



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

MAR 12 1991

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: Review of Phase 4 Package for Sodium Acifluorfen
(EFGWB #91-0182, 91-0183, 91-0212, Chemical #114402,
Case #2605, DP Barcode 158412, 158514, 158791.

TO: Amy Rispin, Chief
Science Analysis and Coordination Staff
Environmental Fate and Effects Division (H7507C)

FROM: Kevin L. Poff, Chemist
Section 3, EFGWB/EFED (H7507C)

THRU: Henry Jacoby, Chief
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (H7507C)

Akiva Abramovitch, Ph.D., Chief, Section 3
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (H7507C)

The LUIS determined the use pattern Terrestrial Food Crop, Terrestrial Non-Food Crop, Terrestrial Non-Food+Outdoor, Aquatic Food Crop. The attached table shows the current status of the data requirements for the reported uses.

The following is a summary (as of February 1991) of data requirements for Sodium Acifluorfen.

- Hydrolysis (161-1) Satisfied
- Photodegradation in Water (162-2) Not Satisfied, new study will be submitted to satisfy the data requirement
- Photodegradation on Soil (161-3) Not Satisfied, a new study needs to be submitted
- Photodegradation in Air (161-4) Waived, low vapor pressure ($<0.1 \times 10^{-6}$ mbar@20°C) = 7.5×10^{-8} mmHg
- Aerobic Soil Metabolism (162-1) Satisfied
- Anaerobic Soil Metabolism (162-2) Not Satisfied, an anaerobic aquatic metabolism study will be submitted to satisfy this data requirement
- Anaerobic Aquatic Metabolism (162-3) Not Satisfied, registrant has agreed to submit a new study



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- Aerobic Aquatic Metabolism (162-4) Not Satisfied, registrant has agreed to submit a new study
- Leaching/Adsorption/Desorption (163-1) Not Satisfied, submitted study will be reviewed in phase V
- Volatility Laboratory (163-2) Waived, low vapor pressure of ($<0.1 \times 10^{-8}$ mbar@20°C) = 7.5×10^{-8} mmHg
- Volatility Field (163-3) Waived, low vapor pressure
- Terrestrial Soil (164-1) Not Satisfied, registrant has agreed to submit a new study
- Long Term Terrestrial (164-5) Reserved
- Aquatic Sediment (164-2) Not Satisfied, registrant has agreed to submit a new study
- Forestry (164-3) Not Applicable
- Combin./Tank Mix (164-4) Not Applicable
- Confined Rotational Crops (165-1) Not Satisfied, registrant has agreed to submit a new study
- Field Rotational Crops (165-2) Reserved
- Irrigated Crops (165-3) Not Satisfied
- Fish Accumulation (165-4) Waived, low K_{ow}
- Aquatic Non-target Organisms (165-5) Waived, low K_{ow}
- Droplet Spectrum (201-1) Not Satisfied, submitted study will be reviewed in phase V
- Field Spray Drift Evaluation (202-2) Not Satisfied, submitted study will be reviewed in phase V
- Small Prospect. (166-1) Not Satisfied, summary deferred to groundwater for review
- Small Retrospect. (166-2) Not Satisfied, progress report deferred to groundwater for review
- Large Retrospect. (166-3) Reserved
- Field Runoff (167-1) Reserved
- Surface Water Monitoring (167-2) Reserved

Rhone Poulenc has decided to exit the acifluorfen-sodium herbicide market and to transfer registration data to BASF Corporation.

The irrigated crop (165-3) study requirement will not be imposed if there is a statement on the label indicating that the water will not be used to irrigate other crops.

A summary of a photodegradation on soil study was submitted and reviewed. Summary MRID #41688501 indicated a mercury light source was used which was not shown to simulate sunlight conditions in the complete range of sunlight. Therefore a new (161-2) study needs to be submitted to satisfy the data requirement.

A small scale prospective (166-1) summary (92168035), MRID = 41172801 as well as a small scale retrospective (166-2) progress report, MRID #41644900 was deferred to groundwater for review.

PHASE IV ENVIRONMENTAL FATE SUMMARY TABLE FOR SODIUM ACIFLUORFEN

Chemical Code:114402

Pesticide Type:Herbicide

Reviewer:K.Poff
Date:3-7-91

Uses (LUIS 11/13/90):Terrestrial Food Crop, Terrestrial Non-Food Crop, Terrestrial Non-Food+Outdoor, Aquatic Food Crop

Submitted Studies/Addendum	DER/Addendum Review/Summary Identification	DER/Addendum Review Conclusions	Additional Data/Info Required?
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PHYS/CHEM PROPERTIES:

160-5. Chemical Identity 40797801
40844001

No

DEGRADATION-LAB:

161-1. Hydrolysis

107479/(Acc#095735)

Summary(92168-032)

Satisfies

No¹

PHOTODEGRADATION:

161-2. In water

Acc# 071323

Dynamac Review of
March 8,1983

Supplemental Yes²
New SWB Submitted

161-3. On soil

Acc# 071324

Summary(41688501)

Not Reviewable Yes³
New SWB Submitted

161-4. In Air

none

Waived⁴

METABOLISM-LAB:

162-1. Aerobic Soil

Acc#071324 EAB# 4554(11-9-84)
Acc#254534/MRID#00143572

Summary(41688502) No⁵
Satisfies

162-2. Anaerobic Soil

00143572

Summary(41688503)

Yes⁶

PHASE IV ENVIRONMENTAL FATE SUMMARY TABLE (continued)

	Submitted Studies/ Addendum	DER/Addendum Review/Summary Identification	DER/Addendum Review/Summary Review Conclusions	Additional Data/Info Required?
162-3. Anaerobic Aquat	none		New SWB Submitted	Yes ⁷
162-4. Aerobic Aquat	none		New SWB Submitted	Yes ⁸
<u>MOBILITY STUDIES:</u>				
163- 1. Leaching and Adsorp/Desorp	071325	Summary(92168-033) EFB# 3422 (8-30-83)	Partially Satisfies	Yes ⁹
163-2. Volatil.(Lab)	none			Waived ⁴
163-3. Volatil.(Field)	none			Waived ⁴
<u>DISSIPATION-FIELD:</u>				
164-1. Terrestr.(Soil)	Acc.#071325, (EAB #3422,8-26-83) Acc.#252764, (EAB #4273,6-25-84) Supp.#254535, (EAB #4554,11-7-84)		DNS/Supplemental Partially Satisfies	Yes ¹⁰
164-2. Aquat.(Sediment)	none		New SWB Submitted	Yes ¹¹
164-3. Forestry	none			N/A
164-4. Combin./Tank Mix	none			N/A
164-5. Long Term Terr.	none			Reserved ¹²

