

US EPA ARCHIVE DOCUMENT

2-28-91



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No./File Symbol 59-231

Exspot for Dogs

FROM: Lucy D. Markarian *ly 11/29/90*
Precautionary Review Section
Registration Support Branch
Registration Division (H75-05C)

E 2/28/91

TO: George LaRocca (PM 157)
Insecticide - Rodenticide
Registration Division (H75-05C)

APPLICANT: Coopers Animal Health, Inc
2000 South 11th Street
Kansas City KS 66103

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
<u>Permethrin (3-phenoxyphenyl)methyl (I)-cis,trans-3-(2,2-dichloroethyl)-2,2-dimethyl cyclopropane carboxylate</u>	<u>65.0</u>
_____	_____
_____	_____
<u>Inert Ingredient(s):</u>	<u>35.0</u>
Total	100.0%

BACKGROUND: Coopers Animal Health Inc. has applied to revise the precautionary labeling of the product Exspot for Dogs registered under EPA symbol 59-231. The present signal word is "Warning" based on the eye irritation study reviewed 5/27/89 and found to be in category II. Conjunctival irritation had persisted a over 7 days. The applicant claims that "Due to formulation ingredients and our familiarity with permethrin formulations, the original category II eye irritation result for this product seemed unusual." Therefore two new eye studies are submitted, one performed at the same laboratory as before and one at a different one to support this claim.

RECOMMENDATION:

Both studies support Coopers Animal Health's claim that the eye irritation is not severe enough to warrant "Warning" as the signal word. Both studies initially indicate grade 2 redness at 1 hr, but no corneal opacity orritis. In the study performed at the same laboratory as before Grade 2 redness persists to 24 hrs and in the second study ~~done~~ elsewhere the redness is Grade 1 at 24 hrs. Grade 1 redness clears on day 4 at the original laboratory and by day 7. Both studies are guideline data.

Label

The signal word is changed to "Caution"
The precautionary statement must be revised: Delete "Causes substantial but temporary eye injury + wear goggles face shield or safety glasses and in its place insert - causes moderate eye irritation, avoid contact with eyes.

The statement of practical treatment is adequate as it stands

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

Product Manager: (15) Reviewer: L. Markarian
 MRID No.: 416839-01 Report Date: 11/28/90
 Testing Laboratory: Stillmeadow, Inc. Report No. 6951-50 & P15140-90
 Author(s): E.P. Miller, J.E. Dyer, J.V. Grissom, J.O. Kahn
 Species: Rabbit, New Zealand white
 Sex: 3 ♂ + 3 ♀ Weight: not specified
 Source: Ray Nichols rabbitry, Lumberton, Texas
 Dosage: 0.1ml
 Test Material: Eyspot (65% permethrin) amber liquid
 Quality Assurance (40 CFR §160.12): included

Summary:

Tox. Category: III Classification: core guideline

Procedure (Deviation From §81-4): Undiluted test material was instilled in the conjunctival sac of preexamined left eyes of rabbits. The eyes were scored according to Draize at 1, 2, 4, 8, 12, 16 and 21 days and 7. Fluorescein was used to confirm the findings at 24 hrs.

Results:

	Observations (number "positive"/number tested)							
	Hour	Days						
	1	1	2	3	4	7	14	21
Cornea Opacity	0/6	0/6	0/6	0/6	0/6	0/6		
Iris	0/6	0/6	0/6	0/6	0/6	0/6		
Conjunctivae Redness	6/6	6/6*	6/6*	3/6*	1/6*	0/6		
Chemosis	6/6	6/6*	0/6	0/6	0/6	0/6		
Discharge	5/6	0/6	0/6	0/6	0/6	0/6		

*grade I

Comments: _____

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

Product Manager: (15) Reviewer: L. Markarian
 MRID No.: 216839-02 Report Date: 11/28/90
 Testing Laboratory: T.P.S. Inc. Report No. 409A-301-912-90
 Author(s): E.P. Miller, J.E. Dyer, J.V. Grissom, A.S. Mick P151-41-90
 Species: Rabbit, New Zealand White
 Sex: 6 ♂ Weight: 2.59 - 2.75 Kg
 Source: _____
 Dosage: _____
 Test Material: Exspot (65% Permethrin) Batch P151-86-0080-112
 Quality Assurance (40 CFR §160.12): included

Summary:

Tox. Category: III Classification: Low guideline

Procedure (Deviation From §81-4): Undiluted test material was instilled in the conjunctival sac of the eye. Observations were at 1, 2, 4, 8, 12 & 16 hrs according to Draize. Observations were made with the naked eye and ophthalmoscope

Results:

	Observations (number "positive"/number tested)							
	Hour	Days						
	1	1	2	3	4	7	14	21
Cornea Opacity	0/6	0/6	0/6	0/6	0/6			
Iris	0/6	0/6	0/6	0/6	0/6			
Conjunctivae Redness	6/6	6/6	6/6*	6/6*	0/6			
Chemosis	6/6*	6/6*	6/6*	0/6	0/6			
Discharge	6/6*	6/6*	0/6	0/6	0/6			

*=Grade 1

Comments: _____

Tox Chem No: 652 BB
Permethrin

File Last Updated _____

Current Date 11/28/90

Study/Lab/Study #/Date	Material	EPA Accession No.	Results: LD50, LC50, PIS, NOEL, LEL	TOX. CORE Grade/Cnt, Doc. No.
Acute Eye Irritation Stillmeadow Inc. 4525 Town Park Dr. Houston, TX 6951-50 8/9/90 P151-40-90	Exspot 65% Permethrin	416834-01	All irritation cleared by Day 7	III Guideline
Acute Eye Irritation T.P.S. Inc. 10424 Middle HT. Vernon Rd Mount Vernon, IN 47620 409A-301-912-90 8/5/90 P151-41-90	Exspot 65% Permethrin	416834-02	All irritation cleared by Day 7	III Guideline