

# RESTRICTED USE PESTICIDE

Due to Very High Acute Toxicity to Humans and Birds

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

## HELENA® PARATHION 8 FLOWABLE INSECTICIDE CONCENTRATE

For use only on alfalfa, barley, corn, cotton, and wheat

### ACTIVE INGREDIENTS:

Parathion (O,O-diethyl O-p-nitrophenyl phosphorothioate) ..	77.81%
Related Compounds .....	2.46%

INERT INGREDIENTS .....

TOTAL .....

**POISON**

**DANGER**

**KEEP OUT OF REACH OF CHILDREN**

**PELIGRO:** Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

### STATEMENT OF PRACTICAL TREATMENT

#### Organophosphate

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. See doctor immediately.

See inside label for additional information.

EPA Reg. No.: 5905-516

First letters of product batch code indicate producing establishment: 5905-GA-1=EG, 5905-AR-1=WA,

5905-CA-1=KC, 5905-FL-1=TF, 5905-IA-1=DI

NET CONTENTS:

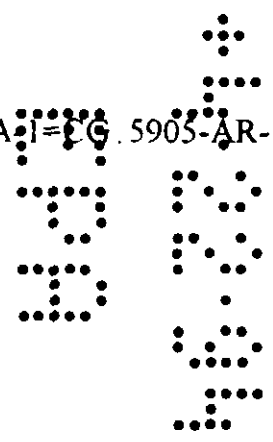
**ACCEPTED**

**APR 26 1994**

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 5905-516

MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119

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**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER - POISON**

Poisonous if swallowed, inhaled or absorbed through skin or eyes. Rapidly absorbed through skin. Do not breathe vapors. Do not get in eyes or on skin or clothing.

**THIS PRODUCT MAY BE FATAL IF SWALLOWED OR INHALED, OR IF ALLOWED TO CONTACT SKIN. FAILURE TO PROPERLY FOLLOW ALL INSTRUCTIONS FOR PERSONAL PROTECTIVE EQUIPMENT WILL INCREASE YOUR RISK.**

**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 or spray mist may be fatal

**PERSONAL PROTECTIVE EQUIPMENT**

**Mixers and Loaders (who must use the closed system described elsewhere on this label) must wear:**

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant apron
- Protective Eyewear, if the closed system is pressurized

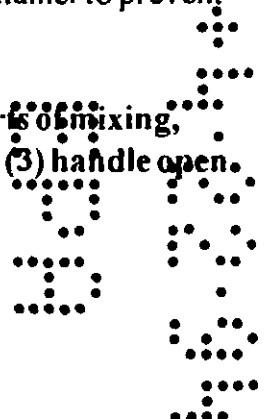
**Applicators (pilots in enclosed cockpits) must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

In addition, pilots must wear waterproof gloves when entering or leaving an aircraft contaminated with pesticide residues. If taken into the cockpit, the gloves must be kept in an enclosed container to prevent contamination of the inside of the cockpit.

**All Other Handlers, including persons who (1) repair, clean, or maintain the parts of mixing, loading, or application equipment that may contain residues, (2) clean up spills, (3) handle open containers, or (4) dispose of this pesticide must wear:**

- Chemical-resistant protective suit
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective Eyewear
- Chemical-resistant headgear for overhead exposure



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A respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

### USER SAFETY REQUIREMENTS

Users must:

- Provide mechanical exhaust ventilation, if product is handled indoors
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them.
- Clean respirators and replace cartridges or canisters according to instructions included with the respirators.
- Replace gloves frequently
- Keep and wash PPE (coveralls, gloves, footwear, aprons, protective eyewear, etc.) separately from all other laundry. Wash PPE after each day's use, following the manufacturer's directions. If no such instructions, use detergent and hot water. Store PPE separately from personal clothing.
- Keep personal work clothing (long-sleeved shirts, long pants, and socks) worn while performing mixing, loading, application, and other handling and early entry tasks separate from household articles. After each day of use, wash work clothing separately from household articles.

### USER SAFETY RECOMMENDATIONS

Users should:

- Not rub eyes or mouth with hands
- STOP work and get help right away, if you feel sick in any way. See First Aid (Practical Treatment) section of this label. Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to parathion and describe his condition. After first aid is given (See First Aid Treatment Section) and if a doctor cannot come, take victim to clinic or hospital.
- 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, all work clothing, and footwear immediately after handling this product. Wash the outside of gloves with soap and water before removing. Shower using soap and water. Wear only clean clothing when leaving job -- do not wear contaminated clothing.
- The National Pesticide Telecommunication Network (NPTN) is available for recommendations regarding poisoning management, emergency treatment, and other information regarding the toxicity of parathion. The toll-free number for NPTN is 1-800-858-7378.
- Repeated exposures to Cholinesterase Inhibitors such as are contained in this product may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor.