PHASE IV ENVIRONMENTAL FATE SUMMARY TABLE (continued)

Submitted Studies/ Addendum	DER/Addendum Review/Summary Identification	DER/Addendum Review/Summary Review Conclusions	Additional Data/Info Required?
<u>ACCUMULATION STUDIES:</u>			
165-1. Conf. Rot. Crops	Acc#071326 Acc.#256167	EAB#4554 (11-7-84) EAB#5762 (7-15-86)	DNS/Supp. DNS/Supp. (New SWB Submitted) Yes ¹³
165-2. Field Rot. Crops	107504	Summary 92168034	Reserved ¹⁴
165-3. Irrigated Crops	none		Yes ¹⁵
165-4. Fish (lab)	none		Waived ¹⁶
165-5. Aqua. Non-target Organ. (Field)	none		Waived ¹⁷
<u>SPRAY DRIFT:</u>			
201-1. Droplet Spect.	40036301	Summary (92168040)	SWB Reviewed Yes ¹⁸
202-2. Field Spray Drift Evaluation	40036302	Summary (92168041)	SWB Reviewed Yes ¹⁸
<u>GROUNDWATER MONITORING:</u>			
166-1. Small Prospect.	41172801	Summary (92168035)	Summary deferred to Ground Water
166-2. Small Retrospect.	41644900	Progress Report	Report deferred to Ground Water
166-3. Large Retrospect.	none		Reserved ¹⁹

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PHASE IV ENVIRONMENTAL FATE SUMMARY TABLE (continued)

Submitted Studies/ Addendum		DER/Addendum Review/Summary Identification	DER/Addendum Review/Summary Review Conclusions	Additional Data/Info Required?
<u>SURFACE WATER:</u>				
167-1.	Field Runoff	none		Reserved ²⁰
167-2.	Surface Water Monitoring	none		Reserved ²¹

FOOTNOTES:

- 1) Study MRID# 107479 was submitted by Rohm and Haas Co. (Technical Report # 3423-75-66) and was accepted (Task 1. Review of Blazer, contract No. 68-01-5830, August 29, 1979). Another hydrolysis study (161-1), (Acc. No. 071323) was submitted and accepted on August 26, 1983 (EFB# 3422). The 161-1 data requirement is fulfilled.
- 2) Study Acc #071323 was reviewed and accepted in a Dynamac review of March 8, 1983, but after reviewing the DER a deficiency was noted. The authors used an inappropriate light source (mercury, obvious by the segmented emission spectra 285-310nm and 320-375nm). Therefore a new photodegradation in water study needs to be submitted with an appropriate light source to satisfy the data requirement.
- 3) Study #41688501 (Gerecke, D.R. and J.P. Wargo. August 1982, ASD Report No. 82/045, Acc.No. (either 071323 or 071324, there seems to be some confusion) was previously submitted and accepted. This study's summary was resubmitted to be reviewed in phase IV. However, after reviewing the summary there are numerous deficiencies, including the light source, which is not appropriate (Mercury lighting is unacceptable, it does not simulate natural sunlight, xenon is the preferred light source), both phenol rings were not labeled, dark controls were not maintained at the same temperature as the exposed soils, and the soil was not sieved properly (study used 250um screen instead of the required 2mm). Therefore a new (161-3) photodegradation on soil study needs to be submitted to satisfy the data requirement.
- 4) The vapor pressure of Sodium Acifluorfen is to low ($<7.5 \times 10^{-8}$ mmHg at 20°C) to impose photodegradation in air and volatility studies, EFGWB concurs with the waiver requests. See correspondence.
- 5) Study (summary 41688502) Acc # 071324 was initially reviewed by Dynamic contractor (contract no. 68-01-6679) on March of 1983, which questioned the efficacy of the extraction procedure. In further correspondence, EAB# 3422 8/26/83 and EAB# 4273 6/25/84, this problem as well as others were not resolved. A new study was submitted by Gemma and Wargo, August 1984, Acc. No. 254534; MRID# 00143572 which was reviewed and accepted (EAB# 4554 11/7/84). Therefore no further aerobic soil metabolism studies are required.
- 6) The anaerobic soil metabolism (162-2) study data requirement is being satisfied by the (162-3) anaerobic aquatic metabolism data requirement. See correspondence.

- 7) A new anaerobic aquatic metabolism (162-3) study will be submitted to satisfy the data requirement. See correspondence.
- 8) A new aerobic aquatic metabolism (162-4) study will be submitted to satisfy the data requirement. See correspondence.
- 9) A major deficiency was noted in the soil column study; elution volume was not adequate and distribution (identity and quantity) of major degradates/metabolites within the column (including eluate) was not determined. Due to these deficiencies and the need to quantitate the adsorption/desorption characteristics of sodium acifluorfen a batch equilibrium study is required to satisfy the (163-1) data requirement.
- 10) A new terrestrial field dissipation (164-1) study will be submitted to satisfy the data requirement. See correspondence.
- 11) A new Aquatic field dissipation study (164-2) will be submitted to satisfy the data requirement. See correspondence.
- 12) The Long Term soil Dissipation study (164-5) is reserved based on the results of the Terrestrial Field Dissipation study (164-1).
- 13) A new confined rotational crops study (165-1) will be submitted to satisfy the data requirement. See correspondence.
- 14) The summary of the Field Rotational Crop study (165-2) reveal numerous deficiencies which indicate the field study completed in 1977 is not reviewable. This study is reserved until the new Confined rotational crop study (165-1) is submitted by the registrant and is evaluated. If the new confined rotational crop study indicates a field study is necessary, a new field accumulation study (165-2) will be required to satisfy the data requirement.
- 15) An Accumulation in irrigated crops study (165-3) is required under aquatic use pattern if the water, containing herbicide, is used to irrigate other crops.
- 16) EFED agrees with the waiver request for the bioaccumulation in fish (165-4) study because of the extremely low K_{ow} . See correspondence.

