

PM 25 5905-461

1048

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 11-30-93

(A) 	United States Environmental Protection Agency Office of Pesticide Programs (H75G5C) Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input type="checkbox"/> Other	OPP Identifier Number 160071
	Application for Pesticide:		
	Section I		

1. Company/Product Number 5905-461	2. EPA Product Manager ROBERT J. TAYLOR	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) 6 LB. SODIUM CHLORATE DEFOLIANT-DESICCANT	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) HELENA CHEMICAL COMPANY 6075 POPLAR AVENUE, SUITE 500 MEMPHIS, TN 38119 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

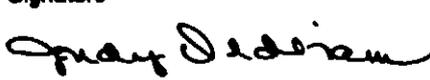
Section II	
<input type="checkbox"/> Amendment - Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 ADDING THE WORDS, "FOR TERRESTRIAL USES," TO CURRENT STATEMENT IN ENVIRONMENTAL HAZARDS SECTION AS PER PR NOTICE 93-3.

BEST AVAILABLE COPY

NOTIFICATION LABEL NOT REVISED PER PR NOTICE DATE 6/29/93

Section III					
1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted.		If "Yes," Unit Package wgt.	No. per container	If "Yes," Package wgt.	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container		5. Location of Label Directions <input type="checkbox"/> Or Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed To Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other (_____)					

Section IV		
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name JUDY OLDHAM	Title MGR., REGISTRATION SERVICES	Telephone No. (Include Area Code) 901-761-0050
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title MANAGER, REGISTRATION SERVICES	
4. Typed Name JUDY OLDHAM	5. Date JUNE 17, 1993	

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HELENA CHEMICAL COMPANY



CORPORATE OFFICE

June 17, 1993

Suite 500
6075 Poplar Avenue
Memphis, Tennessee 38119
Telephone: 901/761-0050
Telex: 12424

Document Processing Desk (AMEND)
Office of Pesticide Programs - H7504C
U. S. Environmental Protection Agency
Washington, D.C. 20460

**RE: AMENDMENT BY NOTIFICATION - OPP IDENTIFIER NUMBER 160071
6 LB. SODIUM CHLORATE DEFOLIANT-DESICCANT, EPA REG. NO. 5905-461**

Dear Sir/Madam:

Enclosed please find our Notification amendment application whereby we are making changes as required on PR Notice 93-3 on the above referenced product.

We have added the words, "For terrestrial uses," to our current statement under the Environmental Hazards section. Enclosed please find two copies of the labels for your review; one copy before the change was made and one copy after the change was made.

No other changes were made to the label. It is my understanding from PR Notice 93-3 that as long as no other changes are made, this can be submitted as a notification.

If further information is needed, please do not hesitate to contact me.

Sincerely,

HELENA CHEMICAL COMPANY

Judy Oldham
Manager, Registration Services

jo
enc.



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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

PRECAUCION AL USARIO: Si usted no ingles, no use este producto hasta que le etiqueta haya sido explicado ampliamente.

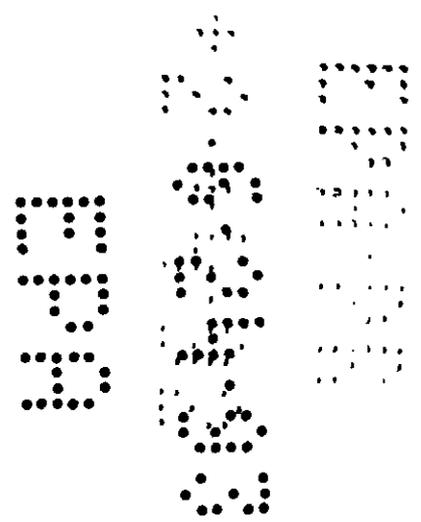
For Additional Precautions and Statements of Practical Treatment See Inside Label.

EPA REG. NO. 5905-461

NET CONTENTS

EPA EST. NO.

MANUFACTURED BY
HELENA CHEMICAL COMPANY
MEMPHIS, TN 38119



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes eye damage. Harmful or fatal if swallowed. Do not get in eyes or on clothing. Wear goggles or face shield when handling this product. Avoid contact with skin. Wash thoroughly after handling. Remove and wash contaminated clothing before reuse.

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 muscosal 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.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

CHEMIGATION PROHIBITION

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

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.

RE-ENTRY STATEMENT

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

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.

Written or oral warnings must be given to workers who are expected to be in a treated area or an area about to be treated with this product. (Indicate specific oral warnings which 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.) 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 Sodium Chlorate on (date of application). Do not enter without appropriate protective clothing until sprays have dried.'

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 1% 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 defoliant 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.

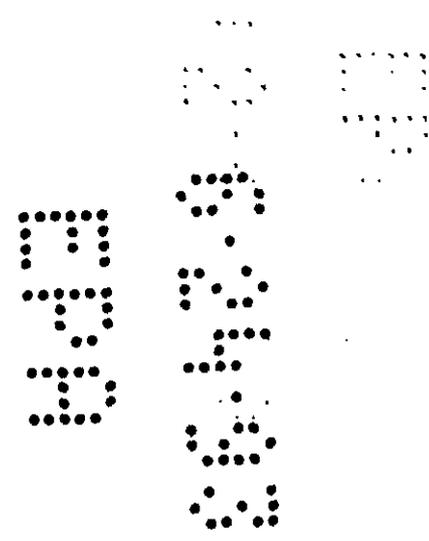
Apply at least 14 days before anticipated harvest date on clear days when temperatures are expected to go above 70° F. Use the 5 gallon rate when weeds are small and the crop canopy is fairly open. DO NOT graze treated fields or feed fodder, forage or residual seeds within 14 days of application.

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.



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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 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.