### 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.

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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.

**NOTE TO PHYSICIAN**

Since any symptoms from absorption of this combination product are likely to be those of ethyl 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 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.**

**ENVIRONMENTAL HAZARDS**

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

This product is extremely toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops or weeds. Do not apply this product or allow 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**APPLICATION RESTRICTIONS**

**Aerial Application Only:** Ethyl parathion may only be applied aerially, and only by a certified commercial applicator as defined in FIFRA 2(e)(3) **HUMAN FLAGGERS ARE STRICTLY PROHIBITED DURING AERIAL APPLICATION.**

**No spray or Drift On Any Person:** Do not apply this product in a way that will contact workers or other persons, either directly or through drift. During application, keep all persons, livestock, and pets out of the treated area and any area within 100 feet of the treated area.

**Areas Where Application Is Prohibited:** Do not apply this product within 100 feet of buildings, public roads, or bodies of water. Do not apply within 100 feet of property lines, unless the owner of the adjacent property has given prior written consent to the application and has been informed of the timing of the application and the appropriate entry restrictions.

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**Crop Limitations:** This product must not be applied to any crop other than alfalfa, barley, corn, cotton, sorghum, soybeans, sunflower, and wheat. Any treated crop must be harvested only by mechanical means. Hand harvesting of treated crop is prohibited.

**Chemigation Prohibition:** Do not apply this product through any type of irrigation system.

**Drift Reduction Measures:** Do not apply this product if the wind exceeds 10 miles per hour. Apply only from nozzles located not more than 75% of the distance from the center of the aircraft to the wing tip or helicopter rotor tip.

**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 handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions pertaining to the statements in this labeling about personal protective equipment, restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

**IMPORTANT:** The exceptions in the WPS pertaining to personal protective equipment, restricted-entry intervals, and notification to workers do NOT apply when this product is used.

**Restrictions on Entry to Treated Areas:**

Do not enter or allow any person to enter into entry-restricted areas (treated areas plus areas within 100 feet of treated areas) during the restricted entry interval (REI) of 3 days (6 days for corn) and during any longer period of time prescribed by State law or regulation. Entry into entry-restricted areas (including early entry that would otherwise be permitted under the WPS) by any person is PROHIBITED, except for persons who are (1) handlers performing crop-advisor tasks or (2) workers performing irrigation-related tasks.

**Restrictions for All Persons Who Enter Entry-Restricted**

When any person enters the treated area or within 100 feet of the treated area before the expiration of REI all of the following requirements must be complied with:

- (1) No entry is permitted, except for persons who are performing crop-advisor tasks or irrigation-related tasks.
- (2) No person is allowed to enter or remain in entry-restricted areas during application and until four (4) hours after application is complete
- (3) No person is allowed to remain in any entry-restricted area for a total of more than (J) hour in any 24-hour period.
- (4) Each person must wear the personal protective equipment specified for early entry on this label.
- (5) Each person must be provided the protections in the WPS and in this labeling. If the two requirements are not identical, the requirements that are the most restrictive must be followed.

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(6) Each person, except owners of the farm and members of their immediate family, must have received training as follows:

- (a) Currently certified as an applicator of restricted-use pesticides,
- OR
- (b) Currently trained as a handler under the requirements of the WPS
- OR

(c) Currently trained as a worker under the requirements of the WPS and, in addition, is informed (i) how to put on, use, and take off PPE correctly, (ii) about the importance of washing thoroughly after removing PPE, and (iii) how to prevent, recognize, and give correct first aid for heat illness.

(7) Before entering the entry-restricted area, each person must have read the product labeling or been informed in a manner the person can understand of all the requirements of all labeling requirements related to safe use of the pesticide, including signal word, human hazard precautions, first aid instructions, symptoms of poisoning, and personal protective equipment requirements for early entry.

(8) Appropriate measures to prevent heat illness must be taken for each person.

(9) Each person must be provided a decontamination site that is reasonably accessible and is within 1/4 mile of that person. (Exception: if the site where the person is working is more than 1/4 mile from the nearest point reachable by vehicle, the decontamination site may be at the access point.) Each decontamination site must contain an adequate supply of soap and single-use towels and an adequate amount of water for routine washing, emergency eyeflushing, and emergency whole-body washing. The water must be of a quality and temperature that will not cause illness or injury when it contacts the skin or eyes or if it is swallowed. The site for crop advisors must also contain a clean change of clothing, such as a coverall.