- 17) EFED waives the Bioaccumulation-aquatic non-target organism (165-5) study due to the extremely low K_{ow} . See correspondence.
- 18) Studies will be reviewed in phase V.
- 19) Reserved pending review of the results of small scale retrospective ground water study.
- 20) Reserved pending a preliminary assessments of the potential for runoff to surface water (based upon the results of various laboratory and field dissipation studies).
- 21) Reserved pending a review of the results of the field runoff study (if applicable).

2.c. Case No.
2605

2.a. Chemical No.
114402

2.b. Chemical Name
Sodium acifluorfen (5-(2-

1.a. Company Name
BASF CORPORATION
Research Triangle Park, NC

1.b. Company No.
007969

Summary of Registrant's Phase 2 Response

Phase 3 Response

Guideline Reference Number	Name of Requirement	5 MRID Number Associated with Codes 1 and 6	6 Comply Codes Used in Phase 2 Response	Phase 3 Response										15 Time Frame		
				7 Is Summary provided?	8 Does Summary identify Adverse Effects?	9 Is Reformat Study provided?	10 Will Do study?	11 Will Cost Share?	12 Have/Will provide Data Compen-	13 Amending to Drop Use?	14 Corres-pondence					
161-1	Hydrolysis	107478-107479 ★	1	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1	
161-2	Photodegradation-water	122757 24584 137750 95755 137750 122758 74505 107504 122759 74592 95724 122761 122763 137136 143572 137751 122760 122762 ★ 254534	1	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	1
161-3	Photodegradation-soil		1	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	1
162-1	Aerobic soil metabolism		1	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☒	☐	2

W. Spaulding 10/18/90

★ Accession number converted to MR10

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1.a. Company Name BASF CORPORATION Research Triangle Park, NC			1.b. Company No. 007969		2.a. Chemical No. 114402		2.b. Chemical Name Sodium acifluorfen (5-(2-		2.c. Case No. 2605			
Summary of Registrant's Phase 2 Response					Phase 3 Response							
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes used in Phase 2 Response	Is Summary Provided?	Does Summary identify adverse effects?	Is reformulated study provided?	Will Do Study?	Will Cost Share?	Will Provide Data Compensation?	Am Amending to Prop Use?	Correspondence	Time Frame
162-2	Anaerobic soil metabolism	137754 137755 143572 95734 422761 422760 143572 254534 122764 122760 143572 254534 76706 107497 107496 122765 122764 147720 71591 97749 107498	1	☐	☐	☐	☐	☐	☐	☐	☐	2
162-3	Anaerobic aquatic metab.		1	☐	☐	☐	☒	☐	☐	☐	☒	2
162-4	Aerobic aquatic metab.		1	☐	☐	☐	☐	☐	☐	☐	☒	2
163-1	Leach/adsorp/desorption		1	☐	☐	☐	☒	☐	☐	☐	☒	1
164-1	Terrestrial field dissipation		1	☐	☐	☒	☐	☐	☐	☐	☒	2

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Summary of Registrant's Phase 2 Response				Phase 3 Response									
Guideline Reference Number	4	Name of Requirement	5 MRID Number Associated with Codes 1 and 6	6 Comply with Codes 1 and 6 response	7 Is Summary Provided?	8 Does Summary Identify Adverse Effects?	9 Is Refor- matted Study Provided?	10 Will Do Study?	11 Will Cost Share?	12 Have/ Will Provide Data Compen-	13 Am Amending to Prop Use?	14 Corres- pondence	15 Time Frame
					Yes	Yes	Yes	Yes	Yes	Yes	Yes		
164.2 165.1		Aquatic field dissipation Confined rotational crop	137756 145573 147720- 76707- 407504 97724 156220 422768 422769 107504 97721 164236 97722 422731 122720 41172801 4446004 41160001 80564 407437 40484 407478	1 1	☐	☐	☐	☒	☐	☐	☐	☐	2
					☐	☐	☐	☒	☐	☐	☐	☒	2
165.2		Field rotational crop	★ 107504 97721	1	☒	☐	☐	☐	☐	☐	☐	☐	3
165.4		Bioaccumulation in fish	164236 97722	1	☐	☐	☐	☐	☐	☐	☐	☐	1
166.1		Grd water-small prospect.	122720		☐	☐	☐	☐	☐	☐	☐	☐	4
166.2		Grd water-small. retrospect.	41172801	1,3	☐	☐	☐	☐	☐	☐	☐	☒	4
171.2		Chemical identity	4446004 41160001 80564	1,3	☐	☐	☐	☒	☐	☐	☐	☒	1
			407437	1	☐	☐	☐	☐	☐	☐	☐	☒	4
			40484		☐	☐	☐	☐	☐	☐	☐	☒	4
			407478		☐	☐	☐	☐	☐	☐	☐	☐	1

