DP Barcode: 184061
Shaughnessy No.: 109801
Date Out of EFGWB:

TO: Barbara Briscoe, Chemical Review Manager
Accelerated Reregistration Branch
Special Review and Registration Division (H7508W)

FROM: Emil Regelman, Supervisory Chemist
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (H7507C)

Henry Jacoby 2/8/93

THROUGH: Henry Jacoby, Chief
Environmental Fate and Groundwater Branch
Environmental Fate and Effects Division (H7507C)

Attached, please find the EFGWB review of:

Reg./File #(s) : 109801-264

Common Name : Iprodione

Chemical Name : 3-(3,5-Dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxyamide

Product Type : Fungicide

Product Name : Glycophene, Rovral 4F, RP 26019, Chipco 26019, others

Company Name : Rhone-Poulenc Agricultural Company

Purpose : Review of response to previous Aerobic Aquatic Metabolism study.

Action Code: 627 **EFGWB #(s):** 93-0088

EFGWB Guideline/MRID/Status Summary Table:
The review in this package contains...

161-1		162-4	42503801	Y	164-4		166-1				
161-2		163-1			164-5		166-2				
161-3		163-2			165-1		166-3				
161-4		163-3			165-2		167-1				
162-1		164-1			165-3		167-2				
162-2		164-2			165-4		201-1				
162-3		164-3			165-5		202-1				

Y = Acceptable (Study satisfied the Guideline)/Concur P = Partial (Study partially satisfied the Guideline, but additional information is still needed)
S = Supplemental (Study provided useful information, but Guideline was not satisfied) N = Unacceptable (Study was rejected)/Non-Concur

1. CHEMICAL:

Common name:

Iprodione.

Chemical name:

3-(3,5-Dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide.

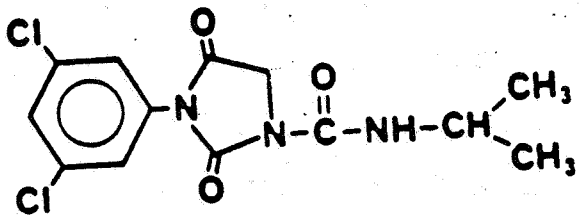
CAS No.:

36734-19-7

Trade name(s):

Chipco 26019, Kidan, Rovral, RP-26019.

Structure:



Formulations:

Wettable powder, flowable concentrate.

Physical/Chemical properties:

Molecular formula:	$C_{13}H_{13}Cl_2N_3O_3$
Molecular weight:	330.2 g/mole
Physical state:	White, odorless, non-hygroscopic crystals
Melting point:	c. 136°C
Vapor pressure (20°C):	<0.133 mPa (<9.98×10^{-7} torr)
Solubility (20°C):	13 mg/L water; 200 g/L benzene; 300 g/L acetone, acetophenone, anisole; 500 g/L methylene chloride, dimethylformamide, 1-methyl-2-pyrrolidone; 25 g/L ethanol, methanol

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2. TEST MATERIAL:

Refer to attached Data Evaluation Record (DER) for details.

3. STUDY/ACTION TYPE:

Review of response to a previous Aerobic Aquatic Metabolism study.

4. STUDY IDENTIFICATION:

Spare, W. C. 1992. Aerobic Aquatic Metabolism of Iprodione. Addendum to MRID# 41927601. Laboratory project ID: Supplement No. 1, Agrisearch Project No. 1514. Unpublished study performed by Agrisearch Incorporated, MD, and submitted by Rhone-Poulenc AG Company, Research Triangle Park, NC (MRID# 42503801)

5. REVIEWED BY:

José Luis Meléndez
Chemist
EFGWB/EFED/OPP
Review Section #2

Signature: José Luis Meléndez

Date: Jan. 25, 1993

6. APPROVED BY:

Emil Regelman
Chief
EFGWB/EFED/OPP
Review Section #2

Signature: Elegl

Date: 2/8/93

7. CONCLUSIONS:

Aerobic Aquatic Metabolism Study (MRID# 41927601 and 42503801)

This study and supplement are acceptable and can be used to fulfill the Aerobic Aquatic Metabolism data requirement.

