DP Barcode: D155856
Shaughnessy No.: 090301
Date Out of EFGWB:
DEC 13 1990

TO: Dennis Edwards, Jr./Rita Kumar
Product Manager #12
Registration Division (H7505C)

FROM: Emil Regelman
Supervisory Chemist, Review Section #2
OPP/EFED/EFGWB (H7507C)

THROUGH: Henry Jacoby, Chief
OPP/EFED/EFGWB (H7507C)

Attached, please find the EFGWB review of:

Reg./File #(s) : 000352-00370

Common Name : Methomyl

Chemical Name : S-Methyl-N-[(methylcarbamoyl)oxy]thioacetimidate

Product Type : Insecticide

Product Name : Lannate, Lanox 90, Lanox 216, Nu-Bait II, Nudrin, SD-14999 DPX-X1179

Company Name : E. I. Du Pont De Nemours and Company, Inc. (000352)

Purpose : Review/comment on a Terrestrial Field Dissipation Study

Date Received: 9/19/1990 EFGWB #(s): 90-0886

Date Completed: 11/27/1990

Total Reviewing Time: 1 day

Deferrals to:

_____Ecological Effects Branch/EFED

_____Science Integration & Policy Staff/EFED

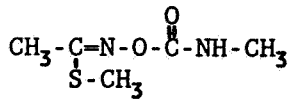
_____Non-Dietary Exposure Branch/HED

_____Dietary Exposure Branch/HED

_____Toxicology Branch I, II/HED

1. CHEMICAL:

Chemical Name: S-Methyl-N-[(methylcarbamoyl)oxy]thioacetimidate
CAS No.: 16752-77-5
Common Name: Methomyl
Trade Name: Lannate, Lanox 90, Lanox 216, Nu-Bait II, Nudrin, SD-14999, DPX-X1179
Chemical Structure:



Molecular Formula: $C_5H_{10}N_2O_2S$
Physical/Chemical Properties of Active Ingredient:

Molecular Weight: 162.21 g/mol
Physical state: crystalline solid
Color: white
Odor: slightly sulfurous
Vapor pressure: 5.0×10^{-5} torr
Water solubility at 20 °C: 58,000 ppm
Octanol/water partition coefficient (log): 0.11
Formulations: Formulated predominantly into a 90% ai water soluble powder and a 1.8% and 2.4% ai liquid. Other registered formulations include dusts (1.5%-2.5% ai), granulars (1.0-5.0%), and baits (1.0-2.5% ai).

2. TEST MATERIAL:

The test substance used in the study was Lannate^R L formulated in a 24% water-soluble liquid containing 1.8 lbs of the active ingredient methomyl per gallon.

3. STUDY/ACTION TYPE:

Review/comment on a Terrestrial Field Dissipation study (#164-1).

4. STUDY IDENTIFICATION:

Letter from Dr. Charles S. Baer -- U. S. Registration Specialist, Registration and Regulatory Affairs, E. I. Du Pont De Nemours and Company, Inc. -- submitting a Field Dissipation study. (Copy of the letter is attached to this review)

Kennedy, S. Marcus. November 10, 1989. Field Soil Dissipation of Lannate^R Insecticide. Study performed by Morse Laboratories, Inc., Sacramento, CA (Lab. Project ID ML88-0078-DUP) and submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE (Du Pont Project ID AMR-1215-88). (MRID #416239-01)

Kennedy, S. Marcus. November 10, 1989. Supplement to Field Soil Dissipation of Lannate[R] Insecticide. Study performed by Morse Laboratories, Inc., Sacramento, CA (Lab. Project ID ML88-0078-DUP) and submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE (Du Pont Project ID AMR-1215-88). (MRID #416239-02)

5. REVIEWED BY:

María Isabel Rodríguez
Chemist, Review Section #2
OPP/EFED/EFWGB

Signature: María Isabel Rodríguez
Date: November 27, 1990.