(10) Each person must carry an eyeflush dispenser containing at least one pint of water that meets the quality and temperature criteria listed for decontamination water in (9) above.

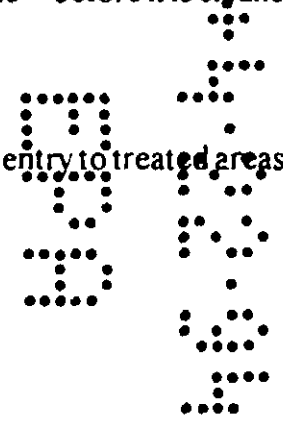
(11) After the activity in the entry-restricted area, soap, clean towels, and an adequate amount of water for thorough washing must be available at the place where the person removes the PPE. The water must meet the quality and temperature criteria listed for decontamination water in (9) above.

(12) Each person must wash thoroughly after removing PPE.

(13) Personal protective equipment worn during early entry must not be worn home. No person, other than owners of the farm and members of their immediate family, may take home -- before it is cleaned -- PPE worn during early entry.

**Personal Protective Equipment for Early Entry:** PPE required for early entry to treated areas that is permitted on this label is:

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear
- Protective Eyewear
- Chemical-resistant headgear for overhead exposure



**Notification About Application and Entry Restrictions:**  
 Notify workers (other than workers who are members of the farm owner's immediate family) of the application by warning them orally if they will be within 1/4 mile of the treated area. In addition, treated areas must be posted with WPS signs at (or 100 feet outside) all usual points of entry or at (or 100 feet outside) all the corners of the treated areas affording maximum visibility.

**Notification to Farm Owner/Operator**

A certified commercial applicator must not apply this parathion product on a farm until he or she makes sure the owner of the farm (or person responsible for managing the farm) has the following information in writing; (1) specific location and description of the area to be treated, (2) time and date of application, (3) product name, EPA registration number, and active ingredients, (4) the entry restrictions including the restricted-entry interval, (5) the requirement for both oral warnings to workers and posting of treated areas, (6) the requirement that crops treated with parathion be harvested mechanically and the prohibition on hand harvesting, (7) the incident reporting requirements set forth on this label, and (8) any other labeling requirements concerning the protection of workers or other persons during or after application. This requirement is satisfied if the owner/operator of the farm has a copy of this labeling.

**PROTECTION OF APPLICATORS AND MIXER/LOADERS**

**Applicator Protection:** The cockpit of the aircraft used to apply this product must be fully enclosed while the product is being applied. No pilot may apply this product if the pilot has earlier during the day of application performed any mixing/loading activities (other than acting as an observer) involving any pesticide product containing parathion. Human flaggers are prohibited.

**Mixer/Loader Protection:** An observer must be present during all mixing/loading activities in order to furnish assistance in the event of an accident. The observer may not act as a mixer/loader and need not wear personal protective equipment.

This product must not be mixed and loaded in a closed system, as described below:

The liquid pesticide must be removed from its original shipping container and transferred through connecting hoses, pipes, and/or couplings that are sufficiently tight to prevent handlers or other persons from contacting the parathion concentrate, use dilution, or rinsate solution. A complete seal by dry break or screw-on coupling to the opening of the original container shall be required.

All hoses, piping, tanks, and connections used in the system shall be of a type appropriate for the product being used and the pressure and vacuum levels involved. The system shall be designed and operated so that the concentrated form of this product is not under more than 25 psi of pressure at any point in the system beyond or downstream from a pump producing positive pressure. The closed system must be adequate to make necessary measurements of the product being used. External sight gauges shall be equipped with valves so that the flow of pesticide to the sight gauge can be shut off in case of breakage or leakage from the gauge.

Shut-off devices must be installed on the exit end of all hoses and at all disconnect points to prevent leakage of parathion when the transfer is stopped and the hose is removed or disconnected. If a hose carried parathion concentrate and has not been rinsed in accordance with the instructions in this section, a dry-couple shut-off device that will minimize parathion drip to not more than 2 ml. per disconnect must be installed at the disconnect point. If the hose carried diluted-for-use parathion or rinsate solution, a reversing

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action pump or a similar system that will empty the hose and eliminate dripping of liquid from the end of the hose may be used as an alternative to a shut-off device.