Iprodione degraded with an observed half-life of 3-7 days (registrant calculated 9 days) in a flooded silt loam sediment system that was incubated in the dark at 25°C. The major non volatile degradate was
1-(3,5-dichlorophenyl)carbamoyl-3-isopropyl hydantoin (RP-30228).

Other non volatile degradates were
1-(3,5-dichlorophenyl)-3-carbamoyl hydantoin (RP-32490),
1-(3,5-dichlorophenyl)-5-isopropyl biuret (RP-36221),
3,5-dichloroaniline (RP-32596)
N-(dichloro-3,5-phenyl)(isopropyl-3-ureido)-2-acetamide (RP-37176), and
(dichloro-3,5-hydroxy-4-phenyl)-1-biuret (RP-36114)

8. RECOMMENDATIONS:

Inform the registrant that the Aerobic Aquatic Metabolism study and supplement (MRID #'s 42503801, and 41927601) are acceptable and fulfill the data requirement. No additional data are required.

9. BACKGROUND:

Iprodione is a contact fungicide active against a broad spectrum of diseases including Cyliadrocladrim, Botrytis, Sclerotinia, Septoria, Monilinia, Alternaria, Helminthosporium, Fusarium, and Rhizoctonia. Iprodione is registered for the following use patterns: terrestrial food/feed/non-food, outdoor residential, aquatic food, and greenhouse non-food. It is used on vegetable (lettuce, broccoli, carrots, onions, garlic, beans, peanuts, potatoes, caneberries, and ginseng), orchard (grapes, berries, stone fruits, and almonds), cereal, ornamental, and turf crops. Single active ingredient formulations include wettable powder and flowable concentrate. The maximum application rates are 4.0 lb ai/A on field and vegetable crops, and 2.0 lb ai/A on orchard crops.

EFGWB recieved one data package, containing a response to a previous Aerobic Aquatic Metabolism study.

An environmental-fate summary table for iprodione is attached to this review.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

Refer to attached DER.

11. COMPLETION OF ONE-LINER:

The One-Liner database file for iprodione was updated with this review.

12. CBI APPENDIX:

All data reviewed here are considered "company confidential" by the registrant and must be treated as such.

rev36
jlm

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ENVIRONMENTAL FATE SUMMARY TABLE FOR IPRODIONE

Data Requirements and Guidelines Reference No.		Use Patterns [1]	Does EPA have data to satisfy this data requirement ?	Bibliographic Citation	Additional Data Required?
Degradation - Lab.:					
161-1	Hydrolysis	A,B,C,D, I,K	Yes	41885401	No[2]
161-2	Photolysis in Water	A,B,C,D	Yes	41861901	No[3]
161-3	Photolysis in Soil	A,B,C	No		Yes[4]
161-4	Photodegradation in Air	A,B,C,I, K	No		Waived[5]
Metabolism Studies - Lab.					
162-1	Aerobic Soil Metabolism	A,B,C,D, I,K	No		Yes[6]
162-2	Anaerobic Soil Metabolism	A,B,C	No		Yes[7]
162-3	Anaerobic Aquatic Metabolism	A,B,C,D	No		Yes[8]
162-4	Aerobic Aquatic Metabolism	A,B,C,D	Yes	44927601, 42503801	No[9]
Mobility Studies - Lab.					
163-1	Mobility in Soil	A,B,C,D I,K	No		Yes[10]
163-2	Volatility from Soil (Lab.)	A,B,I	No		Waived[5]
163-3	Volatility from Soil (Field)	A,B,I	No		Waived[5]
Field Dissipation Studies					
164-1	Terrestrial	A,B,C,D, K	Yes	41877401	Supplemental[11]
164-2	Aquatic/Sediment	A,B,C,D	No		Yes[12]
164-3	Forestry	N/A	N/A	N/A	N/A[13]
164-4	Combination/Tank Mixes	N/A	N/A	N/A	N/A[13]
164-5	Terrestrial (Long Term)	A,B,C,D, K	No		Reserved[14]

