

Reg # 5905-461

PM-25

File

199

United States Environmental Protection Agency  
Washington, D.C. 20460

OCT 19 1993

Office of  
Prevention, Pesticides and  
Toxic Substances

Judy Oldham  
HELENA CHEMICAL CO  
6075 POPULAR AVE - SUITE 500  
MEMPHIS TN 38119

Subject: Label Amendment Submission of 06/18/93  
in Compliance with WPS Labeling Requirements  
EPA Reg No. 5905-461  
HELENA 6LB SODIUM CHLORATE DEFOLIANT-DESSICANT.

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

299  
Office of Pesticide Programs (H-7504C)  
U.S. Environmental Protection Agency  
401 M Street SW  
Washington, DC 20460-0001

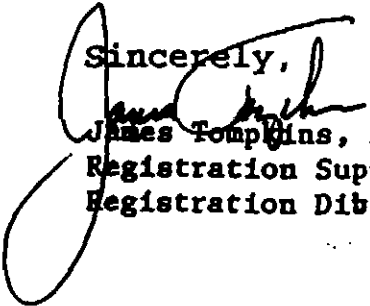
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)  
Room 266A Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,



James Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

399

# 6 LB. SODIUM CHLORATE DEFOLIANT-DESICCANT

**ACTIVE INGREDIENT:**

Sodium Chlorate ..... 47.2%

**INERT INGREDIENTS:** ..... 52.8%

**TOTAL** ..... 100.0%

One Gallon of product contains 6.0 lbs. of Sodium Chlorate plus fire retardant.

**KEEP OUT OF REACH OF CHILDREN**

**DANGER      PELIGRO**

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

For Additional Precautions and Statements of Practical Treatment See Inside Label.

EPA REG. NO. 5905-461

NET CONTENTS

EPA EST. NO.

**MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119**

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

**OCT 19 1993**

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

5905-461

## **PRECAUTIONARY STATEMENTS**

### **Hazards to Humans & Domestic Animals**

## **DANGER**

**Corrosive. Causes eye damage. Harmful or fatal if swallowed. Do not get in eyes or on clothing. Avoid contact with skin.**

### **Personal Protection Equipment**

**Applicators and other handlers must wear:**

Coveralls over short-sleeved shirt and short pants

Waterproof gloves

Chemical-resistant footwear plus socks

Protective eyewear

Chemical-resistant headgear for overhead exposure

Chemical-resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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 use 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**

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.

---

### **STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Flush with water for 15 minutes. Get medical attention.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**IF SWALLOWED:** Drink immediately a large quantity of either milk, egg whites or gelatin solution. If these are not available drink a large quantity of water. Avoid alcohol. Get medical attention.

**NOTE TO PHYSICIAN:** Probable mucosal damage. Use of gastric lavage may be contraindicated.

### **ENVIRONMENTAL HAZARDS**

For terrestrial uses, 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 washwaters.

Clean and wash spray equipment before and after use and do not allow washwater to contact desirable plants.

**PHYSICAL AND CHEMICAL HAZARDS**

To avoid fire or explosion do not mix with insecticides.

**CHEMIGATION PROHIBITION**

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

**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 a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**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 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 enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.

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 over short-sleeved shirt and short pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

## STORAGE AND DISPOSAL

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

**Storage Instructions:** Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Do not stack plastic containers (4x1 gal. or 2x2.5 gal) over 2 pallets high. Do not stack metal containers over 4 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original containers only. Unloading storage and work areas must be as clean as possible to prevent contamination if spilled. If concentrate or spray solution is allowed to dry on flammable objects, the chlorate component can act as an oxidizer. If the contents are leaking or material is spilled follow these steps:

1. Contain spill, absorb with a material such as saw dust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with water and soap to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Clothing contaminated with chlorate solution must be removed at once before solution dries. Dried contaminated clothes can be ignited easily. Wash contaminated clothing immediately.
6. Do not allow run off to enter sewer or contaminate water supplies.
7. Dispose of waste as indicated below.

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

**CONTAINER DISPOSAL:** 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

Weather conditions and plant conditions affect defoliation. Weather conditions that favor good defoliation are high temperature, high humidity, low wind velocity, high to adequate soil moisture. Plant conditions which favor good defoliation are ample fertility and moisture, complete insect control. Nutrients should be ample but not too much nitrogen. **LEAVES SHOULD BE GREEN AND TURGID (NOT WILTED, TOUGHENED OR STUNNED BY LACK OF FERTILIZERS).**

**MATURITY-** Boll load heavy, most bolls mature, vegetative growth ceased, little or no second growth.

**BEANS, DRY -** To facilitate harvest and reduce bean seed moisture, apply 1 gallon of 6 LB. **SODIUM CHLORATE** in enough water to provide thorough coverage, either by aircraft or ground equipment. Make application 7-10 days before anticipated harvest date. Do not apply under conditions of extreme heat during the middle of the day. For air application, use 5-10 gallons of total

solution per acre; for ground application, use a minimum of 20 gallons of total solution per acre. Do not graze treated fields or feed treated fodder or forage to livestock.