In mixing/loading operations do not pour this product from its container. Before opening the container, make sure that the container is resting securely on the ground or a sturdy support, with the top (opening) end up and approximately level.

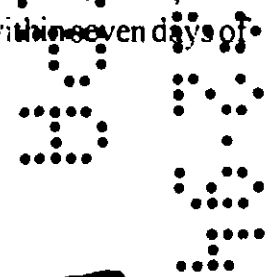
Remove the product from the container only by use of a vacuum-producing pump system connected to a probe system that is listed by the State of California under that State's program establishing criteria for closed-system handling of Toxicity Category I pesticides. Examples of California-listed systems are the Chemprobe ® Model II system sold by Cherlor Mfg. Co., Inc., P. O. Box 2174, Salinas, CA 93902, telephone 408-422-5477 or the Protect-O-Loader Model XM-1 system sold by Protecto Mfg. Co., 20189 Firerock Road, Bend, OR 97701, telephone 503-382-6886. The probe system shall be screwed into the threaded opening in the top of the container to form a watertight connection, using appropriate adaptors provided by the probe manufacturer as necessary. The instructions provided by the seller of the probe have been thoroughly rinsed as required by this section.

The closed-system must provide for adequate rinsing of any removable probe and of all containers that are not labelled for return to the registrant. Rinsing must be done using a liquid that contains no pesticide. The rinsing system must be capable of spray-rinsing the inner surface of the container. The rinse solution shall be removed from the pesticide container concurrent with the introduction of the rinse medium. The rinse solution shall go into the pesticide mix tank of applicator vehicle via the closed system.

The system shall be rinsed according to the specifications of the manufacturer of the probe system, or, in the absence of such specifications, by moving at least one half of the container volume through the system. A minimum pressure of 15 psi shall be used for the spray rinse. Parathion containers shall be protected against excessive pressure during the container rinse operation. Measures shall be taken to prevent the spray rinse procedure from causing an increase in pressure on the inside of the container walls of more than 5 psi.

Either the operator of the closed system must have available at the time of operation a complete set of written instructions for proper operation of the system, or the certified applicator must document in writing before an operator uses the closed system that the operator has been adequately trained in the proper operation of the system.

**INCIDENT REPORTING:** A telephone notification must be made if mixing, loading, or use of a product containing ethyl parathion results in (1) inadvertent or unexpected human exposure to the product or illness resulting from exposure to the product, (2) spill of the product, (3) an investigation by Federal, State, or local authorities of allegations involving drift of the product, or (4) the deaths of birds or other wildlife. The certified applicator or the owner of the treated lands must notify by telephone the Chief, Compliance Branch, Office of Compliance Monitoring, US EPA, at (202) 260-3375 within seven days of becoming aware of the incident



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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.

## GENERAL INFORMATION

Mix in water with agitation; agitate while spraying. Apply to row and field crops in 1 to 3 gals. (California only: use 5 to 15 gals.) of water by airplane

**COMPATIBILITY**- Avoid combinations containing highly alkaline materials such as lime-sulfur solutions or lime. Alkaline compounds will reduce the effectiveness of Parathion.

**ALFALFA:** Greenbug (Aphids), Armyworms, Grasshoppers- 1/4 to 1/3 pint per acre in water to cover by air application. Alfalfa Weevil Larvae - Use 1/3 pt. per acre. Apply when alfalfa is 12 to 14 inches high. For severe infestation repeat application to stubble after first cutting. Do not apply within 15 days of harvest. Do not graze animals on treated pasture or cut for hay within 15 days of application.

**BARLEY AND WHEAT:** Greenbug (Aphids), Armyworms, Grasshoppers- 1/4 to 1/3 pint per acre in water to cover by air application. Alfalfa Weevil Larvae - Use 1/3 pt per acre. Apply when alfalfa is 12 to 14 inches high. For severe infestation repeat application to stubble after first cutting. Do not apply within 15 days of harvest. Do not graze animals on treated pasture or cut for hay within 15 days of application.

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**CORN: Sap Beetles, Corn Leaf Aphid** - Apply 1/4 pint per acre, diluted in water, the amount depending on type of equipment used. Do not apply within 12 days of harvest or cutting for storage.

**COTTON: Aphids, Red Spider Mites**, - 1/3 pint per acre in water to cover. **Leaf Perforator** - 1 pint per acre in water to cover. **Cabbage Looper, Stink Bugs, Salt Marsh Caterpillars, Leafhoppers** - 1/2 pint per acre in water to cover. Do not harvest within 7 days.

### **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.