Data Requirements and Guidelines Reference No.		Use Patterns[1]	Does EPA have data to satisfy this data requirement ?	Bibliographic Citation	Additional Data Required?
Accumulation Studies					
165-1	In Confined Rotational Crops	A,B,C,D	No		Yes[15]
165-2	In Field Rotational Crops	A,B,C,D	No		Reserved[16]
165-3	In Irrigated Crops	D	No		Yes[17]
165-4	In Fish	A,B,C,D	No		Yes[18]
165-5	In Aquatic, Non-target Organisms	A,B,C,D	No		Reserved[19]
Other					
166-1/-2/-3	Ground Water Monitoring Studies	A,B,C	No		No[20]
167-1/-2	Run-off/Surface Water Monitoring Studies	A,B,C,D, K	No		No[20]

Footnotes:

1. Use patterns: A = Terrestrial Food Crop; B = Terrestrial Feed Crop; C = Terrestrial Non-Food; D = Aquatic Food; I = Greenhouse Non-Food; K = Outdoor residential

2. Iprodione hydrolyzed with half-lives of 131 days, 4.7 days, and 27 minutes in sterile aqueous buffered solutions at pH's of 5, 7, and 9, respectively (EFGWB 91-0712).

3. Iprodione photodegraded with a calculated half life of 67 Florida equivalent days (EFGWB# 92-1148).

4. Previous study found not acceptable (MRID# 41912101, EFGWB# 91-0719). A new study is required.

5. Photodegradation in air (161-4) and laboratory volatility studies (163-2) are required if the vapor pressure of the technical grade active ingredient is greater than 10^{-4}torr. The vapor pressure for iprodione is $<9.98\times10^{-7}$torr, therefore, studies are not required.

6. Previous study found not reviewable (MRID# 00068285, Summary 92083022). A new study is required.

7. An Anaerobic Aquatic Metabolism (162-3) study may be used to satify this data requirement.

8. Previous study found not acceptable (MRID# 41755801, EFGWB# 91-0399, 5/13/92). A new study is required.

9. Iprodione degraded with an observed half life of 3-7 days in a flooded silt loam sediment system. The major degradate was RP-30228. Five minor non-volatile degradates were identified.

10. Previous studies found not acceptable (MRID#'s 41878801 and 41889601, EFGWB# 92-1148). New aged and unaged studies are required.

11. The information provided by previous study is supplemental. Iprodione dissipated with half-lives of about 7 days, and < 3 days in the 0-15 cm depth in soils of California and North Carolina. The main degradates are RP-30228 and RP-32490 (EFGWB# 92-1148). Decision of the adequacy of this study will be deferred until the registrant submits adequate metabolism studies.

12. Previous study found not acceptable (MRID# 00162218, EFGWB# 92-1148). A new study is being conducted as part of the conditional registration on rice.

13. N/A = Not Applicable

14. EFGWB does not concur with a request for a waiver for the Long Term Field Dissipation (164-5) data requirement at this time. The data requirement will remain reserved until the Field Dissipation Study is validated.

15. Previous study found not acceptable (MRID# 41247101, EFGWB# 90-0373). A new study is required.

16. Field Rotational Crop studies (165-2) are required on a case by case-by-case basis as determined by the results of the Confined Rotational Crop study (165-1). In lieu of this study, the registrant may request rotational crop tolerances for all crops to be rotated which could conceivably contain residues of concern.

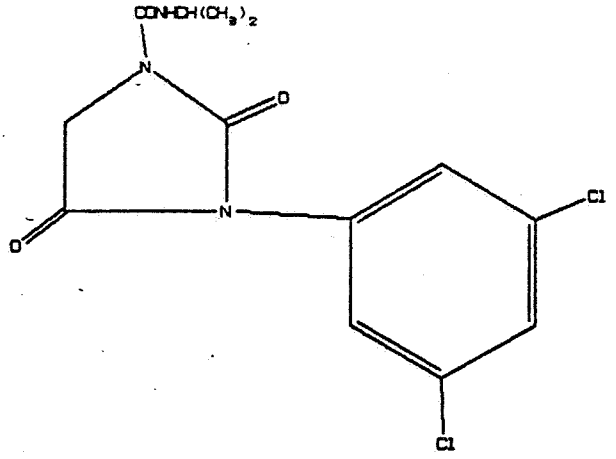
17. Previous study found not acceptable at this time (EFGWB# 92-1148, MRID# 00162218). The study <u>may</u> be made acceptable by the submission of additional data.

