

5905-461

09/26/2002

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 26 2002

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Emily Smathers Ratliff
Helena Chemical Co.
225 Schilling Boulevard, Suite 300
Collierville, TN 38017

Dear Ms. Ratliff:

Subject: Revised Labeling
6 lb. Sodium Chlorate Defoliant-Desiccant
EPA Registration No. 5905-461
Your Application Dated June 17, 2002

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- a. Please note that 40 CFR 156.10(i)(1)(ii) states that only the Directions For Use may appear on printed or graphic matter which accompanies the pesticide. The referral statement "For Additional Precautions.....See Inside Panel" implies that the precautionary statements are inside a booklet. If all of the Precautionary Statements and First Aid Statements cannot appear on the outside container label due to size constraints, you should formally submit a request for a size exemption from the regulations.
- b. Assure that the appropriate EPA Establishment Number appears on the label or immediate container when this product is shipped.
- c. At the beginning of the list of Personal Protective Equipment (PPE) within the Precautionary Statements, add the statements "Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart." In addition, revise the requirement for "waterproof gloves" to a requirement for "chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride."

d. Within the list of PPE for early re-entry in the Agricultural Use Requirements box, revise the requirement for "waterproof gloves" to a requirement for "chemical-resistant gloves made of any waterproof material."

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,



James A. Tompkins
Product Manager (25)
Herbicide Branch
Registration Division (7505C)

Enclosure

6 LB. SODIUM CHLORATE DEFOLIANT-DESICCANT

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ACCEPTED
with COMMENTS
In EPA Letter Dated:

SEP 26 2002

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
5705-461**

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

ANGER 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.)

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

ANGER

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

FIRST AID

- | | |
|----------------------|--|
| IF IN EYES: | <ul style="list-style-type: none">• Hold eyelid open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.• Call a poison control center or doctor immediately for treatment advice. |
| IF ON SKIN: | <ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water, after the first minutes, then continue rinsing.• Call a poison control center or doctor immediately for treatment advice. |
| IF SWALLOWED: | <ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Have a person sip a glass of water if able to swallow.• Do not give anything to an unconscious or convulsing person. |

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency, call ChemTrec at 1-800-424-9300.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

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

EPA REG. NO. 5905-461
EPA EST. NO.

NET CONTENTS

**MANUFACTURED BY
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIERVILLE, TENNESSEE 38017**

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.

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 (Not for use in California) - 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 (Not for use in California) - 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.

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GUAR BEANS (Not for use in California) - 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 (Not for use in California) - 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 (Not for use in California) - **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.

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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**

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

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 or 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 shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, 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.

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