**CHILIPEPPERS** - Apply 1/2 to 1-1/4 gallons per acre in 5 to 15 gallons of water by aircraft and 20 to 40 gallons of water by ground rig. To be used on peppers for processing only. Apply 10 days before harvest. When grown for processing, consult a processor before applying.

**GUAR BEANS** - To facilitate harvest and reduce bean seed moisture, apply 1 gallon of 6 LB. **SODIUM CHLORATE** in enough water to provide thorough coverage either by aircraft or ground equipment. Make application 7-10 days before anticipated harvest date. Do not apply under conditions of extreme heat during the middle of the day. For air application, use 5-10 gallons of total solution per acre; for ground application, use a minimum of 20 gallons of total solution per acre. Do not graze treated fields or feed treated fodder or forage to livestock.

**COTTON - Defoliation** - Do not treat later than 7 to 10 days prior to harvest. Thorough coverage of the plant is essential.

**AIR APPLICATION:** Apply 2 or 3 quarts of 6 LB. **SODIUM CHLORATE** per acre in sufficient water to make 4 to 10 gallons total solution per acre. Use the lower rate when plants and weather conditions are ideal for defoliation. Swath width should not exceed wing spread; altitude and speed of aircraft should be regulated to give sufficient spray coverage. Do not apply during periods of excessive wind as spray may drift and cause defoliation of adjoining cotton or injury to other crops. Do not apply during very high temperatures found in some areas at mid-day.

**GROUND MACHINE APPLICATION:** Apply 2 to 3 quarts of 6 LB. **SODIUM CHLORATE** per acre in sufficient water to make 15 to 30 gallons total solution per acre. Cotton defoliants should be applied when 70% of the bolls are open. Poor defoliation often occurs under unfavorable weather, soil moisture, fertility and plant conditions. Uniform defoliation within a field may sometimes be difficult to obtain because of irregular plant maturity. Satisfactory defoliation may not be obtained with cotton plants that are suffering from lack of moisture or when plant growth is retarded by cold weather. Do not graze treated areas or feed gin waste to livestock. Flush out equipment with water after each day's work.

**FLAX - For Use As A Harvest Aid:** To desiccate trashy weeds and desiccate the mature crop, apply 1 gallon 6 LB. **SODIUM CHLORATE** per acre in enough water to give thorough coverage. Make application on bright, sunny days (preferably when temperature is above 60° F) 7 to 10 days before anticipated harvest date. For air application, use minimum of 5 gallons ready-to-apply material per acre. Activity of the spray will be enhanced by the addition of a good nonionic surfactant at the rate of 1 quart per 100 gallons of spray.

**GRAIN SORGHUM:** As a desiccant, apply 3 quarts to 1 gallon 6 LB. **SODIUM CHLORATE** per acre 7 to 10 days before harvest. Application should be made in enough water for thorough coverage. Apply a total of 4 to 10 gallons of spray per acre by air and 10 to 20 gallons per acre by ground equipment.

**CORN - 6 LB. SODIUM CHLORATE** may be used as a harvest aid for desiccation of trashy weeds in early maturing corn. Use 1 gallon of product in 5 to 7 gallons of water per acre by air.

Apply at least 14 days before anticipated harvest date on clear days when temperatures are expected to go above 70° F. Use the 5 gallon rate when weeds are small and the crop canopy is fairly open. DO NOT graze treated fields or feed fodder, forage or residual seeds within 14 days of application.

**RICE:** As a pre-harvest desiccant, apply 3 quarts to 1 gallon 6 LB. SODIUM CHLORATE in enough water for thorough coverage. By air, use a minimum of 5 gallons per acre. Application should be made 7 to 10 days before harvest. Do not graze treated fields or feed treated straw or crop residues within 14 days of application.

**SAFFLOWER:** As a pre-harvest desiccant, apply 1 gallon 6 LB. SODIUM CHLORATE per acre in enough water for thorough coverage. By air apply 5 to 10 total gallons of spray per acre. By ground, apply 20 to 30 gallons of total spray per acre. Application should be made 7 to 10 days before harvest when safflower heads are fully mature. Do not apply later than 7 days before harvest. Do not feed treated forage or graze treated fields. Not for use in California.

**SOYBEANS:** As a pre-harvest desiccant, apply 1 gallon of 6 LB. SODIUM CHLORATE per acre in enough water for thorough coverage. By air, apply a minimum of 5 gallons of spray solution per acre; for ground application, apply a minimum of 20 gallons of spray solution per acre. Application should be made 7 to 10 days prior to normal anticipated harvest. Do not feed treated foliate or graze treated fields. Not for use in California.

**SUNFLOWER:** As a pre-harvest desiccant, apply 1 gallon of 6 LB. SODIUM CHLORATE per acre to fully mature seedheads in enough water for thorough coverage. By air, apply 5 to 10 gallons total spray solution per acre. By ground equipment, apply 20 to 30 gallons of total spray solution per acre. Application should be made 7 days prior to normal harvest. Do not feed treated forage or graze treated fields. Not for use in California.



**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.