18. Previous studies found not reviewable (MRID#'s 00162221 00162222, Summary 92083024). A new study is required.

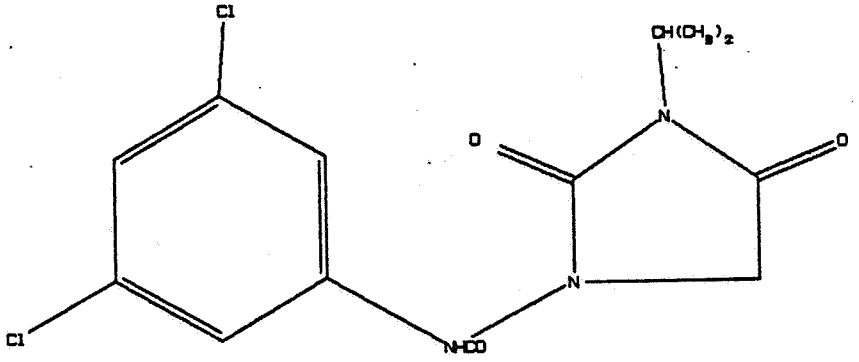
19. Reserved pending results of Accumulation in Fish (165-4) studies.

20. The Soil Field Dissipation studies indicate that iprodione is not persistant nor highly mobile, therefore, the Groundwater and the Run-off/Surface monitoring studies are not required.

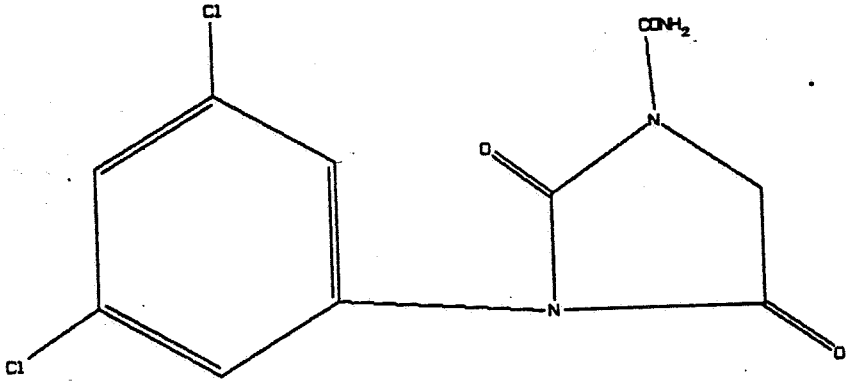
CHEMICAL STRUCTURES



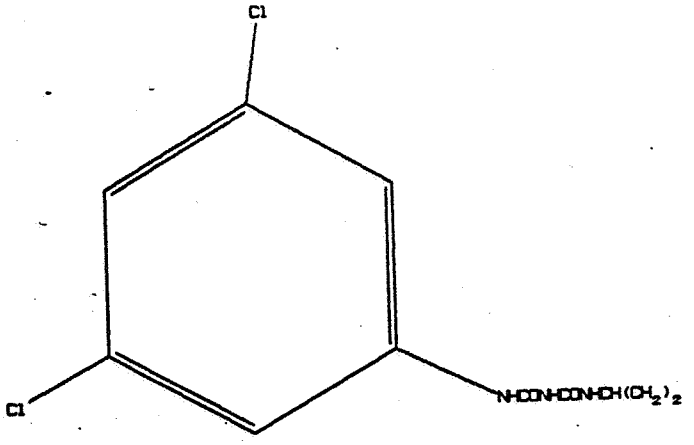
Iprodione



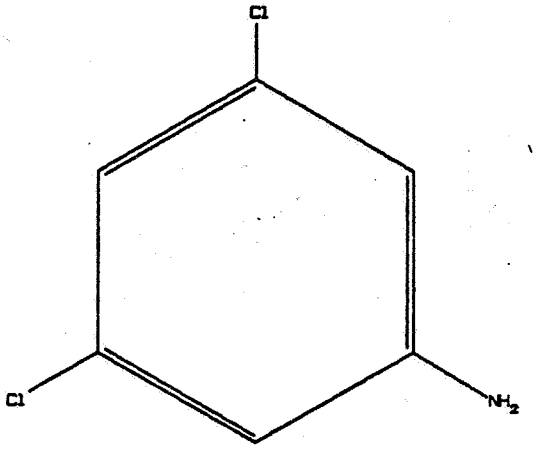
1-(3,5-dichlorophenyl)carbamoyl-3-isopropyl hydantoin
RP-30228