★ Accession number converted to MRID 77. Spurling 10/19

1.a. Company Name RHONE-POULENC AG COMPANY RESEARCH TRIANGLE PARK, NC		1.b. Company No. 000264		2.a. Chemical No. 114402		2.b. Chemical Name Sodium acifluorfen (5-(2-		2.c. Case No. 2605				
Summary of Registrant's Phase 2 Response				Phase 3 Response								
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Referred Study Provided?	Will Do Study?	Will Cost Share?	Have/Will Provide Data Compen-	Am Amending to Prop Use?	Corres-pondence	Time Frame
123-1(a)	Seed germ/seedling emerg		5	☐	☐	☐	☐	☐	☐	☐	☒	1
123-1(b)	Vegetative vigor		5	☐	☐	☐	☐	☐	☐	☐	☒	1
123-2	Aquatic plant growth		5	☐	☐	☐	☐	☐	☐	☐	☒	1
124-1	Terrestrial field			☐	☐	☐	☐	☐	☐	☐	☐	2
124-2	Aquatic field			☐	☐	☐	☐	☐	☐	☐	☐	2
132-1(a)	Foliar residue dissipation			☐	☐	☐	☐	☐	☐	☐	☐	2
132-1(b)	Soil residue dissipation			☐	☐	☐	☐	☐	☐	☐	☐	2
133-3	Dermal passive dosimetry expo	97707	1	☐	☐	☐	☐	☐	☐	☐	☒	2
133-4	Inhal. passive dosimetry expo	* 252140	1	☐	☐	☐	☐	☐	☐	☐	☒	2
141-1	Honey bee acute contact	* 252140		☐	☐	☐	☐	☐	☐	☐	☒	1
141-2	Honey bee residue on foliage			☐	☐	☐	☐	☐	☐	☐	☐	1
141-5	Field test for pollinators			☐	☐	☐	☐	☐	☐	☐	☐	2
160-5	Chemical identity	40797801	1	☐	☐	☐	☐	☐	☐	☐	☒	1
		40844001		☐	☐	☐	☐	☐	☐	☐	☒	
161-1	Hydrolysis	95735	1	☐	☐	☐	☐	☐	☐	☐	☒	1
		71584		☐	☐	☐	☐	☐	☐	☐	☒	
		122757		☐	☐	☐	☐	☐	☐	☐	☒	
		137750		☐	☐	☐	☐	☐	☐	☐	☒	

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1.a. Company Name RHONE-POULENC AG COMPANY RESEARCH TRIANGLE PARK, NC				1.b. Company No. 000264		2.a. Chemical No. 114402		2.b. Chemical Name Sodium acifluorfen (5-(2-		2.c. Case No. 2605		
Summary of Registrant's Phase 2 Response												
3	4	5	6	Phase 3 Response								
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	7 Is Summary Provided?	8 Does Summary Identify Adverse Effects?	9 Is Reformatted Study Provided?	10 Will Do Study?	11 Will Cost Share?	12 Will Provide Data Compen-	13 Am Amending to Drop Use?	14 Corres-pondence	15 Time Frame
161-2	Photodegradation-water	137750	1	☐	☐	☐	☐	☐	☐	☐	☒	1
		122751		☐	☐	☐					☒	
		71585		☐	☐	☐					☒	
		95735		☐	☐	☐					☒	
161-3	Photodegradation-soil	122759	1	☐	☐	☐	☐	☐	☐	☐	☒	1
		71592		☐	☐	☐					☒	
		107501		☐	☐	☐					☒	
161-4	Photodegradation-air	122761	1	☐	☐	☐	☐	☐	☐	☐	☒	1
162-1	Aerobic soil metabolism	143572		☐	☐	☐	☐	☐	☐	☐	☒	2
		122760		☐	☐	☐					☒	
		137751		☐	☐	☐					☒	
		122763		☐	☐	☐					☒	
		137136		☐	☐	☐					☒	
		122762		☐	☐	☐					☒	
		* 254534		☐	☐	☐					☒	
		137754		☐	☐	☐					☒	
		133755		☐	☐	☐					☒	
		95734		☐	☐	☐					☒	
162-2	Anaerobic soil metabolism	122761	1	☐	☐	☐	☐	☐	☐	☐	☒	2
		143572		☐	☐	☐					☒	

1.a. Company Name RHONE-POULENC AG COMPANY RESEARCH TRIANGLE PARK, NC		1.b. Company No. 000264		2.a. Chemical No. 114402		2.b. Chemical Name Sodium acifluorfen (5-(2-		2.c. Case No. 2605				
Summary of Registrant's Phase 2 Response												
3	4	5	6	Phase 3 Response								
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	7 Is Summary Provided?	8 Does Summary Identify Adverse Effects?	9 Is Reformation Study Provided?	10 Will Do Study?	11 Will Cost Share?	12 Have/Will Provide Data Compen-	13 Am Amending to Drop Use?	14 Correspondence	15 Time Frame
162-3	Anaerobic aquatic metab.	122760 * 254534 95734 122761 122760 143572 * 254534 76706 147720 71591 107496 107497 122764 122765	1	☐	☐	☐	☐	☐	☐	☐	☒	2
162-4	Aerobic aquatic metab.		1	☐	☐	☐	☐	☐	☐	☐	☒	2
163-1	Leach/adsorp/desorption		1	☐	☐	☐	☐	☐	☐	☐	☒	1
163-2	Volatility - lab			☐	☐	☐	☐	☐	☐	☐	☒	1
163-3	Volatility - field			☐	☐	☐	☐	☐	☐	☐	☒	1
164-1	Terrestrial field dissipation	97719 143573 147720 107498 137756	1,2	☐	☐	☐	☐	☐	☐	☐	☒	2

1.a. Company Name RHONE-POULENC AG COMPANY RESEARCH TRIANGLE PARK, NC		1.b. Company No. 000264		2.a. Chemical No. 114402		2.b. Chemical Name Sodium acifluorfen (5-(2-		2.c. Case No. 2605				
Summary of Registrant's Phase 2 Response												
3	4	5	6	Phase 3 Response								
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	7 Is Summary Provided?	8 Does Summary Identify Adverse Effects?	9 Is Reference Study Provided?	10 Will Do Study?	11 Will Cost Share?	12 Will Provide Data Compen-	13 Amending to Drop Use?	14 Correspondence	15 Time Frame
164-2	Aquatic field dissipation	76707	1	☐	☐	☐	☐	☐	☐	☐	☒	2
164-5	Long term soil dissipation			☐	☐	☐	☐	☐	☐	☐	☐	4
165-1	Confined rotational crop	15620	1	☐	☐	☐	☐	☐	☐	☐	☒	2
		122768		☐	☐	☐	☐	☐	☐	☐	☒	
		122769		☐	☐	☐	☐	☐	☐	☐	☒	
		107504		☐	☐	☐	☐	☐	☐	☐	☒	
		97721		☐	☐	☐	☐	☐	☐	☐	☒	
165-2	Field rotational crop	164236	1	☐	☐	☐	☐	☐	☐	☐	☒	3
		97721		☐	☐	☐	☐	☐	☐	☐	☒	
165-3	Accumulation - irrig crop			☐	☐	☐	☐	☐	☐	☐	☒	3
165-4	Bioaccumulation in fish	122770	1	☐	☐	☐	☐	☐	☐	☐	☒	1
		122771		☐	☐	☐	☐	☐	☐	☐	☒	
		97722		☐	☐	☐	☐	☐	☐	☐	☒	
165-5	Bioaccum-aquatic non-target			☐	☐	☐	☐	☐	☐	☐	☒	1
166-1	Grd water-small prospect.	41172801	1,3	☐	☐	☐	☐	☐	☐	☐	☒	4
166-2	Grd water-small. retrospect.	41160001	1,3	☐	☐	☐	☐	☐	☐	☐	☒	4
166-3	Grd water-irrig retrospect.			☐	☐	☐	☐	☐	☐	☐	☒	4
171-2	Chemical identity	40797801	1	☐	☐	☐	☐	☐	☐	☐	☒	1
		40044001		☐	☐	☐	☐	☐	☐	☐	☒	
171-3	Directions for use			☐	☐	☐	☐	☐	☐	☐	☒	1