6. APPROVED BY:

Emil Regelman
Supervisory Chemist
Review Section #2
OPP/EFED/EFWGB

Signature:
DEC 13 1990
Date:

7. CONCLUSIONS:

Since the Soil Field Dissipation (#164-1) requirement had been previously fulfilled with the submission of two acceptable studies, only a screening of the study was performed.

Lannate[R] L insecticide was applied to a sandy loam soil test site planted with Copenhagen cabbage in Madera, CA. A worst-case scenario was created by applying 9 lbs ai/A (144 oz ai/A) of a 24% water-soluble liquid containing 1.8 lbs of the active ingredient methomyl per gallon.

Samples from the treatment and control plots were collected immediately before application and within six hours after application. Thereafter, samples were taken 3, 7, 15, 30, 44, 59, 75, 92, 120, 150, 181, 210, 238, and 272 days after the test substance was applied. A sampling depth of 90 cm was chosen for the study. Soil samples were analyzed for residues of methomyl by High Performance Liquid Chromatography (HPLC) (SP8450-2 and SP8770-2) using a UV detector at 233 nm. The mobile phase used was 84% water, 15% acetonitrile, 1% acetic acid. The detection limit was 0.020 ppm.

The calculated half-life for methomyl in the soil tested was 54 days. Methomyl's mobility in soil is low to moderate. Primarily, methomyl remains in the top 15 cm of soil, with a deepest consistent soil penetration of 15-30 cm.

The calculated half-life value was higher than found in previous studies and the registrant attributes this to the low moisture content of the soil, which reduces its bioactivity.

Results indicate that only the parent compound was monitored in the study.

Roundup[R] (glyphosate) was applied to the plots at a rate of 2.48 lb ai/A approximately 6 months after the methomyl application in order to control weeds.

A method validation was conducted prior to sample analyses. Recoveries ranged from 94 to 102%.

Average methomyl residues were 2.62 ppm on day 0, increased to 4.77 ppm on day 3, fluctuated between 2.99 and 0.161 ppm from day 7 to day 238. By day 272, methomyl residues had declined to 0.065 ppm.

A study of the stability of residues in frozen soil samples is currently ongoing and the registrant reported that the data obtained to date indicate that methomyl residues are stable for at least six months in the soils tested when frozen at approximately -20 °C. The freezer storage stability study will be provided upon completion.

It is known that methomyl degrades rapidly by microbial action in the soil. However, in this study the extremely low moisture (2.5-17.2% with an average moisture of 10.7%) reduced the bioactivity of the soil. Therefore, the half-life of methomyl was longer than predicted in laboratory studies and reported in previous studies.

Previous acceptable studies showed the following results:

1. At 4 lbs ai/A application, methomyl decreased from 91% at day 0 to 55% at day 15, and to 33% at 30 days. Methomyl decomposed in a sandy loam soil in a greenhouse with a half-life of less than 30 days, although the cause of decomposition, microbial or physico-chemical, could not be determined from this study because there was no sterile control soil and no measurement of $^{14}CO_2$, and the incubation was presumably in the light in the greenhouse.[1]

2. In light textured soils, methomyl will not leach more than 11 and 15 inches over 3 and 5 months, respectively. Very little surface runoff of methomyl will be expected to occur from sandy soils under normal field use conditions. Methomyl would likely remain in the upper 6 inches of treated soil.[2]

3. No residues were detected in muck soil (52% organic matter; pH 5.4) 7-32 days after application.[3]

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[1] Harvey, J., Jr. Decomposition of ^{14}C-methomyl in a sandy loam soil in the greenhouse. 1977. Unpublished study prepared in cooperation with the University of Delaware, Soil Testing Laboratory and submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE. (CDL: 096026-A). Reviewed in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[2] Harvey, J., Jr. and Pease, H. L. Decomposition of methomyl in soil. 1971??? Unpublished study submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE. (CDL: 229711-D). Included in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[3] Methomyl decomposition in muck soil -- a field study. 1971. E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE. (CDL: 222971-F). Included in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

