

PM 12  
5905-466

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**RESTRICTED USE PESTICIDE**

**Due to very high acute toxicity to  
Humans and Birds**

**For retail sale to and use only by certified applicator or  
persons under their direct supervision and only for those  
uses covered by the certified applicator's certification.  
Direct supervision for this product is defined as the  
certified applicator being physically present during  
application, mixing, loading, repair and cleaning of  
application equipment. Commercial certified applicators  
must also ensure that all persons involved in these  
activities are informed of the precautionary statements.**

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**METHAM  
EMULSIFIABLE CONCENTRATE**

ACTIVE INGREDIENTS

(By Weight)

Methyl Parathion (0,0-dimethyl 0-p-nitrophenyl phosphorothioate Related compounds	58.33%
Permethrin (3-phenoxyphenyl) methyl 3-(2,2-dichloroethenyl) -2,2- dimethylcyclo-propane carboxylate	2.27%
INERT INGREDIENTS	12.12%

TOTAL	27.28%
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1 gallon of HELENA METHAM contains 6 pounds of Methyl Parathion and 1/2 pounds of Permethrin. 100.00%

**POISON**

See Side Panels  
for Antidote &  
Precautions



**DANGER**

Keep Out of  
Reach of  
Children

**PELIGRO: AL USARIO: Si usted no lee ingles, no use este producto hasta que  
la etiqueta la haya sido explicado ampliamente.**

E.P.A. REG. NO. 5905-466

First letter of Product batch code indicates producing establishment.

5905-FL-1-WF • 5905-GA-1-CG • 5905-AR-1-WA • 5905-OK-1-AG • 5905-TX-2-AT  
5905-CA-1-KC • 5905-LA-3-EL

Manufactured by HELENA CHEMICAL COMPANY  
Memphis, TN. 38137

**ACCEPTED** Net Content:

NOV 9 1987

Under the Federal Insecticide,  
Fungicide, and Plant Growth Regulator Act  
as amended for the pesticide

0715 116

**Precautionary Statements  
Hazards to Humans And Domestic Animals  
DANGER—POISON**



**POISONOUS IF SWALLOWED**

**IF SWALLOWED** - Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger or blunt object. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.



**POISONOUS BY SKIN CONTACT**

Poisonous if touched by hands or spilled or splashed on skin, in eyes or on clothing (liquid goes through clothes.)

**POISONOUS IF BREATHED**

Breathing vapors, spray mist or dust may be fatal.

**STATEMENT OF PRACTICAL TREATMENT**

**POISONING SYMPTOMS**

Parathion is a very dangerous poison. It rapidly enters the body by contact with all skin surfaces and eyes. Clothing wet with this material must be removed immediately. Exposed persons must receive prompt medical treatment or they may die.

Some of the signs and symptoms of poisoning are: Headache, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.



Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to parathion and describe his condition.

**+ FIRST AID TREATMENT +**

Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to parathion and describe his condition.

If breathing has stopped, start artificial respiration immediately and maintain until doctor sees victim.

If swallowed, drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. See doctor immediately.

**NOTE TO PHYSICIAN**

Since any symptoms from absorption of this combination product are likely to be those of parathion intoxication, treatment should be directed towards the relief of cholinesterase inhibition.

Antidote — administer atropine sulfate in large doses, TWO to FOUR mg. intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is also antidotal and may be administered in conjunction with atropine. **DO NOT GIVE MORPHINE OR TRANQUILIZERS.**

Parathion is a strong cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. At first sign of pulmonary edema, the patient should be given

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supplemental oxygen and treated symptomatically. Continued absorption of the poison may occur and fatal relapses have been reported after initial improvement. **VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.**

Consult your State Agricultural Extension Service or Experiment Station regarding posting treated areas.

## **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to aquatic invertebrates and wildlife. Birds in treated areas may be killed. Do not apply directly to water or wetlands (swamps, bogs, marshes, potholes). Runoff and drift from target areas may be hazardous to aquatic organisms in adjacent aquatic sites. Do not contaminate water by cleaning of equipment or disposal of waste.

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 weed if bees are visiting the treatment area.

## ENDANGERED SPECIES RESTRICTIONS

The use of any pesticide in a manner that may kill or otherwise harm an endangered or threatened species or adversely modify their habitat is a violation of federal laws. The use of this product is controlled to prevent death or harm to endangered or threatened species that occur in the following counties or elsewhere in their range.

