

US EPA ARCHIVE DOCUMENT

DP Barcode : D183447
PC Code No : 109303
EEB Out :

MAY 27 1993

To: George LaRocca PM13
Product Manager
Registration Division (H7505C)

From: Douglas J. Urban, Acting Chief
Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : 352-515
Chemical Name : ESFENVALERATE
Type Product : INSECTICIDE
Product Name : ASANA XL
Company Name : DUPONT
Purpose : REVIEW STUDIES SUBMITTED AS 6A2

Action Code : 405 Date Due : 01-20-93
Reviewer : MIACHEL REXRODE Date In EEB: 10-15-92

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)			72-2(A) TECH.	42496202		72-7(A)		
71-1(B)			72-2(B) FORM.	42496201		72-7(B)		
71-2(A)			72-3(A)			122-1(A)		
71-2(B)			72-3(B)			122-1(B)		
71-3			72-3(C)			122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)			72-4(B)			124-2		
72-1(B)			72-5			141-1		
72-1(C)			72-6			141-2		
72-1(D)						141-5		

Y=Acceptable (Study satisfied Guideline)/Concur
P=Partial (Study partially fulfilled Guideline but additional information is needed)
S=Supplemental (Study provided useful information but Guideline was not satisfied)
N=Unacceptable (Study was rejected)/Nonconcur

DP BARCODE: D183447

CASE: 037980
SUBMISSION: S427269

DATA PACKAGE RECORD
BEAN SHEET

DATE: 10/15/92
Page 1 of 1

*** CASE/SUBMISSION INFORMATION ***

CASE TYPE: REGISTRATION ACTION: 405 6(A)(2) ADVERSE DATA
CHEMICALS: 109303 Fenvalerate 84.0000%
109301 Fenvalerate 08.4000%

ID#: 000352-00515 DUPONT ASANA XL INSECTICIDE
COMPANY: 000352 E. I. DU PONT DENEMOURS AND CO, INC
PRODUCT MANAGER: 13 GEORGE LARocca 703-305-6100 ROOM: CM2 204
PM TEAM REVIEWER: ADAM HEYWARD 703-305-5021 ROOM: CM2 202
RECEIVED DATE: 09/30/92 DUE OUT DATE: 12/09/92

*** DATA PACKAGE INFORMATION ***

DP BARCODE: 183447 EXPEDITE: Y DATE SENT: 10/14/92 DATE RET.: / /
CHEMICAL: 109303 Fenvalerate
DP TYPE: 001 Submission Related Data Package
ADMIN DUE DATE: 11/08/92 CSF: N LABEL: N

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	10/15/92	/ /
BRAN: EEB	10/15/92	/ /
SECT: RS1	/ /	/ /
REVR :	/ /	/ /
CONTR:	/ /	/ /

*** DATA REVIEW INSTRUCTIONS ***

Attached for your review 6(a)2 data for Asana XL to Daphnia magna.

*** ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION ***

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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IMPORTANT

6(A)2
DATA



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MAY 27 1993

MEMORANDUM

SUBJECT: 6(a)(2); Follow-up to Submissions of Acute Daphnia magna Study

FROM: Anthony F. Maciorowski, Chief *A. F. Maciorowski*
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

TO: George LaRocca, PM-13
Registration Division

The registrant, DuPont, made a submission under FIFRA Section 6(a)(2) in reference to an acute Daphnia magna toxicity study on ASANA (esfenvalerate). The study (MRID: 41798301) was not scientifically sound and could not be used to satisfy registration requirements (problems with analytical measurements). In response to this Agency action, DuPont has submitted two new studies. One study measures effects of technical grade esfenvalerate on daphnids, while the other study is an evaluation of the toxicity of formulated ASANA XL on daphnids. The new data were reviewed as follows:

72-2: Freshwater Invertebrate Static-Renewal Acute Toxicity Study (Daphnia magna). MRID # 424926-01. This study is scientifically sound but does not meet Guideline Requirements. The study was conducted on the formulation and shows that ASANA XL is highly toxic to Daphnia magna with a 48-hour EC50 = 0.33 ug/L. The NOEC, after 48 hours, was calculated at 0.067 ug/L.

72-2: Freshwater Invertebrate Static-Renewal Acute Toxicity Test (Daphnia magna). MRID # 424926-02. This study is scientifically sound and will fulfill Guideline Requirements for an acute toxicity test using freshwater invertebrates. ASANA technical is highly toxic to Daphnia magna with a 48-hour EC50 = 0.24 ug/L. The NOEC, after 48 hours, was 0.044 ug/L.



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These studies show that the formulated product and technical active ingredient of ASANA are highly toxic to freshwater aquatic invertebrates (daphnids). This information will be added to the Agency's existing esfenvalerate data base but does not change EEB's level of concern for this compound. ASANA has the potential for toxic impact to aquatic ecosystems, as well as, possible indirect affects to certain waterfowl by a reduction in their aquatic food base (Rexrode 305-5578).