DP BARCODE: D158514

Sodium Acifluorfen

REREG CASE # 2605

CASE: 816449
SUBMISSION: S386253

DATA PACKAGE RECORD
BEAN SHEET

DATE: 11/21/90
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 603 PHASE 3 INITIAL SUB
CHEMICAL: 114402 Sodium acifluorfen (5-(2-chloro-4-(trifluoro-methyl)phenox
ID#: 114402-000264
COMPANY: 000264 RHONE-POULENC AG COMPANY
PRODUCT MANAGER: 50 JAY ELLENBERGER 703-308-8085 ROOM: CST 4J1
PM TEAM REVIEWER: THOMAS JR LUMINELLO 703-308-8075 ROOM: CST 4M1
RECEIVED DATE: 11/21/90 DUE OUT DATE: / /

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 158514 EXPEDITE: N DATE SENT: 11/21/90 DATE RET.: / /
DP TYPE: 101 Phase IV Review
ADMIN DUE DATE: 12/12/90 CSF: N LABEL: N
ASSIGNED TO DATE IN ASSIGNED TO DATE IN
DIV : EFED 11/23/90 REVR : / /
BRAN: EFGB / / CONTR: / /
SECT: / /

* * * DATA PACKAGE REVIEW INSTRUCTIONS * * *

For the attached reregistration case, please identify
all applicable data requirements and note those for which
adequate data have not been submitted to the Agency.

The package contains no summaries or reformat to
review.

NO PRODUCT CHEM INCLUDED.

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

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
158505	EEB	11/21/90	12/12/90	Y	N	N
158507	EEB	11/21/90	12/12/90	Y	N	N
158508	DEB	11/21/90	12/12/90	Y	N	N
158509	NDEB	11/21/90	12/12/90	Y	N	N
158512	TB-HFAS	11/21/90	12/12/90	Y	N	N

LIST B

Set 3

91-0182 (Dupl)

1/25

DP BARCODE: D158514

Sodium Acifluorene

REREG CASE # 2605

CASE: 816449
SUBMISSION: S386253

DATA PACKAGE RECORD
BEAN SHEET

DATE: 11/21/90
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 603 PHASE 3 INITIAL SUB
CHEMICAL: 114402 Sodium acifluorfen (5-(2-chloro-4-(trifluoro-methyl)phenox
ID#: 114402-000264
COMPANY: 000264 RHONE-POULENC AG COMPANY
PRODUCT MANAGER: 50 JAY ELLENBERGER 703-308-8085 ROOM: CST 4J1
PM TEAM REVIEWER: THOMAS JR LUMINELLO 703-308-8075 ROOM: CST 4M1
RECEIVED DATE: 11/21/90 DUE OUT DATE: / /

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 158514 EXPEDITE: N DATE SENT: 11/21/90 DATE RET.: / /
DP TYPE: 101 Phase IV Review
ADMIN DUE DATE: 12/12/90 CSF: N LABEL: N
ASSIGNED TO DATE IN ASSIGNED TO DATE IN
DIV : EFED 11/23/90 REVR : / /
BRAN: EFGB / / CONTR: / /
SECT: / /

* * * DATA PACKAGE REVIEW INSTRUCTIONS * * *

For the attached reregistration case, please identify all applicable data requirements and note those for which adequate data have not been submitted to the Agency.

The package contains no summaries or reformat to review.

NO PRODUCT CHEM INCLUDED.

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

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
158505	EEB	11/21/90	12/12/90	Y	N	N
158507	EEB	11/21/90	12/12/90	Y	N	N
158508	DEB	11/21/90	12/12/90	Y	N	N
158509	NDEB	11/21/90	12/12/90	Y	N	N
158512	TB-HFAS	11/21/90	12/12/90	Y	N	N

91-0182

LIST B

Sub 3

12/60

DP BARCODE: D158412

Sodium Acifluorfen
REREG CASE # 2605

CASE: 816452
SUBMISSION: S386097

DATA PACKAGE RECORD
BEAN SHEET

DATE: 11/19/90
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 603 PHASE 3 INITIAL SUB
CHEMICAL: 114402 Sodium acifluorfen (5-(2-chloro-4-(trifluoro-methyl)phenoxy
ID#: 114402-007969
COMPANY: 007969 BASF CORPORATION
PRODUCT MANAGER: 50 JAY ELLENBERGER 703-308-8085 ROOM: CST 4J1
PM TEAM REVIEWER: THOMAS JR LUMINELLO 703-308-8075 ROOM: CST 4M1
RECEIVED DATE: 11/19/90 DUE OUT DATE: / /

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 158412 EXPEDITE: N DATE SENT: 11/19/90 DATE RET.: / /
DP TYPE: 101 Phase IV Review
ADMIN DUE DATE: 12/10/90 CSF: N LABEL: N
ASSIGNED TO DATE IN ASSIGNED TO DATE IN
DIV : EFED 11/23/90 REVR : / /
BRAN: EFGB / / CONTR: / /
SECT: / /

* * * DATA PACKAGE REVIEW INSTRUCTIONS * * *

For the attached reregistration case, please identify
all applicable data requirements and note those for which
adequate data have not been submitted to the Agency.
Data waiver requests for guidelines are attached.