Before using this pesticide in the following counties you must obtain the EPA Cropland Endangered Species Bulletin. The use of this pesticide is prohibited in these counties unless specified otherwise in the Bulletins. The EPA Bulletin is available from either your County Agricultural Extension Agent, the Endangered Species Specialist in your State Wildlife Agency Headquarters or the appropriate Regional Office of either the U.S. Fish and Wildlife Service (FWS) or the U.S. Environmental Protection Agency. THIS BULLETIN MUST BE REVIEWED PRIOR TO PESTICIDE USE.

STATE (Regional Office FWS) Species	COUNTY	
CALIFORNIA (Portland, OR.) Aleutian Canada goose	COLUSA	SUTTER
	MERCED	STANISLAUS
Blunt-nosed leopard lizard	FRESNO	MONTEREY
	KERN	SAN LUIS OBISPO
	KINGS	SANTA BARBARA
	MADERA	STANISLAUS
	MERCED	TULARE
Delta green ground beetle	SOLANO	
Kern primrose sphinx moth	KERN	
Santa Cruz long-toed salamander	MONTEREY	SANTA CRUZ
Valley elderberry longhorn beetle	MERCED	
	SACRAMENTO	
FLORIDA (Atlanta, GA.) Everglade kite	DADE	PALM BEACH
	GLADES	BRONARD
TEXAS (Albuquerque, N.M.) Attwater's greater prairie chicken	ARANSAS	GOLIAD
	AUSTIN	REFUGIO
	COLORADO	VICTORIA
	FORT BEND	
	BASTROP	BURLESON
Houston toad	BASTROP	BURLESON
San Marcos salamander	HAYS	
Texas blind salamander	HAYS	

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# 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.

## RE-ENTRY STATEMENT

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 48 hours unless appropriate protective clothing is worn.

Protective clothing means, at least, a hat or other suitable head covering, a long sleeved shirt and long legged trousers or a coverall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks.

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. Inform workers of areas or fields that may not be entered without specific protective clothing; period of time field must be vacated and appropriate actions to take in case of accidental exposure. An example of such information is given under written warnings. 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:

### DANGER

Area treated with Methyl Parathion on (insert date). Do not enter treated areas for 48 hours (insert State Department of Agriculture's re-entry interval, if more restrictive).

In case of accidental exposure to pesticide spray or dust, wash the skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If in eyes, flush with plenty of water. If inhaled, go to an area where the pesticide has not been applied. Get medical attention if needed.

Reentry into treated fields is prohibited for 48 hours after application, unless all protective clothing and equipment required for early reentry as described elsewhere on the label are worn.

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## WORK SAFETY RULES

The National Pesticide Telecommunication Network is available for recommendations regarding poisoning management, emergency treatment, and other information regarding the toxicity of methyl parathion. The toll free number for the National Pesticide Telecommunication Network is 1-800-858-7378.

If handled indoors provide mechanical exhaust ventilation. Keep all unprotected persons, children, livestock, and pets away from treated area 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.

### HANDLE THE CONCENTRATE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT:

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. Wear a pesticide respirator approved by the National Institute for Occupational Safety and Health under the provisions of 30 CFR part II.

USE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT DURING MIXING/LOADING, APPLICATION, REPAIR, AND CLEANING OF APPLICATION EQUIPMENT, DISPOSAL OF PESTICIDE AND EARLY REENTRY INTO TREATED AREAS: protective suit of one or two pieces covering all parts of the body except the head, hands, and feet; chemical resistant gloves; chemical resistant shoes (or chemical resistant shoe coverings or chemical resistant boots); goggles or face shield; hood or wide brimmed hat; NIOSH approved respirator.

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IF MIXING/LOADING IS PERFORMED USING A CLOSED SYSTEM, THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT MAY BE WORN AS AN ALTERNATIVE: long-sleeve shirt; long-legged pants; chemical resistant gloves; chemical resistant apron; shoes and socks. Goggles or face shield must be worn when the system is under pressure. All other protective clothing and equipment required for use with open systems must be available nearby.

IF APPLICATION IS PERFORMED USING AN ENCLOSED CAB OR COCKPIT, THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT MAY BE WORN AS AN ALTERNATIVE: long-sleeve shirt and long-legged pants; shoes and socks. Chemical resistant gloves must be available in the cab or cockpit and must be worn during entry to and exit from the application vehicle. All other protective clothing and equipment required for use during application must be available in the cab and must be worn when exiting the cab into treated area. When used for this purpose, contaminated clothing may not be brought back into the cab unless in an enclosure such as a plastic bag. REMEMBER-THIS CLOTHING IS INADEQUATE TO PROTECT YOU DURING REPAIR AND CLEANING OF APPLICATION EQUIPMENT AND EARLY REENTRY TO TREATED AREAS! REFER TO PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS ABOVE.

