3-7-90

363A

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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES
March 1st, 1990

MEMORANDUM

SUBJECT: EPA Reg. No./File Symbol 241-239
AVENGE

FROM: Olga Odiott O Odiott 3/7/90
Precautionary Review Section
Registration Support Branch
Registration Division (H75-05C)

TO: Joanne Miller (PM 23)
fungicide-Herbicide
Registration Division (H75-05C)

APPLICANT: American Cyanamid Company
Agricultural Research Division
P.O. Box 400
Princeton, NJ 08540

FORMULATION FROM LABEL:

	Active Ingredient(s):	% by wt.
363A	difenzoquat methyl sulfate	16.6 %
	Inert Ingredient(s):	83.4 %
	Total	100.0%

1/7

BACKGROUND: Acute oral and primary eye irritation studies were submitted to comply with the requirements for the Difenzoquat Methyl Sulfate Registration Standard. The studies were conducted at American Cyanamid Corporation. MRID No. 413005-02 and 413005-01.

RECOMMENDATION: RSB/PRS finds the studies acceptable to support Registration of 241-239. The signal word is DANGER, based on eye irritation.

The product's registration jacket does not contain data or reference to data on skin sensitization, acute inhalation or acute dermal as required by the Difenzoquat Registration Standard (See III B.1) These studies are required.

Labeling:

Proposed label changes are satisfactory.

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DATA REVIEW FOR ACUTE ORAL TOXICITY TESTING (§81-1)

Product Manager: (23)
MRID No.: 413005-02
Testing Facility: American Cyanamid Comp.
Author(s): Joel E. Fischer
Species: albino rat ; Sprague-Dawley derived
Age: young adult (5-6 weeks)
Weight:
Source: Charles River Lab. Inc. Wilmington MA
Test Material: Difenzoquat ; AVENGE
Quality Assurance (40 CFR §160.12): attached.

Reviewer: O. Odiott
Report Date: Oct. 9, 1989
Report No. A89-195

Observation Days (Post Exposure): (14); other ( )

Conclusion:

1. LD_{50} (mg/kg): Males = 617 (497-760) mg/kg ; Females = 373 (266-524) mg/kg ; Combined = 485 (372-630) mg/kg.
2. The estimated LD_{50} is
3. Tox. Category: II . Classification: Guideline

Procedure (Deviations From §81-1):

Results:

Reported Mortality

DOSAGE (/kg)	(NUMBER KILLED/NUMBER TESTED) Males	Females	Combined
200 mg/kg	0/5	0/5	0/10
400 mg/kg	0/5	3/5	3/10
800 mg/kg.	4/5	5/5	9/10

Symptomology & Gross Necropsy Findings:

Decreased activity, salivation, diuresis and prostration were observed. At necropsy congested liver and kidneys, enlarged intestines fill with fluids & vascularized stomachs were noted.

DATA REVIEW FOR ACUTE EYE IRRITATION TESTING (§81-4)

Product Manager: (23)
MRID No.: 413005-01
Testing Laboratory: American Cyanamid Co
Author(s): Joel E. Fisher
Species: New Zealand white rabbit
Sex: 6 males/ Weight:
Source: Skippack Farms, Skippack, Pennsylvania
Dosage: 0.1 gm
Test Material: NIENGE
Quality Assurance (40 CFR §160.12): attached

Reviewer: O. Odiott
Report Date: Feb. 7, 1989
Report No. A-88-128

Summary:

Tox. Category: I Classification: Guideline

Procedure (Deviation From §81-4):

Results:

	Observations (number "positive"/number tested)							
	Hour	Days						
	1	1	2	3	4	7	14	21
Cornea Opacity	0/6	5/6	5/6	5/6	3/6	1/6	1/6	1/6
Iris	0/6	0/6	0/6	0/6	1/6	1/6	0/6	0/6
Conjunctivae Redness	0/6	0/6	2/6	2/6	2/6	1/6	0/6	0/6
Chemosis	6/6	5/6	3/6	2/6	2/6	2/6	0/6	0/6
Discharge	6/6	5/6	4/6	2/6	2/6	2/6	0/6	0/6
slight vascularization of the cornea.	0/6	0/6	0/6	0/6	0/6	1/6	1/6	1/6

Comments:

AVENGE (DIFENZOQUAT)

Page_____ is not included in this copy.

Pages 5 through 7 are not included.

The material not included contains the following type of information:

____ Identity of product inert ingredients.

____ Identity of product impurities.

____ Description of the product manufacturing process.

____ Description of quality control procedures.

____ Identity of the source of product ingredients.

____ Sales or other commercial/financial information.

X A draft product label.

____ The product confidential statement of formula.

____ Information about a pending registration action.

____ FIFRA registration data.

____ The document is a duplicate of page(s) _____.

____ The document is not responsive to the request.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.