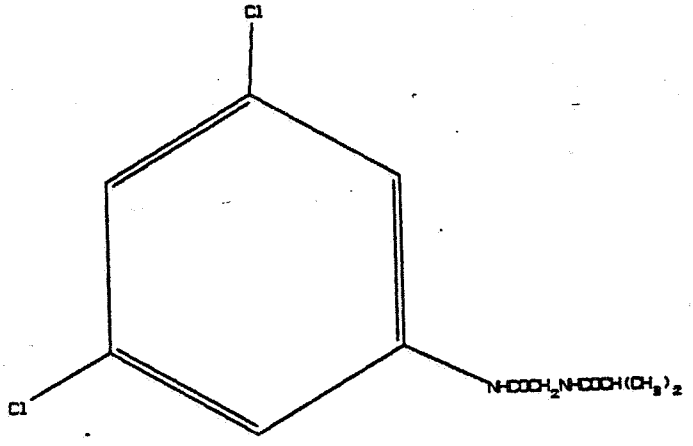
1-(3,5-dichlorophenyl)-3-carbamoyl hydantoin
RP-32490



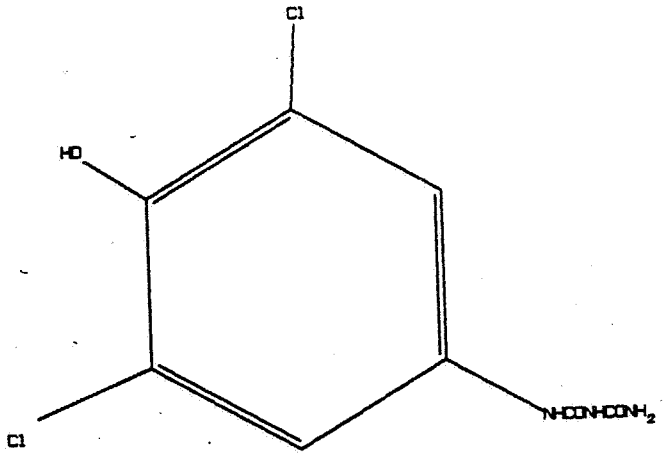
1-(3,5-dichlorophenyl)-5-isopropyl biuret
RP-36221



3,5-dicloroaniline
RP-32596



N-(dicloro-3,5-phenyl)(isopropyl-3-ureido)-2-acetamide
RP-37176



(dichloro-3,5-hydroxy-4-phenyl)-1-biuret
RP-36114

Data Evaluation Record

Study 1

CHEM 109801 IPRODIONE S 164-2

Study ID 42503801

Spare, W. C. 1992. Aerobic Aquatic Metabolism of Iprodione. Addendum to MRID# 41927601. Laboratory project ID: Supplement No. 1, Agrisearch Project No. 1514. Unpublished study performed by Agrisearch Incorporated, MD, and submitted by Rhone-Poulenc AG Company, Research Triangle Park, NC (MRID# 42503801)

Reviewed By: José Luis Meléndez
Title: Chemist
Org.: OPP/EFED/EFGWB/Section #2

Signature: José Luis Meléndez
Date: Jan. 25, 1993

CONCLUSIONS:

Aerobic Aquatic Metabolism

This study and supplement are acceptable and can be used to fulfill the Aerobic Aquatic Metabolism data requirement.

Iprodione degraded with an observed half-life of 3-7 days (registrant calculated 9 days) in a flooded silt loam sediment system that was incubated in the dark at 25°C. The major non volatile degradate was
1-(3,5-dichlorophenyl)carbamoyl-3-isopropyl hydantoin (RP-30228) with 64.0-64.6% of the applied at 14 days posttreatment.

