



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

JAN 10 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: ID# 000241-00337. Pendimethalin (PROWL 3.3EC) on sugarcane - Proposed amendment containing minor label changes. Barcode D192410. Chemical No 108501. CBTS# 12076.

FROM: G.F. Kramer Ph.D., Chemist *G.F. Kramer*
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THRU: P.V. Errico, Section Head *P.V. Errico*
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TO: Robert Taylor, Product Manager
Evelyn Alston, Team 25 Reviewer
Registration Division (7505C)

American Cyanamid has submitted a proposal to make the following changes in the label of pendimethalin (PROWL 3.3EC) for use on sugarcane:

1. Under DIRECTIONS FOR USE: "PROWL 3.3EC may be applied to plant or ratoon cane preemergence through layby" is changed to "PROWL 3.3EC may be applied to plant or ratoon cane preemergence through layby and again in late summer or early fall to newly planted sugarcane."
2. Under APPLICATION INSTRUCTIONS: "PROWL 3.3EC may be applied twice per season, preemergence through layby, in plant or ratoon sugarcane" is changed to "PROWL 3.3EC may be applied preemergence through layby, in plant or ratoon sugarcane, and again in late summer or early fall to newly planted sugarcane."
3. Under BROADCAST RATES OF PROWL 3.3EC HERBICIDE: "a. for dark clay soils" is changed to "a. for heavy clay soils."



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4. Under INCORPORATION INSTRUCTIONS, MECHANICAL INCORPORATION: "Rolling cultivator set to cut 2 or 3 inches deep and operated two times at 7 to 8 mph. This technique may be used in the spring or at layby." is changed to "Rolling cultivator set to cut 2 or 3 inches deep and operated two times at 7 to 8 mph. This technique may be used with all application timings."

5. Under WEED SPECIES CONTROLLED: "Junglerice (*Echinochloa colona*)" was added to the list of grasses.

Tolerances for pendimethalin on sugarcane are currently established under 40 CFR 180.361 at a level of 0.1 ppm.

CONCLUSIONS/RECOMMENDATIONS

The proposed label changes will not effect the potential for pendimethalin residues in sugarcane at harvest if a PHI of 90 days or longer is specified and the directions for use and application instructions are clarified as stated below under Detailed Considerations 1 and 2. CBTS can not recommend in favor of this amendment until these changes are made.

Detailed Considerations

The following label amendments have the potential to affect the levels of pendimethalin residues in sugarcane at harvest:

1. "PROWL 3.3EC may be applied to plant or ratoon cane preemergence through layby" is changed to "PROWL 3.3EC may be applied to plant or ratoon cane preemergence through layby and again in late summer or early fall to newly planted sugarcane."

The timing of PROWL 3.3EC applications is confusing as written. We recommend changing the use directions to:

"PROWL 3.3EC may be applied to newly planted or ratoon sugarcane preemergence through layby and again in late summer or early fall to the newly planted sugarcane."

Since an application later in the growing season is now being recommended, the label should specify a PHI. Existing data would support a PHI of 90 days. If a shorter PHI is desired, the registrant will need to submit additional field residue data from the major sugarcane growing areas in the continental U.S.

2. "PROWL 3.3EC may be applied twice per season, preemergence through layby, in plant or ratoon sugarcane" is changed to "PROWL 3.3EC may be applied preemergence through layby, in plant or ratoon sugarcane, and again in late summer or early fall to newly planted sugarcane."

The directions recommend 4.8-7.2 pt of PROWL 3.3EC per application with a seasonal maximum of 14.4 pt. The maximum number of applications is thus three instead of two as specified previously. Since the total application volume is unchanged, there should be no effect on the potential for pendimethalin residues at harvest. However to clarify the application timing, the instructions should be modified to:

"PROWL 3.3EC may be applied preemergence through layby, to newly planted or ratoon sugarcane, and again in late summer or early fall to the newly planted sugarcane."

4. "Rolling cultivator set to cut 2 or 3 inches deep and operated two times at 7 to 8 mph. This technique may be used in the spring or at layby." is changed to "Rolling cultivator set to cut 2 or 3 inches deep and operated two times at 7 to 8 mph. This technique may be used with all application timings."

This change merely clarifies that mechanical incorporation can be used at all application times and would have no impact on the potential for pendimethalin residues at harvest.

cc:S.F., Kramer, circ., R.F., Pendimethalin Amended Use File
RDI: P.V. Errico (1/6/94), R.A. Loranger (1/6/94), D.F. Edwards
(1/6/94)
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