4. In silt-loam soil, 98% of the methomyl dissipated within a month.[4]

5. In loamy sand soil, 85% of the methomyl dissipated after 5 months.[5]

8. RECOMMENDATIONS:

The registrant, E. I. Du Pont De Nemours and Company, Inc., should be informed that the submitted Soil Field Dissipation study (#164-1) is acceptable. Since the Soil Field Dissipation data requirement had been previously fulfilled, a complete data evaluation record (DER) was not performed on this study; only a screening was done. However, the new information was thoroughly integrated into EFGWB chemical file as well as in the one-liner database. Please refer to the Conclusions Section (Section 7 of this review) for more details.

9. BACKGROUND:

Methomyl is a carbamate insecticide registered for control of a variety of pests, including many lepidopteran larvae. Approximatedly 70-80% of methomyl is used on soybeans, peanuts, cotton, and tobacco, although other registered sites include certain vegetables, fruits, field crops, and commercial ornamentals. A water-soluble powder (90% ai) and water-soluble liquids (1.8 and 2.4 lb ai/gallon) are the predominant formulations. Other registered formulations include dusts (1.25-2.5% ai), granulars (1-5% ai), and baits. The pesticide is applied as a foliar treatment with aircraft (fixed-wing and helicopters) and ground equipment, including airblast sprayers, and hydraulic sprayers with a single wand (gun) or boom.

The general use-patterns for methomyl are terrestrial non-food, terrestrial food, and aquatic non-food uses. The environmental-fate data-requirements, according to 40 CFR, Part 158.290, and their status are presented in the last page of the review.

10. DISCUSSION OF INDIVIDUAL STUDIES:

See the attached data evaluation record.

11. COMPLETION OF ONE-LINER:

The one-liner database was updated with this review.

12. CBI INDEX:

No claim of confidentiality was made for any information contained in the

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[4] Exposure of S-methyl N-phenyl(methylcarbamoyl)oxylthioacetimidate in sunlight, water, and soil. 1964??? Unpublished study submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE (CDL: 091179-V). Included in the document: Methomyl Task 1. Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[5] EFGWB one-liner database.

study on the basis of its falling within the scope of FIFRA 10 (d)(1)(A),(B) or (C). The submitted information is considered TRADE SECRET information by the registrant.

METHOMYL

Data Requirements and Guidelines Reference #	Status
1. Degradation studies	
a. Hydrolysis (161-1)	Acceptable
b. Photodegradation in water (161-2)	Acceptable
c. Photodegradation on soil (161-3)	Acceptable
d. Photodegradationin in air (161-4)	Supplemental
2. Metabolism studies	
a. Aerobic soil (162-1)	Acceptable
b. Anaerobic soil (162-2)	Acceptable
c. Anaerobic aquatic (162-3)	Required
d. Aerobic aquatic (162-4)	Required
3. Mobility studies	
a. Leaching and adsorption/desorption (163-1)	Supplemental
b. Volatility	
-Lab (163-2)	Required
-Field (163-3)	Required
4. Dissipation studies - field	
a. Soil (164-1)	Acceptable[1]
b. Aquatic sediment (164-2)	Required
5. Accumulation studies	
a. Rotational crops	
-Confined (165-1)	Acceptable
b. Irrigated crops (165-3)	Required
c. In fish (165-4)	Acceptable
d. In aquatic non-target organisms (165-5)	Acceptable
6. Spray drift[2]	
a. Droplet size spectrum (201-1)	Reserved[3]
b. Drift field evaluation (202-1)	Reserved[3]
7. Ground water monitoring study	Supplemental[4]

1 Although the data requirement has been previously fulfilled (with the two required studies), the registrant submitted a new one (this review).
2 Data requirements according to 40 CFR, Part 158.440, section on spray drift data requirements.
3 Reserved pending review on oxamyl for acceptability and suitability for use as surrogate data for methomyl.
4 Required because the detection of methomyl in ground water has been confirmed but data are insufficient to assess the extent and degree of ground water contamination.