PRODUCT CHEM INCLUDED.

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

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
158411	EEB	11/19/90	12/10/90	Y	N	N
158413	DEB	11/19/90	12/10/90	Y	N	N
158414	NDEB	11/19/90	12/10/90	Y	N	N
158415	TB-HFAS	11/19/90	12/10/90	Y	N	N

91-0183

LISTB

Set 3

12/10

+LUHS

Review recent

Studies in Phase 5

Get together w/ GW Section

(Betsy) in GW studies
(Phase 5)

DP BARCODE: D158412

Sodium Ac; Sulfon

REREG CASE # 2605

CASE: 816452
SUBMISSION: S386097

DATA PACKAGE RECORD
BEAN SHEET

DATE: 11/19/90
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 603 PHASE 3 INITIAL SUB
CHEMICAL: 114402 Sodium acifluorfen (5-(2-chloro-4-(trifluoro-methyl)phenoxy
ID#: 114402-007969
COMPANY: 007969 BASF CORPORATION
PRODUCT MANAGER: 50 JAY ELLENBERGER 703-308-8085 ROOM: CST 4J1
PM TEAM REVIEWER: THOMAS JR LUMINELLO 703-308-8075 ROOM: CST 4M1
RECEIVED DATE: 11/19/90 DUE OUT DATE: / /

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 158412 EXPEDITE: N DATE SENT: 11/19/90 DATE RET.: / /
DP TYPE: 101 Phase IV Review
ADMIN DUE DATE: 12/10/90 CSF: N LABEL: N
ASSIGNED TO DATE IN ASSIGNED TO DATE IN
DIV : EFED 11/23/90 REVR : / /
BRAN: EFGB / / CONTR: / /
SECT: / /

* * * DATA PACKAGE REVIEW INSTRUCTIONS * * *

For the attached reregistration case, please identify
all applicable data requirements and note those for which
adequate data have not been submitted to the Agency.
Data waiver requests for guidelines are attached.

PRODUCT CHEM INCLUDED.

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

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
158411	EEB	11/19/90	12/10/90	Y	N	N
158413	DEB	11/19/90	12/10/90	Y	N	N
158414	NDEB	11/19/90	12/10/90	Y	N	N
158415	TB-HFAS	11/19/90	12/10/90	Y	N	N

LIST B

Set 3

91-0183 (Dupl)

1/29

Guideline

- 161-2 PHOTODEGRADATION - WATER
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 161-3 PHOTODEGRADATION - SOIL
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 161-4 PHOTODEGRADATION - AIR
See Waiver Request
- 162-1 AEROBIC SOIL METABOLISM
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 162-2 ANAEROBIC SOIL METABOLISM
See Waiver Request.
- 162-3 ANAEROBIC AQUATIC METABOLISM
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 162-4 AEROBIC AQUATIC METABOLISM
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 163-2 VOLATILITY - LAB
See Waiver Request.
- 163-3 VOLATILITY - FIELD
See Waiver Request.

Guideline

- 164-1 TERRESTRIAL FIELD DISSIPATION
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 164-2 AQUATIC FIELD DISSIPATION
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 165-1 CONFINED ROTATIONAL CROPS
In the Phase 2 submission, BASF cited MRID numbers supporting this requirement. After evaluating the supporting studies, BASF has decided to repeat the study and will submit the new study within the specified time frame.
- 165-4 BIOACCUMULATION IN FISH
See Waiver Request.
- 165-5 BIOACCUMULATION IN AQUATIC ORGANISMS
In the Phase 2 submission, EPA has classified this guideline as Reserved.
- 166-2 GROUNDWATER - SMALL RETROSPECTIVE
In the Phase 2 submission, BASF cited an MRID number (41160001) supporting this guideline, which is required because of a Data Call-In. The report cited is a progress report (the study is still under way) and therefore we felt that a summary was not appropriate at this point. A final report will be submitted when the study has been completed.
- 171-2 CHEMICAL IDENTITY
A discussion of the chemical identity of the test compound is contained in each of the studies and summaries used to support the guideline requirements in this subdivision.

AT

BASF Corporation
Agricultural Chemicals Group
PO Box 13528
Research Triangle Park, NC 27709
Company Number 7969

WAIVER REQUEST

Case Name: Sodium Acifluorfen
Case No.: 2605
Chemical Name: Sodium 5-[2-chloro-4-(trifluoromethyl)
phenoxy]-2-nitrobenzoate
Chemical No.: 114402

161-4 PHOTODEGRADATION IN AIR

Sodium acifluorfen is produced and applied as an aqueous solution. The vapor pressure of acifluorfen in the acid form has been determined to be less than 1×10^{-8} mmHg at 25 degrees celsius. The vapor pressure of the sodium salt would be expected to be even less.

The protocol for a vapor phase photolysis study requires that the material be exposed to natural or artificial sunlight in the vapor phase. The extremely low vapor pressure exhibited by sodium acifluorfen will not allow sufficient material to be vaporized to conduct a meaningful study, even at elevated temperatures.

Based on the normal agricultural use and the vapor pressure of sodium acifluorfen, it is not reasonable to expect any significant amounts of the compound to be exposed to sunlight in the vapor state. Therefore, based on the above information, BASF requests a waiver for guideline 161-4 PHOTODEGRADATION IN AIR.

