

US EPA ARCHIVE DOCUMENT

DD-242  
3807

ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20560

003807

Date: September 4, 1973  
Reply to  
Attn of:

# 465/8

Subject: Human Safety Review

To: Mr. Lee TerBush, Acting Chief  
Coordination Branch  
Registration Division

File Symbol: 352-EXP-X Temporary Permit

DuPont de Nemours  
Wilmington, Del.

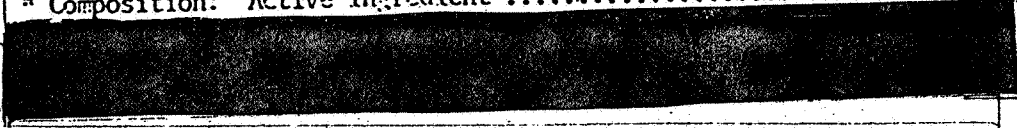
Registrant proposes this new chemical, Ammonium ethyl carbamoyl phosphonate (Kernite<sup>(tm)</sup>) for use in non-crop brush control situations. No food tolerances appear to be involved.

Toxicity data are submitted for the formulation\*:

Species	Route	LD50	Toxic Signs
Rat	Acute Oral	24,400 mg/kg	Respiratory distress; diarrhea & weight loss
Guinea Pig	Acute Oral	7380 mg/kg	Tremors, Pallor, convulsions
Rabbit	Dermal Irritation (single dose)	>1685 mg/kg	none observed systemically; transient, mild skin irritation

Direct ingredient information is not included

\* Composition: Active ingredient .....43%



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<u>Species</u>	<u>Route</u>	<u>LD<sub>50</sub></u>	<u>Toxic Signs</u>
Rat	Acute Inhalation	Male >56.6 mg/l air Female >42.0 mg/l air	none of significance CG
Rat	10 dose subcutaneous oral	2200 mg/kg/day for ten doses failed to elicit toxic signs	
Guinea Pig	Skin irritation & sensitization	neither an irritant nor a sensitizer at up to 50% on intact and abraded skin	
Rabbit	10 day skin exposure	0, 50% and 100% dilutions applied to occluded dorsal skin failed to induce signs of toxicity or alterations in blood ChE activity, hematology or histopathology.	

Comments

Krenite appears to be singularly non-toxic in animals.

Our only concern is that no acute ChE inhibition studies were done in order to more clearly define the potential hazard to users. Nevertheless, we find that the label signal word and precautionary statement is adequate for the temporary permit.

A ninety day rat feeding study is included; apparently registrant contemplates crop use at some future date, we therefore defer evaluation of this study until such time as residue tolerances are sought.

*David L. Ritter* 9/5/73  
David L. Ritter, Pharmacologist  
Toxicology Branch  
Registration Division

cc: DR, EEB, HEB, IRB, McCritchlow, GWhitmore, Division Reading File,  
Branch Reading File

DLRitter/km 09-05-73

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352-ETP-846 Krenette

003E07

ROUTING AND TRANSMITTAL SLIP		ACTION	
1 TO (Name, title, symbol or location)  David Ritter	INITIALS	CIRCULAR	
	DATE	COORDINATION	
2	INITIALS	FILE	
	DATE	INFORMATION	
3	INITIALS	NOTE AND RETURN	
	DATE	PER CONVERSATION	
4	INITIALS	SEE ME	
	DATE	SIGNATURE	

REMARKS

Please review and return to PCO room 211.

I believe that you reviewed this permit on 9/5/73. They have now asked for a change in the permit. The change consist of an aerial application use. Does this change anything from the Toxicology view point?

The new label attached, is identical to the original except for the addition of the aerial application use.

Don: no need to change anything - all Toxicity is in and material is OK for aerial application. Label Safety statements are adequate. D. Ritter

Do NOT use this form as a RECORD of approvals, concurrences, disapprovals, clearances, and similar actions. 2/12/74

FROM (Name, title, symbol or location)  Ronald Stubbins # 211	DATE	2/13/74
	PHONE	62601

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