

US EPA ARCHIVE DOCUMENT

EEE BRANCH REVIEW

DATE: IN 2/19/76 OUT 5/26/76 IN _____ OUT _____
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR REG. NO. 241-243

PETITION OR EXP. PERMIT NO. _____

DATE DIV. RECEIVED 2/9/76

DATE OF SUBMISSION _____

DATE SUBMISSION ACCEPTED _____

TYPE PRODUCT(S): I, D, (H), F, N, R, S Control of weeds in peanuts.

PRODUCT MGR. NO. _____

PRODUCT NAME(S) PROWL

COMPANY NAME Amer. Cyanamid

SUBMISSION PURPOSE Petition

CHEMICAL & FORMULATION [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeamine]

100.0

PESTICIDAL USE

For control of most annual grasses and certain broadleaf weeds in peanuts.

100.1,.2

Application Methods/Directions/Rates

The seed bed should be firm and free of clods and trash. Thoroughly mix the previous crop residues into the soil to a depth of 4 to 6 inches by plowing or disking prior to application. Uniformly apply PROWL in 10 or more gallons of water per acre as a broadcast spray.*

1. PROWL may be applied immediately before planting peanuts or up to 60 days prior to planting. DO NOT APPLY PROWL AS A POSTEMERGENCE SPRAY.
2. Thoroughly incorporate PROWL into the top 1 to 2 inches of soil within 7 days after application. Mechanical incorporation is not required if a rain of more than one-quarter inch occurs within this 7 day period. (See directions below for listing or bedding.) Incorporation can be achieved by the following methods.
 - (a) Disk harrow set to cut 3 to 4 inches deep.
 - (b) Bed conditioners set to cut 2 to .3 inches deep.
 - (c) PTO-driven equipment (tillers, cultivators, hoes) set to cut 2 inches deep.
 - (d) Rolling cultivators set to cut 2 to 3 inches deep.

When PROWL is applied to flat land prior to listing or bedding, incorporation should be of sufficient depth (4 to 6 inches) so that listing does not bring up untreated soil. During planting, or if beds must be reshaped prior to planting, avoid tillage that will bring untreated soil to the surface or expose untreated soil in the furrow. Rotary-hoeing, shallow cultivation, or hand-hoeing can be practiced after application without reducing weed control. When mechanically incorporated, PROWL is not dependent upon rainfall for effective weed control.

*APPLICATIONS OF PROWL MADE WITH GROUND EQUIPMENT ONLY.

Preplant Incorporated Broadcast Rate of PROWL
Per Acre in Peanuts

REGION	PROWL
Texas and Oklahoma	1.0 to 1.5 pints .5 - .75 lbs. a.i./acre
Other peanut-growing states	.75 - 1.0 lbs. a.i./acre

The high rate listed for each region should be used if heavy weed populations are anticipated.

* 1 gallon contains 4 lbs. a.i.

100.3

WEEDS CONTROLLED

When used as directed, PROWL will control the following weed species:

Barnyardgrass
Crabgrass
Goosegrass
Signalgrass
Panicums
Crowfootgrass

Pigweed
Lambsquarters
Purslane
Carpetweed
Florida pusley

PROWL does not control ragweeds, prickly sida, sicklepod, hemp sesbania, morningglory or nutsedges.

101.0

CHEMICAL & PHYSICAL PROPERTIES

101.1

Chemical Name

[N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine]

101.2

Common Name

PROWL

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102.0 BEHAVIOR IN THE ENVIRONMENT

(See previous reviews)

103.0 TOXICOLOGICAL PROPERTIES

See previous reviews by N. Cook - 2/5/76, 2/19/76 and 8/21/75.

104.0 HAZARD ASSESSMENT

104.1 Discussion

104.1.1 Adequacy of data

Acceptable

104.1.2 Additional data required - See Conclusion 105.0

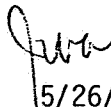
104.1.3 Likelihood of exposure to non-target organisms

See previous reviews by R. Felthousen and N. Cook.

105.0 CONCLUSIONS

1. Prior to consideration of registration of the proposed use, the following data must be submitted as per the new Section 3 Regulations and the proposed Guidelines:
 - a. An acute oral LD₅₀ for either 1 species of wild waterfowl or 1 species of upland game bird.
 - b. A 48-hr. LC₅₀ for an aquatic invertebrate.
2. Insert the statement "Do not apply when weather conditions favor drift from target areas "between".... streams or ponds." and Do not...disposal of wastes."

R. W. Felthousen
Environmental Safety
Efficacy and Ecological Effects Branch


5/26/76