**IMPORTANT!** If pesticide comes in contact with skin, wash off with soap and water and contact a physician immediately. Always wash hands, face, and arms with soap and water before smoking, eating, drinking, or toileting.

**AFTER WORK:** before removing gloves, wash them with soap and water. Take off all work clothes and shoes. Shower using soap and water. Wear only clean clothes when leaving job--do not wear contaminated clothing. Personal clothing worn during work must be stored and laundered separately from protective clothing and household articles. Store protective clothing separately from personal clothing. Clean or launder protective clothing after each use. Respirators must be cleaned and filters replaced according to instructions included with the respirators. Protective clothing and protective equipment heavily contaminated or drenched with methyl parathion must be destroyed according to state and local regulations. HEAVILY CONTAMINATED OR DRENCHED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED. DURING AERIAL APPLICATION, HUMAN FLAGGERS ARE PROHIBITED.

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## **Storage and Disposal**

### **Pesticide Storage**

Do not store below 20°F, (-7°C).

Do not use or store near heat, open flame or hot surfaces.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call 901-761-0050

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

### **Pesticide Disposal**

Pesticide wastes are acutely hazardous. 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**

Metal containers- 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.

Plastic containers- Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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GENERAL DIRECTIONS

Metham is an emulsifiable concentrate which contains 6 lbs Methyl Parathion and 1.2 lbs Permethrin for use on cotton insects. It is suitable for use in conventional hydraulic sprayers and airplane sprayers. For aerial application, apply in a minimum of 1 1/2 gallons of water per acre. By ground, use a minimum of 5 gallons of finished spray per acre.

Apply Metham to cotton as shown in the chart below, using sufficient spray TO OBTAIN FULL COVERAGE OF FOLLIAGE. Timing and frequency of spraying should be based upon insect populations reaching local economic thresholds. Apply as required by scouting reports, usually at 5 to 7 day intervals. DO NOT apply within 14 days of harvest.

COTTON SPRAY RECOMMENDATIONS

<u>PEST CONTROLLED</u>	<u>DOSAGE PER ACRE</u>	<u>EQUIVALENT RATES LBS/AC/AI</u>
Lygus Bugs, Cabbage Looper, Armyworm, Bollworm, Tobacco Budworm, Boll Weevil*, Pink Bollworm	10.6 fl oz - 21.3 fl oz	Permethrin: 0.1 - 0.2 Methyl Parathion: 0.5 - 1.0
Cotton Leaf Perforator, Whitefly*, Cotton Aphid	10.6 fl oz	Permethrin: 0.1 - 0.2 Methyl Parathion: 0.5 Permethrin: 0.025 - 0.1 Methyl Parathion: .125 - .5
Grasshopper	5.3 fl oz	Permethrin: 0.05 Methyl Parathion: 0.25
Cotton Leafworm, Garden Webworm	5.3 fl oz - 10.6 fl oz	Permethrin: 0.05 - 0.1 Methyl Parathion:..... 0.25 - 0.5.....
Southern Green Stink Bug, False Chinch Bug	10.6 fl oz	Permethrin: 0.1 Methyl Parathion:..... 0.25 - 0.5.....
Leafroller, Cutworms, Fall Armyworms, Aphids	10.6 fl oz - 21.3 fl oz	Permethrin: 0.1 - 0.2 Methyl Parathion:..... 0.5 - 1.0.....
Saltmarsh Caterpillar, Stink Bugs	21.3 fl oz	Permethrin: 0.1 - 0.2 Methyl Parathion: 1.0

\*ONLY suppression can be expected when utilized on 5 - 7 day schedule

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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 or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. Helena 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 Helena. Helena 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 warrant shall be implied by law.

The exclusive remedy against Helena 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 Helena exceed the price of the product which causes the alleged loss, damage, injury, or other claim. Helena shall not be liable and any and all claims against Helena are waived, for special, indirect, incidental, or consequential damages or expense, of any nature, including, but not limited to, loss of profits or income, whether or not based on Helena's negligence, breach of warranty, strict liability in tort or any other cause of action.

Helena 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.

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