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DP BARCODE: D155856

CASE: 047860
SUBMISSION: S382428

DATA PACKAGE RECORD
BEAN SHEET

DATE: 09/24/9
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: ~~DATA - ADVERSE DATA~~
CHEMICAL: 090301 Methomyl (S-methyl N-((methylcarbamoyl)oxy)thioacetimidate
ID#: 000352-~~00370 DU PONT~~ LANNATE L METHOMYL INSECTICIDE
COMPANY: 000352 E. I. DU PONT DENEMOURS AND COMPANY, INC.
PRODUCT MANAGER: 12 DENNIS JR EDWARDS 703-557-2386 ROOM: CM#2 202
PM TEAM REVIEWER: RITA KUMAR 703-557-4416 ROOM: CM#2 202B
RECEIVED DATE: 09/19/90 DUE OUT DATE: 11/28/90

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 155856 EXPEDITE: N DATE SENT: 09/24/90 DATE RET.: / /
DP TYPE: 001 Submission Related Data Package
ADMIN DUE DATE: 10/19/90 CSF: N LABEL: N

ASSIGNED TO	DATE IN	ASSIGNED TO	DATE IN
DIV : EFED	09/24/90	REVR :	/ /
BRAN: EFGB	/ /	CONTR:	/ /
SECT:	/ /		

* * * DATA PACKAGE REVIEW INSTRUCTIONS * * *

Please review/comment on submitted data.

THERE ARE NO ADDITIONAL DATA PACKAGE RECORDS

Sect 2
10/19

This is not an adverse action

#90-0886

Maria

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Table of Contents

Introduction:

Methomyl is a carbamate insecticide registered for control of a variety of pests, including many lepidopteran larvae. Approximatedly 70-80% of methomyl is used on soybeans, peanuts, cotton, and tobacco, although other registered sites include certain vegetables, fruits, field crops, and commercial ornamentals. A water-soluble powder (90% ai) and water-soluble liquids (1.8 and 2.4 lb ai/gallon) are the predominant formulations. Other registered formulations include dusts (1.25-2.5% ai), granulars (1-5% ai), and baits. The pesticide is applied as a foliar treatment with aircraft (fixed-wing and helicopters) and ground equipment, including airblast sprayers, and hydraulic sprayers with a single wand (gun) or boom.

Data Evaluation Record

Soil Field Dissipation Study

Chemical #090301 40 CFR, Part 164-1

Methomyl

Formulation: WP

Study ID #416239-01
Kennedy, S. Marcus. November 10, 1989. Field Soil Dissipation of Lannate[R] Insecticide. Study performed by Morse Laboratories, Inc., Sacramento, CA (Lab. Project ID ML88-0078-DUP) and submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE (Du Pont Project ID AMR-1215-88).

Study ID #416239-02
Kennedy, S. Marcus. November 10, 1989. Supplement to Field Soil Dissipation of Lannate[R] Insecticide. Study performed by Morse Laboratories, Inc., Sacramento, CA (Lab. Project ID ML88-0078-DUP) and submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE (Du Pont Project ID AMR-1215-88).

Reviewed by: María Isabel Rodríguez
Title: Chemist
Organization: EPA/OPP/EFED/EFGWB/Section #2
Telephone #: 703-557-7495

Signature: María Isabel Rodríguez

Date: November 27, 1990.

Conclusions/reviewer's comments:

Since the Soil Field Dissipation (#164-1) requirement had been previously fulfilled with the submission of two acceptable studies, a complete data evaluation record (DER) was not performed. Therefore, only a screening of the study was performed.

The study was conducted in order to provide data to evaluate the degradation, mobility, and dissipation of methomyl in soil under field conditions.

Lannate^{R} L insecticide was applied to a sandy loam soil test site planted with Copenhagen cabbage in Madera, CA. The target crop was planted 22 days before the insecticide application. The cabbage was in the 3-5 leaf stage of development at the application time.