BASF Corporation
Agricultural Chemicals Group
PO Box 13528
Research Triangle Park, NC 27709
Company Number 7969

WAIVER REQUEST

Case Name: Sodium Acifluorfen
Case No.: 2605
Chemical Name: Sodium 5-[2-chloro-4-(trifluoromethyl)
phenoxy]-2-nitrobenzoate
Chemical No.: 114402

162-2 Anaerobic Soil Metabolism

In our Phase 2 submission, BASF cited MRID numbers supporting this requirement, as well as requirements 162-1, 162-3, and 162-4. After evaluating these studies, BASF has decided to repeat studies for guidelines 162-1 (Aerobic Soil Metabolism), 162-3 (Anaerobic Aquatic Metabolism), and 162-4 Aerobic Aquatic Metabolism). Therefore, according to 40 CFR Part 158.290, an anaerobic soil metabolism study is not required if an anaerobic aquatic metabolism study is performed. BASF, therefore, requests a waiver for guideline 162-2 ANAEROBIC SOIL METABOLISM.

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BASF Corporation
Agricultural Chemicals Group
PO Box 13528
Research Triangle Park, NC 27709
Company Number 7969

WAIVER REQUEST

Case Name: Sodium Acifluorfen
Case No.: 2605
Chemical Name: Sodium 5-[2-chloro-4-(trifluoromethyl)
phenoxy]-2-nitrobenzoate
Chemical No.: 114402

163-2 VOLATILITY - LAB

The vapor pressure of acifluorfen in the acid form has been determined to be less than 1×10^{-8} mmHg at 25 degrees. The vapor pressure of the acid salt would be expected to be even less.

This extremely low vapor pressure exhibited by sodium acifluorfen will not allow sufficient material to volatilize to conduct a meaningful study, even at elevated temperatures.

Based on normal agricultural use of the compound (application to foliage as an aqueous solution) and the vapor pressure of sodium acifluorfen, it is not reasonable to expect any significant amounts of the compound to volatilize. Therefore, BASF requests a waiver for guideline 163-2 VOLATILITY - LAB.

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BASF Corporation
Agricultural Chemicals Group
PO Box 13528
Research Triangle Park, NC 27709
Company Number 7969

WAIVER REQUEST

Case Name: Sodium Acifluorfen
Case No.: 2605
Chemical Name: Sodium 5-[2-chloro-4-(trifluoromethyl)
phenoxy]-2-nitrobenzoate
Chemical No.: 114402

163-3 VOLATILITY - FIELD

The vapor pressure of acifluorfen in the acid form has been determined to be less than 1×10^{-8} mmHg at 25 degrees. The vapor pressure of the sodium salt would be expected to be even less.

This extremely low vapor pressure exhibited by sodium acifluorfen will not allow sufficient material to volatilize to conduct a meaningful study, even at elevated temperatures.

Based on normal agricultural use of the compound (application to foliage as an aqueous solution) and the vapor pressure of sodium acifluorfen, it is not reasonable to expect any significant amounts of the compound to volatilize. Therefore, BASF requests a waiver for guideline 163-3 VOLATILITY - FIELD.

BASF Corporation
Agricultural Chemicals Group
PO Box 13528
Research Triangle Park, NC 27709
Company Number 7969

WAIVER REQUEST

Case Name: Sodium Acifluorfen
Case No.: 2605
Chemical Name: Sodium 5-[2-chloro-4-(trifluoromethyl)
phenoxy]-2-nitrobenzoate
Chemical No.: 114402

165-4 Bioaccumulation In Fish

In our phase 2 submission, BASF cites MRID numbers supporting this requirement. Upon further examination of the information available, we are requesting that this requirement be waived for sodium acifluorfen. This request is based on the low octanol/water partition coefficient (K_{ow}) and related high water solubility of the compound. The K_{ow} for sodium acifluorfen at pH7 is approximately 5 and the water solubility is 500 g/l at 20 degrees celsius.

The Pesticide Assessment Guidelines for Subdivision E. Wildlife and Aquatic Organisms (#72-6), and Subdivision N, Environmental Fate (#165-4) both indicate that fish bioaccumulation testing is not required if the K_{ow} is below 1000 or the half-life is less than four days. Bioconcentration factors (BCF) are directly related to K_{ow} . A recognized and well-accepted representation of this relationship is provided by the following equation:

$$\log BCF = 0.76 \log K_{ow} - 0.23$$

For sodium acifluorfen:

$$\log BCF = 0.76 \times \log 5 - 0.23$$

$$BCF = 2$$

Therefore, based on the K_{ow} , the predicted BCF is well below the cutoff value of 1000 for requiring this study. Based on this information, BASF requests a waiver for guideline 165-4 BIOACCUMULATION IN FISH.

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LUIS
General Chemical Report
Formulation(s), Product Type(s), Restricted Chemical Information

<u>Form</u>	<u>Description</u>	<u>Product</u>	<u>AI Percent</u>	<u>Single AI</u>	<u>Density</u>	<u>End Use</u>	<u>Homeowner Use</u>	<u>Restricted Use Pesticide</u>	<u>Restricted Reason</u>
02	FORMULATION INTERMEDIATE	000264-00500	21.1000	YES	2.00	NO	YES	NO	
12	EMULSIFIABLE CONCENTRATE	000264-00501	27.5000	YES	3.00	NO	YES	NO	
15	SOLUBLE CONCENTRATE LIQUID	007969-00087	39.6000	YES		NO	YES	NO	
		000264-00468	20.7000	YES	2.00	YES	YES	NO	
		007969-00076	13.4000	N	1.33	YES	YES	NO	
		007969-00077	6.8000	N	0.67	YES	YES	NO	
16	LIQUID-READY TO USE	007969-00080	21.4000	YES	2.00	YES	YES	NO	
90	FORMULATION NOT IDENTIFIED	000239-02509	0.1200	N		YES	YES	NO	
		007969-00079	20.1000	YES	2.00	YES	YES	NO	

114402 Sodium acifluorfen

Date: 11/13/90
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LUIS
General Chemical Report
Type(s) of Pesticide

Description

HERBICIDE

114402 Sodium acifluorfen

Date: 11/13/90

Page: 1

LUIS

General Chemical Report

Use Groups

<u>Use Group</u>	<u>Description</u>
A1	TERRESTRIAL FOOD CROP
C1	TERRESTRIAL NON-FOOD CROP
C2	TERRESTRIAL NON-FOOD+OUTD
D1	AQUATIC FOOD CROP

