

5905-118

4-16-2002

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APR 16 2002

Ms. Emily Smathers Ratliff
Registration Specialist
HELENA CHEMICAL COMPANY
225 Schilling Boulevard, Suite 300
Collierville, TN 38017

SUBJECT: Label Amendment
3lb. Chlorate Defoliant Dessicant, EPA Reg. No. 5905-118
Your Application Dated March 26, 2002

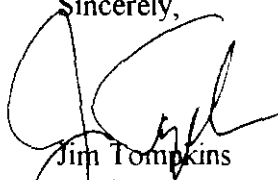
Dear Ms. Smathers Ratliff:

The above mentioned amendment submitted in connection with registration under Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable provided you make the following changes listed below:

- Under the "Agricultural Use Requirements" box change "waterproof gloves" to "chemical resistant gloves such _____ or _____ or _____ or _____". [Use PR Notice 93-7 for procedure for selecting materials for Category A.]

A stamped copy of the label is enclosed for your records. Please submit one (1) final printed copy for the above mentioned label before releasing the product for shipment. The amended labeling supersedes all previously accepted ones.

Sincerely,



Jim Tompkins
Product Manager (25)
Herbicide Branch
Registration Division (7505C)

Enclosure

CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	MINOR, E.							
DATE ▶	Apr 15, 2002							

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3 LB. CHLORATE DEFOLIANT DESICCANT

ACTIVE INGREDIENT:

Sodium Chlorate.....27.50%

INERT INGREDIENTS:.....72.50%

TOTAL.....100.0%

1 Gallon of 3 LB. CHLORATE DEFOLIANT DESICCANT contains 3 pounds of Sodium Chlorate with a fire retardant

KEEP OUT OF REACH OF CHILDREN

CAUTION

Avoid contact with eyes, skin and clothing. In case of contact with product flush eyes with water. Avoid inhaling spray mist. May cause skin irritation. Avoid contamination of food stuffs. Harmful if swallowed. If swallowed call a physician immediately.

SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 5905-118

EPA EST. NO.

NET CONTENTS:

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

**ACCEPTED
with COMMENTS
In EPA Letter Dated**

APR 16 2002
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
5905-118

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Avoid breathing spray mist. May cause irritation of nose, throat and skin. Avoid contact with eyes, skin and clothing. Do not contaminate feed and food stuff.

FIRST AID	
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.
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.
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.	

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by disposal of equipment washwaters.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:
Long-sleeved shirt and long pants
Shoes plus socks

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 with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS	
Users should:	<ul style="list-style-type: none"> 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.

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 (REI) of 12 hours.	
PPE requirements 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

Waterproof gloves

Shoes plus socks

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STORAGE AND DISPOSAL

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

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 (4 x 1 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. Do not allow run off to enter sewer or contaminate water supplies.
6. 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: 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).

3 LB. CHLORATE DEFOLIANT DESICCANT may be applied by aircraft or ground equipment. It is important that the foliage be uniformly and thoroughly covered. The specified dilution rates should be carefully observed. A nonionic surfactant containing 80% or more surface active agent, such as **INDUCE®** at the rate of 1/4 to 1/2% v/v concentration may enhance results. Or, the addition of a nonionic crop oil concentrate containing 80-85% petroleum or vegetable based oil and 15-20% emulsifier, such as **AGRI-DEX™**, can be used at the rate of 1/2-1% v/v.

MATURITY - Boll load heavy, all bolls mature, vegetative growth ceased, little or no second growth. Conditions which contribute to poor defoliation are those adverse to the above.

DIRECTIONS

CHILIPEPPERS - Apply 1 to 2-1/2 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.

CORN - 3 LB. SODIUM CHLORATE may be used as a harvest aid for desiccation of trashy weeds in early maturing corn. Use 2 gallons **3 LB. SODIUM CHLORATE** in 5 to 7 gallons of water per acre by air. Apply at least 14 days before anticipated harvest date on clear days when temperature is expected to go above 70° F. Use the 5 gallon rate when weeds are small and the crop canopy is fairly open.
NOTE: DO NOT graze treated fields or feed fodder, forage or residual seeds within 14 days of application.

