352-556

DRAFT

1/27/2000

SUPPLEMENTAL LABELING

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DuPont Agricultural Products

"The Miracles of Partnership With Nature"

MATRIX™ HERBICIDE
AERIAL APPLICATION USE ON
POTATOES IN THE KLAMATH BASIN
OF CALIFORNIA AND OREGON
And in the State of Texas

ACCEPTED

JAN 27 2000

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No 352-556

MATRIX™ HERBICIDE

EPA REG. NO. 352-556

AERIAL APPLICATION USE ON POTATOES IN THE KLAMATH BASIN OF CALIFORNIA AND OREGON

AND IN THE STATE OF TEXAS

DIRECTION FOR USE

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

DuPont "Matrix" herbicide may be applied by air for weed control in Potatoes grown in Modo and Siskiyou Counties of California, Klamouth county of Oregon and in the state of Texas in accordance with the resterictions described on this label. Consult the EPA approved " Matrix" label for additional requirements, restrictions and precautions.

CONDITIONS FOR USE

"Matrix" may be applied by air to potatoes grown on organic soils (greater than 6% organic matter) when certain conditions, such as wet soil and/or excessive vine growth, make it impractical to apply "Matrix" By ground. "Matrix" may also be applied by air in Texas to potatoes when conditions dictate such an application.

Only those aerial applicators who have a current year letter of consent from DuPont may apply " Matrix" by air in this geography

HOW TO USE

Before using "Matrix" by air, be sure that the aircraft spray tank, and all mixing tanks and delivery system equipment is clean.

Apply "Matrix" at 1 to 1.5 ounces per acre. Add a nonionic surfactant containing at least 80% active ingredient at the rate of 1 quart per 100 Gallons of water. Apply in a minimum of 7 gallons of water per acre in Oregon and Texas and a minimum of 10 gallons of water per acre in California when weeds are small and actively growing. Weeds which are sheltered from spray by potato vines or other larger weeds may not be controlled.

"Matrix" can be tank mixed with other suitable potato herbicides registered for use by air. Consult the EPA registered "Matrix" label for tank mix recommendations. Read and follow all the label instructions and precautions for the other herbicide used in a tank mix with "Matrix".

On organic soils, "Matrix" does not provide adequate soil residual weed control. Weeds that germinate after application may not be controlled.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage.

APPLYING LARGER 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 Inversions sections of this label.

Controlling Droplet Size - General Techniques

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 A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger-droplets. Consider using low-drift nozzles.

Controlling Droplet Size - Aircraft

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

Nozzle Orientation - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.

Nozzle Type - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

Boom Length - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.

Application Height - Application more than 10 ft above the canopy increases the potential for spray drift.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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 the 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.

SPRAYER CLEANUP

Failure to adequately clean spray equipment used to mix and apply "Matrix" before treating another crop can result in crop injury.

CROP INJURY THAT RESULTS FROM INADEQUATELY CLEANED SPRAY EQUIPMENT IS THE RESPONSIBILITY OF THE APPLICATOR. The spray equipment must be cleaned before "MATRIX" is sprayed. Follow the cleanup procedures specified on the labels of the previously applied products. If no directions are provided, follow the six steps outlined in After Spraying "MATRIX".

AT THE END OF THE DAY

It is recommended that during periods when multiple loads of "MATRIX" herbicide are applied, at the end of each day of spraying the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits which can accumulate in the application equipment.

AFTER SPRAYING "MATRIX" AND BEFORE SPRAYING CROPS OTHER THAN POTATOES

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of "MATRIX" as follows:

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits .

2. Fill the tank with clean water and 1 gal of household ammonia* (contains 3% active ingredient) for every 100 gal of water. Flush the hoses, boom,and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.

3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.

4. Repeat step 2.

5. Rinse the tank, boom, and hoses with clean water.

6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions.

If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

* Equivalent amounts of an alternate-strength ammonia solution or a DuPont-recommended cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your Ag dealer, applicator, or DuPont representative for a listing of recommended cleaners.

Notes :

1. CAUTION: Do not use chlorine bleach with ammonia as dangerous gases will form. Do not clean equipment in an enclosed area.

2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.

3. When "MATRIX" is tank mixed with other pesticides, all cleanout procedures should be examined and the most rigorous procedure should be followed.

4. In addition to this cleanout procedure, all pre-cleanout guide lines on subsequently applied products should be followed as per the individual labels.

5. Where routine spraying practices include shared equipment frequently being switched between applications of "MATRIX" and applications of other pesticides to "MATRIX"-sensitive drops during the same spray season, it is recommended that a sprayer be dedicated to "MATRIX" to further reduce the chance of crop injury.

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IMPORTANT

BEFORE USING MATRIX, READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA-REGISTERED LABEL.

This bulletin contains new or supplemental instructions for use of this product which do not appear on the EPA-registered package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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