalent to Beecomist Spray Head Assembly Model No. 350 equipped with:
 - a. a direct reading RPM tachometer or low RPM signal light readily visible to operator;
 - a. a stainless steel porous metal sleeve, 20 micron pore size, dynamically balanced to the nozzle;
 - a. a diaphragm check valve as near to the rotary nozzle as possible to insure positive cut off of the spray;
 - a. nozzle on-off switch separate from main switch and pump switch.
2. Minimum no-load nozzle speed of 10,500 RPM.
3. A continuous nonpulsating metered flow must be maintained by a variable speed metering pump equipped with:
 - a. a positive cut off valve between tank and pump,
 - a. a flow gauge or tachometer visible to operator;
 - a. a pump on-off switch separate from main switch and nozzle switch
4. Maximum flow rate of 0.5 gallon per minute per nozzle.
5. Rotary nozzle must be mounted behind and below the boom with the sleeve directed toward the rear of the aircraft and parallel to the ground during flight. Nozzle must be positioned to minimize air turbulence and the collection of FYFANON ULV droplets on mounting brackets, feed lines, fittings, etc., or any part of the aircraft

OPERATING PROCEDURES

6. FYFANON ULV must be prefiltered through a 10 micron filter prior to transfer into helicopter tank. A 50 mesh stainless steel line strainer must be installed in the pump feed line.
7. Entire system, including tank, pump, nozzle and feed lines, to be used only for application of FYFANON ULV.
8. Entire system must be inspected daily to insure that there are no leaks.
9. Sleeve must be removed and cleaned immediately after each use by washing with hot water and blowing dry from outside in with clean air.
10. Rotating nozzle must be turned on and operating before turning on pump. For shut off, pump must be shut off and lines cleared prior to stopping nozzle rotation.

11. Dosage of FYFANON ULV does not exceed 3 fluid ounces per acre.

12. The spray system must produce droplets of FYFANON ULV with a mass median diameter (MMD) of less than 50 microns, with no more than 2.5% of the droplets exceeding 100 microns, as determined by readings made from microscope slides coated with DRI-FILM® or TEFLON®.

GROUND APPLICATION

Thermal Aerosols or Fogs

For control of adult mosquitoes with thermal aerosols or fogs, apply FYFANON ULV at the rate of 6-8 oz. actual/gallon (3.9-5.2 gallons FYFANON ULV in 100 gallons finished solution*) by ground equipment delivering 40 gallons per hour at a vehicle speed of 5 miles per hour to treat a swath width of 300-400 feet.

* There is a great variation in the chemical composition of fuel oils which may be used as thermal fog solvents. These differences may cause sludge and/or affect the solubility of the FYFANON ULV.

Nonthermal Aerosols

Adult Mosquito Control - For control of adult mosquitoes over a 300-foot swath with nonthermal aerosols of FYFANON ULV using the following rates at the indicated vehicle speeds:

Vehicle Speed Rate per Hour	Flow Rate of FYFANON Fluid Ounces per Minute	Maximum Flow Rate per Hour
5	1.0 to 2.1 fluid ounces	1 gallon
10	2.0 to 4.3 fluid ounces	2 gallons
15	3.0 to 6.3 fluid ounces	3 gallons
20	4.0 to 8.6 fluid ounces	4 gallons

Adult Stable Fly Control - For control of adult stable flies over a 300-foot swath with nonthermal aerosols of FYFANON ULV using the ultra low volume method, use the following flow rates at the indicated vehicle speeds:

Vehicle Speed Rate per Hour	Flow Rate of FYFANON Fluid Ounces per Minute	Maximum Flow Rate per Hour
5	2.1 fluid ounces	1 gallon
10	4.3 fluid ounces	2 gallons

DROPLET SIZE

1. The Mass Median Diameter (MMD) of the droplets should not exceed 17 microns. The MMD is the drop diameter which divides the spray volume in to two equal parts; i.e., 50% of the volume is in the drop sizes below the MMD and 50% is above the MMD.
2. Spray droplets should not exceed 32 microns in size. Three percent of the spray droplets (6 droplets out of 200) can exceed 32 microns providing the MMD does not exceed 17 microns and no droplets exceed a maximum of 48 microns. Larger droplets, when transported by natural air currents, impinge more readily on objects in their pathway and will permanently damage automobile type paints.
3. More than one half of the total spray mass must consist of droplets in the 6 to 18 micron range to achieve adequate dispersal of insecticide over a 300 foot swath.
4. A minimum of two-thirds, preferably four-fifths of the total spray mass must consist of droplets not exceeding 24 microns in range.

OPERATING EQUIPMENT

Each **Nonthermal Aerosol Generator** used for dispersal of FYFANON ULV to control adult mosquitoes must have minimum capability of producing the droplet spectrum described under DROPLET SIZE. The initial determination of droplet size is made after the unit is installed in a vehicle and prior to its use in mosquito control operations. The unit should be rechecked as frequently as necessary to insure that proper droplet size is maintained for each operation. Determination of droplet size every two months is usually sufficient if the unit has been maintained in good operating condition. Equipment manufacturer's instructions setting forth cleaning and maintenance of the unit must be followed. The unit must be inspected before each operation to correct any leaks or obstructions in the spray system, to detect whether the nozzle, hoses, or other parts are worn and need replacement, to insure that the flow meter is properly