A worst-case scenario was created by applying 9 lbs ai/A (144 oz ai/A) with a CO_2 backpack sprayer to three replicate treatment plots. One untreated control plot was also established. This application rate is equivalent to the maximum label rate times the maximum number of field applications typically used in a growing season. The formulation used was a 24% water-soluble liquid containing 1.8 lbs of the active ingredient methomyl per gallon.

Samples from the treatment and control plots were collected immediately before application and within six hours after application. Thereafter, samples were taken 3, 7, 15, 30, 44, 59, 75, 92, 120, 150, 181, 210, 238, and 272 days after the test substance was applied.

A soil TLC study rated methomyl as a class 3, intermediate mobility compound. Therefore, in order to assure sampling below the deepest level where methomyl occurs, a sampling depth of 90 cm was chosen for the study.

The harvested samples were bagged, labeled, processed, and kept frozen (at approximately -20 °C) until analysis. Prior to analysis, the soil cores were segmented and composited by sampling time, replicate number, and segment depth. Soil samples were extracted with ethyl acetate for 15 minutes in a wrist-action shaker and filtered. The extraction and filtration procedure was repeated two more times, and the combined extract was evaporated to 5 mL. Silica gel cleanup was used only when a clean extract was needed for high performance liquid chromatography (HPLC) analysis. The detection limit was 0.020 ppm. Soil samples were analyzed for residues of methomyl by HPLC (SP8450-2 and SP8770-2) using a UV detector at 233 nm. The mobile phase used was 84% water, 15% acetonitrile, 1% acetic acid.

The calculated half-life for methomyl in the soil tested was 54 days. Methomyl's mobility in soil is low to moderate. Primarily, methomyl remains in the top 15 cm of soil, with a deepest consistent soil penetration of 15-30 cm.

The calculated half-life value was higher than found in previous studies and the registrant attributes this to the low moisture content of the soil, which reduces its bioactivity.

Results indicate that only the parent compound was monitored in the study.

Roundup^{R} (glyphorate) was applied to the plots at a rate of 2.48 lb ai/A approximately 6 months after the methomyl application in order to control weeds.

The amount of methomyl residue in the sample was calculated using the following equation:

$$ppm = ng/mg$$

where

ppm = parts per million of methomyl in the sample
ng = ng of methomyl from the standard curve based on peak height response of extract
mg = mg of sample extract injected into the HPLC

A method validation was conducted prior to sample analyses. Percent recoveries were calculated using the following equation:

$$\% \text{ Rec} = \frac{(\text{ppm methomyl in spike sample} - \text{ppm methomyl in check sample})}{\text{Fortification level (ppm)}} \times 100$$

Recoveries ranged from 94 to 102%.

Average methomyl residues were 2.62 ppm on day 0, increased to 4.77 ppm on day 3, fluctuated between 2.99 and 0.161 ppm from day 7 to day 238. By day 272, methomyl residues had declined to 0.065 ppm.

A study of the stability of residues in frozen soil samples is currently ongoing and the registrant reported that the data obtained to date indicate that methomyl residues are stable for at least six months in the soils tested when frozen at approximately -20 °C. The freezer storage stability study will be provided upon completion.

The half-life of methomyl was calculated according to the following equation:

$$t_{1/2} = \ln 2/-k$$

where k is the rate constant in days^{-1}.

It is known that methomyl degrades rapidly by microbial action in the soil. However, in this study the extremely low moisture (2.5-17.2% with an average moisture of 10.7%) reduced the bioactivity of the soil. Therefore, the half-life of methomyl was longer than predicted in laboratory studies and reported in previous studies.

