P91f9

## M-97-009 KAOLIN

A Broad Spectrum Agricultural Repellent/Protectant for Controlling Damage to Agricultural Crops from Various Insect and Mite Pests.

## KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

## STATEMENT OF PRACTICAL TREATMENT (FIRST AID)

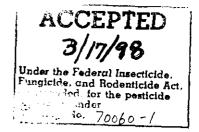
IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

Manufactured by:
ENGELHARD CORPORATION
101 Wood Avenue
Iselin, NJ 08830

Emergency phone number: 1-800-424-9300

Net Weight 50 lbs.

EPA Reg. No. 70060-EPA Est. No. 70060-GA-1



## PRECAUTIONARY STATEMENTS

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. May cause irritation to the respiratory system. Avoid breathing dust or mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Long sleeved shirt, long pants, socks and shoes, and a dust/mist filtering respirator with MSHA/NIOSH approval number TC-21C.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or 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 wash water.

## **DIRECTIONS FOR USE**

1)

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

}

Í

## AGRICULTURAL USE REQUIREMENTS

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. 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 handlers of agricultural pesticides. It contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. The restricted-entry interval (REI) is 4 hours, do not allow worker entry into treated areas during the restricted-entry interval (REI). Personal protection equipment required for early entry workers are long-sleeved shirt, long pants, waterproof gloves and shoes plus socks.

#### I. GENERAL INFORMATION

M-97-009 Kaolin is a unique mineral-based product which is intended for agricultural uses. When M-97-009 Kaolin is applied to plants a dry particle film will develop. M-97-009 Kaolin will help reduce the damage to plants and crops caused by insects and mites. Plant Response Precautions - If the spray droplets bead and do not adhere to crop foliage and/or fruit and a white film does not formed, the plant may be naturally water repellent. This would preclude the use of M-97-009 Kaolin on that variety. This product is an important tool that may be used as part of an integrated pest management system.

#### II. DIRECTIONS FOR USE

### a. Spray Preparation:

ţ

To prepare M-97-009 Kaolin spray solution, the following mixing sequence must be followed; proportional reductions or increases may vary depending upon size of spray equipment:

ţ

- 1. Add an approved agricultural sticker/spreader to 100 gallons of water. (The sticker/spreader must be added before the pesticide.)
- 2. Slowly add 25 lbs. of M-97-009 Kaolin into a recirculating sprayer tank that contains the 100 gallons of sticker/spreader solution.
- 3.-Mix by pumping for 5 minutes.
- 4. Continue gentle agitation until all of the material is sprayed form the tank. (Vigorous agitation may cause foaming.)

On all crops, use sufficient spray volume to obtain thorough coverage. Optimum pest control requires M-97-009 Kaolin to be applied as a dilute application where it is applied to near-drip. Under normal temperature and humidity conditions, nozzles that produce a fine spray are recommended. Under very hot and dry conditions, nozzles that produce a coarser spray and larger volumes are recommended. Otherwise, the product may dry before it contacts the foliage which will result in poor film formation. The total spray volume and nozzle size is best determined by previous experience with other dilute applications.

Observe crop label instructions for specific directions regarding spray volume. Calibrate spray equipment to deliver the required gallonage. The flow rate of this product is similar to water. Use of 25 mesh slotted strainers in the spray system and behind each nozzle is recommended.

#### b. Compatibility:

M-97-009 Kaolin is compatible with a wide range of insecticides, fungicides, and mineral fertilizers, however, many sticker/spreaders are not compatible. Therefore, the sticker/spreader should be carefully chosen and its compatibility with other agricultural products should be tested on a small scale prior to use. Curdling, precipitation, uneven film formation, or change in viscosity are signs of incompatibility.

#### c. Application:

For optimal performance, applications must coat all portions of plant that are to be protected, including both sides of the leaves. Applications can be made with any commercial sprayer that provides enough force to coat both sides of the leaves, the bark, and fruit.

For efficacy, the plant surface must turn a hazy white color after drying. Additional treatments may turn the plant surface a deeper white. This is normal and does not markedly impair photosynthesis, and is indicative of appropriate film formation.

Wash-off resistance and coverage: Apply only to dry foliage. Do not apply to wet foliage or poor coverage and adhesion will result. When the foliage has lost its white appearance, reapplication is necessary.

Reapplication is normally required every 7-14 days. If rainfall is heavy, reapplication within one day is acceptable.

Overhead irrigation will wash off the film and reduced efficacy will result. Overhead irrigation is not preferred but if used should be timed just prior to the next application to prevent premature wash-off. This product is not recommended for application through sprinkler irrigation systems or aerial application.

To clean the spray system after use, drain and flush with water and detergent.

)

Do not spray on ornamental or crops where the visible white film are undesirable and cannot be washed off.

**d.** Insect and Mite Control: Begin application before optimum conditions for a particular insect or mite cycle occurs. M-97-009 Kaolin is a repellent/ protectant that forms a barrier film to insects and mites. Where a dosage range is indicated, use lower rates on younger plants or trees. Thorough, uniform, and consistent coverage are essential for effective control.

#### e. Packing and Processing

Washing is recommended: most residues wash off with brushing and forced water sprays. An approved surfactant may be used in the wash tank. A pre-harvest washing trial is recommended to determine if a surfactant is necessary.