Other non volatile degradates were
1-(3,5-dichlorophenyl)-3-carbamoyl hydantoin (RP-32490),
1-(3,5-dichlorophenyl)-5-isopropyl biuret (RP-36221),
3,5-dichloroaniline (RP-32596)
N-(dichloro-3,5-phenyl)(isopropyl-3-ureido)-2-acetamide (RP-37176), and
(dichloro-3,5-hydroxy-4-phenyl)-1-biuret (RP-36114).

METHODOLOGY:

Fourteen solutions of reference standards were prepared by dissolving approximately 10 mg of each standard in 1 mL acetone.

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These standards were kept in a freezer at about -20°C when not used. All standards were analyzed using one and two dimensional TLC in 0.25 mm silica gel glass plates. The sediment extract samples of the original study were stored between -15 and -26°C. These samples were also tested for TLC identification.

The plates, developed in two dimensions, were first eluted with toluene/ethyl acetate (9:1, V:V), rotated 90° and then eluted with dichloromethane/ethyl acetate/formic acid (85:15:5, V:V:V). Nonradioactive standards were visualized by UV at 254 nm. All radioactive areas were quantified with a radioanalytical scanner. The day 30 sediment sample TLC analysis was compared to the original analysis to confirm stability of the samples.

Radioactive material remaining in the origin was chromatographed in butanol/acetic acid/water (85:10:14, V:V:V) and cochromatographed with RP-36114.

DATA SUMMARY:

Based on the results, the following identifications were made:

Unknown	% of applied	conc./ppm	Identification
unk. #9	11.5	0.93	RP-32596
unk. #10	1.7	0.14	RP-37176
residues at the origin	8.9	0.72	RP-36114

Unknown #6 matched no reference standard. It comprised a maximum of 1.8% of the applied (0.16ppm) at day 1.

Storage stability data of the samples in the supplemental report show slight changes in the concentrations of RP-30228, unknown #9 (RP-32596), and origin (RP-36114). These changes do not affect the identification of the products.

COMMENTS:

The following are comments from the original DER and responses offered by the registrant. EFGWB considers all of these problems resolved by the submission of this addendum.

1. The test water was not completely characterized; the dissolved oxygen content of the rice paddy water was not determined.
   Registrant's response: During shipment, the mixing of the water with the air headspace would insure air saturation of the water. The microbial population counts indicate viable aerobic populations.

2. It was reported that "bulk" incubations were conducted to produce sufficient material for degradates identification. Two samples (100 g equivalent weight) of silt loam sediment were flooded with 200 mL of [^{14}C] iprodione treated (8.12 ppm) water and incubated as described above for the nonsterile soil: water systems. However, it was not reported at what sampling interval the bulk incubations were collected, and quantitative data concerning the bulk incubations were not reported.
Registrant's response: These samples were incubated for 30 days, flooded with 75 mL of extracting solvent (acetone/methanol/water/hydrochloric acid, 50:40:10:0.2, V:V:V:V), and stored at about -20°C. The samples were not analyzed.

3. In a hydrolysis study (MRID# 41885401), the degradate 3-isopropylcarbamoyl)-S-(3,5-dichlorophenyl)hydantoin (RP-35606) was detected at a maximum of 10.8-11.9% of the applied at 30 days posttreatment in pH 5 solutions and 9.8-10.4% at 40.4 hours in pH 7 solutions. Apparently, RP-35606 was not analyzed for in this study, since a reference standard was not received for TLC cochromatography.
Registrant's response: The standard RP-35606 was cochromatographed with the samples. In the Aerobic Aquatic Metabolism study, RP-35606 was not observed.

4. A storage stability study was conducted by analyzing the time 0 water extracts for parent iprodione after 0, 11, 20, and 31 days of frozen storage. The data indicate that the extracted iprodione was stable under the storage conditions up to 31 days. It was not reported how long the study sample extracts were stored prior to analysis.
Registrant's response: The study records indicate that all extracts were stored for no longer than 6 days prior to TLC analysis.

DER37
jlm

PIN 5721-93

Iprodione EF Reviews

Page_____ is not included in this copy.

Pages 15 through 19 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.

