

US EPA ARCHIVE DOCUMENT



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

1-3-90

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No./File Symbol 279-GNTR  
Commandet 4 E Herbicide

FROM: William S. Woodrow WSW 12-19-89  
Precautionary Review Section E 1/3/90  
Registration Support Branch  
Registration Division (H7505C)

TO: Robert Taylor (PM 257)  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

APPLICANT: FMC Corporation  
Agricultural Chemicals Group  
Philadelphia, PA 19103

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
<u>clomezone: 2-(2-Chlorophenyl)methyl-4-</u>	<u>47.1</u>
<u>4-dimethyl-3-isoxazolidinone</u>	<u>52.9</u>
<u>Inert Ingredient(s):</u>	<u>52.9</u>
Total	100.0%

## BACKGROUND:

An April 13, 1988 FMC Corp. letter to Robert Taylor questioned the EPA justification for requiring a DANGER signal word on the Commander 4 E Herbicide label, and the accompanying statement "Causes skin burns." Woodrow obtained the original study listed under Accession NO. 265608, FMC Lab. NO. A86-2153 and re-reviewed the study to double-check the EPA original decisions.

## RECOMMENDATION:

- 1) The primary dermal irritation study submitted by FMC to support Commander 4 EC Herbicide registration is acceptable to RSB/PRS, and is hereby placed in Toxicity Category III. The Primary Irritation Index for this study was determined to be 1.5. At 72 hours post patch removal, the average irritation score was 1.6.
- 2) No additional acute toxicity studies are required for Commander 4 EC Herbicide;  
Acute toxicity profile:

## Commander 4 EC Herbicide

	Toxicity Category
Acute oral	III
Acute dermal	III
Acute Inhalation	III
Primary eye irritation	III
" dermal "	III
Dermal sensitization	—
not a dermal sensitizer	

### LABELLING:

- 1) Change the WARNING signal word to read "CAUTION".
- 2) The Precautionary Statements are appropriate
- 3) Under Statements of Practical Treatment, if on skin, add "Get medical attention".

DATA REVIEW JR SKIN IRRITATION TESTING (81-5)

Product Manager: (25)  
 MRID No.: Acc. # 265608  
 Testing Laboratory: EMC TOX. Lab., Princeton NJ  
 Author(s): Christina Fieeman  
 Species: Rabbit, N 2 white

Reviewer: Woodrow M. Waller  
 Report Date: 12-19-89  
 Report No.: A86-2153

Age: young adult  
 Sex: 3m x 3f  
 Weight: 2.4-2.72 Kg.  
 Dosage: 0.5 ml

2-(2-Chlorophenyl) methyl-4,  
 4-dimethyl-3-isoxazolid-  
 none  
 44.4%

Test Material: Commander 4 EC (Clonazone A.I.), liquid  
 Quality Assurance (40 CFR §160.12): Adequate

Summary:

The Primary Irritation Index = 1.5

Toxicity Category: III

Classification: Guidelines

Procedure (~~Deviations From 81-5~~): 0.5ml undiluted test material introduced under 2" x 8 ply gauze pads on clipped backs of 3m x 3f rabbits; pads secured w/ tape. Entire trunk w/ semi-occlusive bandage, secured w/ tape. 4 hours contact - unwrapping removed, sites wiped w/ methanol & water. Body weights day 0.

Results: Drainage system removed 30 minutes after unwrapping, scoring for erythema & edema against 24, 48, 72 hours, and daily until 14 days. Max score of 4 for erythema, and 4 for edema (total possible max. score of 8.0).

Irritation scores:	Day 4	Day 11
4.5 hrs - 0.3	4 - 2.9	11 - 0.8
24.0 hrs - 1.4	5 - 3.2	12 - 0.6
48.0 hrs - 1.5	6 - 2.3	13 - 0.3
72.0 hrs - <b>1.6</b>	7 - 1.8	14 - 0.0
Special Comments:	8 - 1.4	
	9 - 0.3	
	10 - 0.8	

"Moderate irritation at 72 hours (moderate erythema)"  
 Tox. Cat. III

Tox Chem No. 4630 Commander File Last Updated \_\_\_\_\_ Current Date 12-19-89

Study/Lab/Study #/Date	Material	EPA Accession No.	LD50, LC50, PIS, NOEL, LEL	Results:	TOX. CONC. Grade/Cat. Doc. No.
Primary dermal irritation, Rabbit. FMC Tox. Lab. # A86-2153 10-16-86	Commander 4 EC	Acc. # 265608	P.F. Inducts 1.5	"Moderate irritation at 72 hours (moderate erythema)"	111 Guidelines