#### FIELD AND VEGETABLE CROPS

Apply sufficient spray volume to obtain thorough coverage.

Note: Do not over agitate in any system as excessive foaming may result.

For crops where the produce is directly sprayed, do not apply M-97-009 Kaolin within 10 days of harvest. Washing is recommended; most residues wash off with brushing and forced water sprays; an approved surfactant may be used in the wash tank. A pre-harvest washing trial is recommended to determine if a surfactant is necessary. For crops where the produce is not directly sprayed by M-97-009 Kaolin spray (e.g., potato, shelled beans, radishes), you can apply M-97-009 Kaolin up to the day of harvest.

CROP	INSECT or MITE	POUNDS OF M-97-009 KAOLIN /ACRE
Beans	Alfalfa looper	6.25 to 12.5
Beans (all)	Aphids Fall armyworm Flea beetle Mexican bean beetle European red mites Japanese beetle Leafhoppers Lygus bug Stink bug Tarnished plant bug Three cornered alfalfa hopper Thrips Two-spotted spider mite Velvetbean caterpillar	6.23 to 12.5
Collards Garden Beet Sugar beet Horseradish Radishes Rutabagas Turnips	European red mites Flea beetle Harlequin bug Leafhoppers Tarnished plant bug Two-spotted spider mite Imported cabbage worm	6.26 to 12.5
Cotton	Cotton fleahopper European red mites Flea beetles Tarnished plant bug Thrips Two-spotted spider mite Whiteflies	6.25 to 25.0
Potato Tomato Eggplant Pepper	European red mites Colorado Potato Beetle Flea beetles Lace bugs Leaf hoppers Stink bugs Tarnished plant bug Tomato fruit worm Tomato pinworm Two-spotted spider mite	6.25 to 25.0

ţ

## TREE FRUIT CROPS

Apply sufficient spray volume to obtain thorough coverage.

Note: Do not over agitate in any system as excessive foaming may result.

Do not apply within 10 days of harvest of peaches. Do not apply within 3 days of harvest on other tree fruits. Washing is recommended; most residues wash off with brushing and forced water sprays; an approved surfactant may be used in the wash tank. A pre-harvest washing trial is recommended to determine if a surfactant is necessary.

CROP	INSECT or MITE	POUNDS OF M-97- 009 KAOLIN /ACRE	SPECIFIC DIRECTIONS
Citrus Fruits	Thrips	25.0 to 175.0	
(lemons,	mites	}	
oranges, limes)			
Pome Fruits	Apple aphid	25.0 to 100.0	Where codling moth
(apple, pears.	Apple maggot		pressure is high,
loquats,	Apple rust mite	1	supplementary
crabapples,	Apple sucker		control may be
oriental pears	California pear slug		needed.
and quince	European red mite		
	Japanese beetle		
	June beetle	<b> </b>	
	Leaf hoppers		
	Leaf miners	;	
	Lygus bugs		
	Pearleaf blister mite		
	Pear psylla		
	Pear rust mite		
	Plum curculio		
j	Tarnished plant bug		
	Thrips		
Stone Fruits	Codling moth	25.0 to 100.0	Where codling moth
(Such as	Cucumber beetles		pressure is high,
apricots,	European earwig		supplementary
cherries,	Japanese beetle		control may be
nectarines,	June beetle		needed.
peaches,	Leafminers		
plumes, prunes)	Plum curculio		
	Tarnished plant bug		
	Thrips		ļ

#### SMALL FRUIT CROPS

Apply sufficient spray volume to obtain thorough coverage.

Note: Do not over agitate in any system as excessive foaming may result.

Pre-harvest interval is 10 days. Washing is recommended; most residues wash off with brushing and forced water sprays; an approved surfactant may be used in the wash tank. A pre-harvest washing trial is recommended to determine if a surfactant is necessary.

CROP	INSECT or MITE	POUNDS OF M-97-009 KAOLIN /ACRE
Blackberries Raspberries Dewberries (including boysenberries and loganberries)	Blackberry psyllid European raspberry aphid Japanese beetle Leafhoppers Thrips	12.5 to 37.5
Grapes	Grape leafhopper Japanese beetle June beetle Thrips	12.5 to 37.5

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a dry, sheltered location. Product is slippery when wet. In case of spill or leak, avoid breathing dust, clean up and dispose of wastes in compliance with applicable Federal, State, and local regulations.

**PESTICIDE DISPOSAL:** Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to applicable Federal, State, and local procedures.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. The 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 the smoke.

#### WARRANTY STATEMENT, DISCLAIMER

The manufacturer warrants that this product conforms to the chemical description on the label; that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and that the directions, warnings and other statements on this label are based upon reasonable experts' evaluations of reasonable tests of effectiveness, and upon

reports of field experience. Tests have not been made under all conditions. THE MANUFACTURER NEITHER INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSSES OR DAMAGE WHICH MAY RESULT FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL, DIRECTIONS, WARNINGS OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY [[FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES OR INJURIES RESULTING FROM THE USE]]OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. ((IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE)) OR HANDLING OF THIS PRODUCT.

M\_97\_009\_label6b.doc

١