Environmental Fate & Effects Division
PESTICIDE ENVIRONMENTAL FATE ONE LINE SUMMARY
IPRODIONE
Last Update on January 26, 1993
[V] = Validated Study [S] = Supplemental Study [U] = USDA Data

LOGOUT	Reviewer:	Section Head:	Date: 2/01/93

Common Name: IPRODIONE
Smiles Code:
PC Code # :109801 CAS #:36734-19-7 Caswell #:

Chem. Name :3-(3,5-Dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-
1-imidazolidinecarboxamide
Action Type: FUNGICIDE

Trade Names: GLYCOPHENE; ROVRAL 4F; RP 26019; CHIPCO 26019; others.
(Formul'tn): 50% WP or FC; Granular
Physical State: Non-hygroscopic crystals

Use :Terrestrial food/feed/non-food, outdoor residential, aquatic
Patterns :food, and greenhouse non-food.
(% Usage) :Vegetables (lettuce, broccoli, carrots, onions, & others),
:orchard (apricots, almonds, peaches, & others).

Empirical Form: $C_{13}H_{13}Cl_2N_3O_3$
Molecular Wgt.: 330.15 Vapor Pressure: 1.00E -7 Torr
Melting Point : ca. 136 oC°C Boiling Point: °C
Log Kow : 3.1 pKa: @ °C
Henry's : E Atm. M3/Mol (Measured) 3.34E -9 (calc'd)

Solubility in ...			Comments
Water	13.00E	ppm @20.0 °C	
Acetone	3.00E 2	ppm @20.0 °C	
Acetonitrile	E	ppm @ °C	
Benzene	2.00E 2	ppm @20.0 °C	
Chloroform	E	ppm @ °C	
Ethanol	2.50E 4	ppm @20.0 °C	
Methanol	2.50E 4	ppm @20.0 °C	
Toluene	E	ppm @ °C	
Xylene	E	ppm @ °C	
Methylene chloride	5.00E 5	ppm @20.0 °C	
Dimethylformamide	5.00E 5	ppm @20.0 °C	

Hydrolysis (161-1)
[V] pH 5.0:131 DAYS
[V] pH 7.0:4.7 DAYS
[V] pH 9.0:1 DAY (For 1991 study: 27 MINUTES)
[V] pH 3.0:STABLE
[V] pH 6.0:20 DAYS
[ ] pH :

VP

Environmental Fate & Effects Division
PESTICIDE ENVIRONMENTAL FATE ONE LINE SUMMARY
IPRODIONE
Last Update on January 26, 1993
[V] = Validated Study [S] = Supplemental Study [U] = USDA Data

Photolysis (161-2, -3, -4)
[S] Water:3-7 DAYS
[ ] :
[V] :For 1991 study: 67 DAYS, pH 5/22 days
[ ] : (2 % acetone sensitized)

[V] Soil :7-14 DAYS ON ClLm ([ ] 1991 study: 182 DAYS on Sandy loam)
[ ] Air :

Aerobic Soil Metabolism (162-1)
[S] 20-70 DAYS, ClLm AND SiLm
[S] 50-70 DAYS ClLm
[S] 30-50 DAYS SlClLm
[ ]
[ ]
[ ]
[ ]

Anaerobic Soil Metabolism (162-2)
[S] 20-50 DAYS ClLm
[S] 50 DAYS SlClLm
[ ]
[ ]
[ ]
[ ]
[ ]

Anaerobic Aquatic Metabolism (162-3)
[S] 6.4 DAYS IN WATER AND 126 DAYS IN SiLm SEDIMENT.
[ ]
[ ] For 1991 study (MRID #417558-01; EFGWB #91-0399): 7-14 days in
[ ] SiLm sediment (dark, 25 oC).
[ ]
[ ]
[ ]

Aerobic Aquatic Metabolism (162-4)
[S] DEGRADATE RP-30228 COMPRISED UP TO 50% OF THE TOTAL RESIDUE
[ ] IMMEDIATELY POST-TREATMENT.
[ ]
[V] For 1991 study: 3-7 DAYS in flooded SiLm SEDIMENT system.
[ ] The major degradate was RP-30228, with 5 other identified minor
[ ] degradates.
[ ]

