11656-90

04/26/2004

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

APR 26 2004

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Robert C. Ehn, Agent
Western Farm Service, Inc.
2787 W. Bullard, Suite 105
P.O. Box 1168
Fresno, CA 93715-1168

Dear Mr. Ehn:

Subject: Revisions for Cotton Defoliate Concentrate
EPA Registration Number: 11656-90
Application Dated: August 23, 2003

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable, provided you make the following changes before you release the product for shipment.

1. At the beginning of the Personal Protective Equipment (PPE) in 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."

2. Also in the Precautionary Statements, add "such as polyethylene or polyvinyl chloride." to the end of the "Chemical resistant gloves..." statement.

3. Under Agricultural Use Requirements, change "waterproff gloves" to "chemical resistant gloves made of any waterproof material."

4. Under First Aid, change the period to a comma at the end of the "Remove contact lenses" statement.

5. In the Pressure section of the Aerial Drift Reduction Advisory, add "instead" between "nozzles" and "of" in the last sentence.

6. Also, in the Swath Adjustment section, change "downward" to "downwind."

Submit one copy of final printed labeling incorporating the above changes before you release the product for shipment. This amended labeling will supercede all previously accepted labels. A stamped copy of labeling is enclosed for your records.

Sincerely,

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

APR 26 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 11656-90

COTTON DEFOLIANT CONCENTRATE

READ ENTIRE CONTAINER LABEL BEFORE USING THIS PRODUCT

ACTIVE INGREDIENT:	
Sodium Chlorate	18.0%
INERT INGREDIENTS	82.0%
TOTAL	100.0%

Contains 1.84 lbs. active ingredient per gallon.
CONTAINS UREA AS A FIRE RETARDANT

EPA REG. NO. 11656-90-ZA EPA EST. NO. 11656-CA-28

KEEP OUT OF REACH OF CHILDREN
CAUTION

FOR AGRICULTURAL USE ONLY OR FOR SALE TO, USE AND STORAGE BY SERVICE PERSONS ONLY. DO NOT STORE IN AREAS ACCESSIBLE TO CHILDREN.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

FIRST AID

If Swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If In Eyes: Hold eye 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 eye. Call a poison control center or doctor for treatment advice.

If On Skin Or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

In case of poisoning call your Poison Control center at (800) 222-1222

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS: CAUTION

Harmful if swallowed. May cause skin irritation.

PERSONAL OR PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- 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.

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), notification to workers 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 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, waterproof gloves, shoes plus socks.

USER SAFETY RECOMMENDATIONS

Users should:

- 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 immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Spray, drift, seepage, and drainage will injure or kill all vegetation. Do not graze treated areas or feed waste to livestock. Keep out of lakes, ponds, or streams. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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 regulations. Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS.

CHEMICAL PROHIBITION

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

GENERAL USE DIRECTIONS

For all crops, satisfactory defoliation and/or desiccation usually is achieved with one application. However, dense or lodged crops may require an additional application. Do not exceed the maximum listed rate per acre per application for all crops.

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. Nozzles should produce large droplets. Satisfactory defoliation is usually secured with one application. However, dense or lodged cotton may need more than one application. Satisfactory defoliation may not be obtained if cotton is under moisture stress or if plant growth is retarded by cold weather.

AIRPLANE APPLICATION: Use 1½ -3 gals. per acre in sufficient water to make 4-10 gals. total solution per acre. Use the lower rate when plants and weather conditions are ideal for defoliation. Do not apply during very high temperatures to avoid rapid evaporation. (Refer to the section "Spray Drift Management")

GROUND APPLICATION: Use 1 ½ -3 gals. per acre in sufficient water to make 20-30 gals. total solution per acre. 6 to 8 nozzles per row are necessary to obtain good coverage.

BOTTOM DEFOLIATION: In tall rank cotton, defoliation of the lower leaves prior to regular defoliation assists in speeding up the maturity of bolls on lower portions of the plants as well as reducing boll rot by permitting more air and sunlight to penetrate into the lower parts of the plant. Spray the lower 1/3 to ½ of the plants only, using 4 to 6 quarts in 25 to 30 gallons of water per acre with flat fan nozzles when the bolls are mature. Spraying should be done during periods when drift is at a minimum. Application should be made during early morning or late evening hours to avoid rapid evaporation. Applications should be made 2 to 3 weeks prior to anticipated picking date.
LIMITATIONS: Preharvest defoliation and desiccation. Do not graze treated areas or feed gin waste to livestock. Do not apply within 7 days of harvest.

CHILI PEPPERS: (Processing only). Use 2 to 5 gals. in 5 to 15 gals. of water by air. Use 20 to 40 gals. of water by ground.
DO NOT APPLY WITHIN 10 DAYS OF HARVEST, CONSULT YOUR PROCESSOR PRIOR TO APPLICATION.

GRAIN SORGHUM: As a harvest aid to reduce excess moisture on grain sorghum use 2 to 2.7 gals. per acre in 5 to 10 gals. of water by air application. Use 20 to 40 gallons of water by ground application. Do not use plant materials as food for meat animals within 14 days after harvest.
DO NOT APPLY WITHIN 10 DAYS OF HARVEST.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering these factors when making application decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance from the outer most nuzzles to the boom must not exceed ¾ the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.
- The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

AERIAL DRIFT REDUCTION ADVISORY

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control.

Applying large droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity and Temperature Inversion Section of this label).

Controlling Droplet Size

Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure – Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles of increasing pressure.

Nozzle Orientation – Orienting nozzles so that the spray is released backward parallel to the air stream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Number of Nozzles – Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

Nozzle Type: Use nozzle type that is designed for the intended application. With most nozzle types, narrow spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length - For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height - Applications should be made at a height no greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment - When applications are made with a cross-wind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

Wind - Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature and Humidity - When making applications in low relative humidity set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions - Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS - The pesticide should only be applied when the potential for drift to adjacent sensitive areas is minimal (e.g. when wind is blowing away from the sensitive area). Sensitive areas include, but are not limited to, residential areas, bodies of water, known habitat for threatened or endangered species, and non-target crops.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Keep in original container. Do not reuse empty container. Store in cool, dry place. Protect from excessive heat. Avoid storage near feed and food products. Do not store next to strong acids or emulsifiable concentrates of Parathion or Malathion. For help with any spill, leak, fire or exposure involving this material, call Chemtrec day or night (800) 424-9300.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of 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 by other procedures approved by State and local authorities.

CONDITIONS OF SALE AND WARRANTY

WESTERN FARM SERVICE MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PURPOSE, OR OTHERWISE EXPRESS OR IMPLIED concerning this product or its uses which extend beyond the use of the product under normal conditions in accordance with the statements made on this label.

NET CONTENTS: _____GALLONS
NET WEIGHT: 9.7 lbs./gallon

Manufactured by:
WESTERN FARM SERVICE, INC.
P. O. Box 1168
Fresno CA 93715

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