COTTON: Defoliation - Apply 2 to 3 weeks prior to anticipated picking date. Do not treat later than 7 to 10 days prior to harvest. Thorough coverage of the plant is essential. A second application may be required under some conditions. **AIRPLANE APPLICATION** - 1 to 1-1/2 gals. per acre in sufficient water to make 5 to 10 gals. 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 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 temperature found in some areas at mid-day. **GROUND MACHINE APPLICATION:** 1 to 1-1/2 gals. per acre in sufficient water to make 20 to 30 gals. total solution per acre. Usually 6 to 8 nozzles per row are necessary to obtain good coverage of all leaves. Flush out equipment with water after each day's work. 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 when cotton plants 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.

DRY BEANS: Apply at a rate of 2 gallons per acre in 5 to 10 gallons of water by air or 10 to 20 gallons of water by ground equipment. Thorough coverage is essential. Make application 7 - 10 days before anticipated harvest, longer if temperatures are cool. DO NOT graze treated fields or feed treated fodder or forage to livestock.

FLAX - For Use As A Harvest Aid: To desiccate trashy weeds and desiccate the mature crop, apply 2 gallons 3 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. DO NOT graze treated fields or feed treated flax foliage or fodder for 14 days after application.

GRAIN SORGHUM: As a desiccant: apply 1-1/2 to 2 gallons per acre in 12 to 15 gallons of water 7 to 10 days before harvest.

GUAR BEANS - To facilitate harvest and reduce bean seed moisture: apply 2 gallons of 3 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.

NOTE: DO NOT graze treated fields or feed treated fodder or forage to livestock.

RICE - To facilitate harvest and reduce moisture in the fully mature seed heads, and to desiccate immature red rice in mature white rice: apply by air 1-1/4 to 2 gallons per acre in 5 or more gallons of water. Use the lower rate when crop conditions and weather are right to enhance rapid drying. Make application 7 to 10 days before anticipated harvest date. To avoid drift do not apply during windy weather. Thorough coverage of the crop is essential to achieve good results. DO NOT graze treated fields or feed treated straw or crop residues within 14 days of application.

SAFFLOWERS - To facilitate harvest and reduce moisture in the fully mature seed heads: apply 2 gallons in 5 to 10 gallons of water per acre by air or in 20 to 30 gallons by ground equipment. Make application 7 or more days before normal harvest when safflower heads are fully mature.

SOUTHERN PEAS - Apply at a rate of 2 gallons per acre in 5 to 10 gallons of water by air or 10 to 20 gallons by ground equipment. Thorough coverage is essential. Make application 7 to 10 days before anticipated harvest, longer if temperatures are cool. DO NOT graze treated fields or feed treated fodder or forage to livestock.

SOYBEANS: As a soybean harvest aid to dry weeds in early maturing soybeans and to facilitate the harvest: apply 2 gallons of 3 LB. SODIUM CHLORATE per acre in enough water to give thorough coverage; application may be made by ground equipment or aircraft. Make application 7 to 10 days before anticipated harvesting date when beans are mature and ready for harvest. For air application use a minimum of 5 gallons ready-to-apply spray solution per acre; for ground equipment apply a minimum of 20 gallons of ready-to-apply spray solution per acre. Do not graze treated fields or feed treated soybean foliage.

SUNFLOWER - To facilitate harvest and reduce moisture in the fully mature seed heads: apply 2 gallons in sufficient water to give good coverage. Make application 7 or more days before normal harvest when sunflower heads are fully mature. Apply in 5 to 10 gallons of water per acre by air or in 20 to 30 gallons of water per acre by ground with a high clearance sprayer. Do not apply later than 7 days before harvest. DO NOT graze treated fields or feed treated forage within 14 days of application.

MIXING: Agitate 3 LB. SODIUM CHLORATE DEFOLIANT-DESICCANT in water until completely dissolved. Use mechanical agitator.

**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 related 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

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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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