Environmental Fate & Effects Division
PESTICIDE ENVIRONMENTAL FATE ONE LINE SUMMARY
IPRODIONE
Last Update on January 26, 1993
[V] = Validated Study [S] = Supplemental Study [U] = USDA Data

Soil Partition Coefficient (Kd) (163-1)
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Soil Rf Factors (163-1)
[V] IN SOIL COLUMN STUDIES, WITH Lm MUD, SdLm, ClLm, AND SiClLm, MOST
[ ] OF THE ACTIVITY WAS IN THE UPPER 10 CM; IN LEACHATE, 2% FROM
[ ] SiClLm, LESS THAN 1% FROM OTHERS.
[ ]
[ ]
[ ]

Laboratory Volatility (163-2)
[ ]
[ ]

Field Volatility (163-3)
[ ]
[ ]

Terrestrial Field Dissipation (164-1)
[S] 20-40 DAYS SAND, LOAM, SilLm
[S] 20-40 DAYS SimClLm
[S] WITH SAMPLING AT 0-2, 2-4, AND 4-6". T1/2 VALUES WERE:
[ ] - NORTHEASTERN 15-45 DAYS; SOUTHEASTERN 8-30 DAYS;
[ ] - SOUTHWEST 15-90 DAYS; MIDWEST 40-50 DAYS
[ ]
[S] California: 7 days in the 0-15 cm, degradate is RP-30228, and
[ ] 32490, no parent or degradate below 30 cm.
[S] North Carolina: 0.35 days, degradate RP-30228 was not detected
[ ] below 15 cm.

Aquatic Dissipation (164-2)
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Forestry Dissipation (164-3)
[ ]
[ ]

22

Long-Term Soil Dissipation (164-5)
[ ]
[ ]

Accumulation in Rotational Crops, Confined (165-1)
[ ]
[ ]

Accumulation in Rotational Crops, Field (165-2)
[S] AFTER MAX. USE RATE APPL., DETECTABLE RESIDUES FOUND IN SORGHUM,
[ ] CORN, SOYBEANS, WHEAT, AND PEAS.

Accumulation in Irrigated Crops (165-3)
[S] Not detected (<0.05 ppm) in sorghum, soybeans, sweet potatoes,
[ ]

Bioaccumulation in Fish (165-4)
[S] BLUEGILL EDIBLE: 102X, VISCERA 555X, WHOLE 180X.
[S] CATFISH EDIBLE: < 50X, VISCERA 500X, WHOLE < 50X.

Bioaccumulation in Non-Target Organisms (165-5)
[S] EC 50, 96 HR DATA: TROUT, 4.2 PPM, OYSTER, 2.3; DAPHNIA < 0.33,
[ ] BLUEGILL 8.6.

Ground Water Monitoring, Prospective (166-1)
[ ]
[ ]
[ ]
[ ]

Ground Water Monitoring, Small Scale Retrospective (166-2)
[ ]
[ ]
[ ]
[ ]

Ground Water Monitoring, Large Scale Retrospective (166-3)
[ ]
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[ ]
[ ]

Ground Water Monitoring, Miscellaneous Data (158.75)
[ ]
[ ]
[ ]

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[V] = Validated Study [S] = Supplemental Study [U] = USDA Data

Field Runoff (167-1)
[ ]
[ ]
[ ]
[ ]

Surface Water Monitoring (167-2)
[ ]
[ ]
[ ]
[ ]

Spray Drift, Droplet Spectrum (201-1)
[ ]
[ ]
[ ]
[ ]

Spray Drift, Field Evaluation (202-1)
[ ]
[ ]
[ ]
[ ]

Degradation Products

-Dichloroaniline (see enclosure for others)
-RP-30228 accounts for 71% of radioact. in sediment extracts in anaerobic aquatic study.
-pH and temperature have marked effect on persistence.

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Comments

-List "B" chemical.
-Leaching-soil column study: Glycophene leached 10-15 cm in 30 cm column with 50 cm water in 30 hrs, using LmSd, SdLm,and ClLm. It leached 15-20 cm for SlClLm. Leaching is a potential problem only in soils of acidic pH and fine texture.
-Koc = 700.

References: REG STD and EFGWB Chemical File
Writer : PJH, MIR, JLM