Previous acceptable studies showed the following results:

1. At 4 lbs ai/A application, methomyl decreased from 91% at day 0 to 55% at day 15, and to 33% at 30 days. Methomyl decomposed in a sandy loam soil in a greenhouse with a half-life of less than 30 days, although the cause

of decomposition, microbial or physico-chemical, could not be determined from this study because there was no sterile control soil and no measurement of $^{14}CO_2$, and the incubation was presumably in the ligh in the greenhouse.[6]

2. In light textured soils, methomyl will not leach more than 11 and 15 inches over 3 and 5 months, respectively. Very little surface runoff of methomyl will be expected to occur from sandy soils under normal field use conditions. Methomyl would likely remain in the upper 6 inches of treated soil.[7]

3. No residues were detected in muck soil (52% organic matter; pH 5.4) 7-32 days after application.[8]

4. In silt-loam soil, 98% of the methomyl dissipated within a month.[9]

5. In loamy sand soil, 85% of the methomyl dissipated after 5 months.[10]

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[6] Harvey, J., Jr. Decomposition of ^{14}C-methomyl in a sandy loam soil in the greenhouse. 1977. Unpublished study prepared in cooperation with the University of Delaware, Soil Testing Laboratory and submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE. (CDL: 096026-A). Reviewed in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[7] Harvey, J., Jr. and Pease, H. L. Decomposition of methomyl in soil. 1971??? Unpublished study submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE. (CDL: 229711-D). Included in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[8] Methomyl decomposition in muck soil -- a field study. 1971. E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE. (CDL: 222971-F). Included in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[9] Exposure of S-methyl N-phenyl(methylcarbamoyl)oxylthioacetimidate in sunlight, water, and soil. 1964??? Unpublished study submitted by E. I. Du Pont De Nemours and Co., Inc., Wilmington, DE (CDL: 091179-V). Included in the document: Methomyl Task 1: Review and evaluation of individual studies. May 21, 1981. (Reviewer: H. Boyd)

[10] EFGWB one-liner database.

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Attachments

ATTACHMENT #1

Letter from Dr. Charles S. Baer.

DUPONT

AGRICULTURAL PRODUCTS
Walker's Mill, Barley Mill Plaza
P.O. Box 80038
Wilmington, Delaware 19880-0038

August 13, 1990

400

Mr. Dennis H. Edwards (PM12)
Registration Division (H7505C)
Fungicide-Herbicide Branch
U.S. Environmental Protection Agency
Room 266A, Crystal Mall #2
1921 Jefferson Davis Highway
Arlington, VA 22202

Subject: Methomyl Field Soil Dissipation Reports
New Data Submission, Studies AMR-1215-88
and AMR-1215-88, Supplement 1

Dear Mr. Edwards:

The 1989 Methomyl Registration Standard field soil dissipation requirement (164-1) was fulfilled by previously submitted studies. However, we have conducted a new study which we are submitting for review. Enclosed you will find 4 copies each of the study entitled, "Field Soil Dissipation of Lannate® L Insecticide", AMR-1215-88 and AMR-1215-88, Supplement 1, including one marked "Public Docket" and a signed copy of the Data Transmittal Document.

In this study, Lannate® L Insecticide was applied to sandy loam soil at a test site in California. The test site was planted with cabbage. One application was made under a worst-case scenario of 9 lbs. ai/A. Under low moisture conditions, the half-life was calculated to be 54 days. The deepest consistent penetration of methomyl was found to be to a depth of 15-30 cm. Methomyl's mobility in soil is low to moderate.

If you have any questions concerning this submission, please feel free to contact me.

Sincerely,

Charles S. Baer, Ph D.
U.S. Registration Specialist
Registration & Regulatory Affairs

CSB/keh
Attachments
csb0001

cc: Ms. Joanne Edwards, Review Manager
Office of Pesticide Programs
Special Review and Reregistration
Division (7508C)
U.S. Environmental Protection Agency
Room 266A, Crystal Mall #2
1921 Jefferson Davis Highway
Arlington, VA 22202

Attachment #1

ATTACHMENT #2

Information obtained from the study.

Methomyl RIN: 8036-92

Page____ is not included in this copy.

Pages 19 through 37 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.

____ 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.