LUIS
General Chemical Report
Site and Use Groups

Non-Food / Non-Feed Uses

Site

MULCH
ORNAMENTAL AND/OR SHADE TREES
ORNAMENTAL HERBACEOUS PLANTS
ORNAMENTAL LAWNS AND TURF
ORNAMENTAL WOODY SHRUBS AND VINES
PATHS/PATIOS

Use Group

TERRESTRIAL NON-FOOD+OUTD
TERRESTRIAL NON-FOOD+OUTD
TERRESTRIAL NON-FOOD+OUTD
TERRESTRIAL NON-FOOD+OUTD
TERRESTRIAL NON-FOOD+OUTD
TERRESTRIAL NON-FOOD CROP

Food / Feed Uses

Site

PEANUTS
RICE
SOYBEANS, EDIBLE

Use Group

TERRESTRIAL FOOD CROP
AQUATIC FOOD CROP
TERRESTRIAL FOOD CROP

114402 Sodium acifluorfen

Date: 11/13/90
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LUIS
General Chemical Report
Use Limitations and Restricted Entry Intervals
By Product, Site, and Application Method

<u>Product</u>	<u>Limitation Reason</u>	<u>Use Group</u>	<u>Site</u>	<u>Application Type</u>	<u>Application Timing</u>	<u>Rest'd Entry (days)</u>
000264-00468	50__ day(s) preharvest interval.	AQUATIC FOOD CROP	RICE			
000264-00468	50__ day(s) preharvest interval.	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE			
007969-00076	75__ day(s) preharvest interval.	TERRESTRIAL FOOD CROP	PEANUTS			
007969-00076	50__ day(s) preharvest interval.	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE			

114402 Sodium acifluorfen

Date: 11/13/90

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LUIS

General Chemical Report

Geographic Limitations

Product

AR870003001

Allowed

Code Location

AR Arkansas

Disallowed

Code Location

114402 Sodium acifluorfen

Date: 11/13/90
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LUIS
General Chemical Report
Geographic Limitations
By Site and/or Application Method

<u>Use Group</u>	<u>Site</u>	<u>Application Type</u>	<u>Application Timing</u>	<u>Location Allowed</u>	<u>Disallowed</u>	<u>Product No.</u>
AQUATIC FOOD CROP	RICE				California	007969-00080
AQUATIC FOOD CROP	RICE				California	007969-00079

If a description does not appear for Application Type, Timing, and Equipment, the geographic limitation applies to the entire site.

114402 Sodium acifluorfen

Date: 11/13/90
Page: 1

LUIS
General Chemical Report
Issues

<u>Product</u>	<u>Issue</u>	<u>Cat Description</u>	<u>Site</u>	<u>Use Group</u>	<u>Application Type</u>	<u>Application Timing</u>	<u>Application Equipment</u>
AR870003001	F	Chemical not found on label.					

NOTE: Issue Cat Codes are

A - Formulation	H - Maximum Number of Apps
B - Pesticide Type	I - Label Error
C - Diluent	J - Site
D - Geographic	K - Application Method
E - Limitations	L - Dosage
F - Chemical/Active Ingredient	M - Soil Type
G - Pest	Z - Comments

LUIS
EFGWB Chemical Report
For Aquatic Uses

e Group: D1 AQUATIC FOOD CROP

Number of Applications: UNSPECIFIED

Site: RICE

Product No	Application Type/ Application Timing/ Application Equip.	Min Int Btw Apps (Days)	Max Dose Per Cycle or per Year	Max No. Apps per Cycle or per Year	Max Rate Per Application		Min Diluent		Max Spray Volume	
					Qty	Unit	Type	Qty	Unit	Qty
007969-00079	Spray.	0.00	1.00 / Cycle	0 / Cycle	0.50	pt	W	5.00	gal	0.00
	Early boot. Aircraft.		0.00 / 0 Yr.		0.1250	lb				
007969-00079	Spray.	0.00	1.00 / Cycle	0 / Cycle	0.50	pt	W	5.00	gal	0.00
	Early boot. Aircraft.		0.00 / 0 Yr.		0.0000					
000264-00468	Spray.	0.00	1.00 / Cycle	0 / Cycle	0.50	pt	W	5.00	gal	0.00
	Early tillering. Aircraft.		0.00 / 0 Yr.		0.0000					
000264-00468	Spray.	0.00	1.00 / Cycle	0 / Cycle	0.50	pt	W	5.00	gal	0.00
	Early tillering. Aircraft.		0.00 / 0 Yr.		0.1250	lb				

Notes: The first Application Rate line per product is the label dosage.

The second Application Rate line per product is the standard unit dosage per active ingredient.
Dosage per active ingredient cannot be calculated from label for a liquid product if the label does not show density.

For information on limitations, consult the "General Chemical Report; Use Limitations and Restricted Entry Intervals By Product, Site, and Application Method".

For information on form type and formulation of product, consult the "General Chemical Report; Forms and Products."

LUIS
EFGMB Chemical Report
For Aquatic Uses

Use Group: D1 AQUATIC FOOD CROP

Number of Applications: UNSPECIFIED

Site: RICE

Product No	Application Type/ Application Timing/ Application Equip.	Min Int Btw Apps (Days)	Max Dose Per Cycle or per Year	Max No. Apps per Cycle or per Year	Max Rate Per Application			Min Diluent			Max Spray Volume		
					Qty	Unit	Area	Type	Qty	Unit	Qty	Unit	Area
000264-00468	Spray.												
	Foliar.	0.00	1.00 / Cycle	0 / Cycle	1.00	pt	A						
	Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.2500	lb	A	W	5.00	gal	0.00		
000264-00468	Spray.												
	Foliar.	0.00	1.00 / Cycle	0 / Cycle	1.00	pt	A						
	Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.0000			W	5.00	gal	0.00		
000264-00468	Spray.												
	Late tillering.	0.00	1.00 / Cycle	0 / Cycle	1.00	pt	A						
	Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.0000			W	5.00	gal	0.00		
000264-00468	Spray.												
	Late tillering.	0.00	1.00 / Cycle	0 / Cycle	1.00	pt	A						
	Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.2500	lb	A	W	5.00	gal	0.00		
007969-00079	Spray.												
	Late tillering.	0.00	1.00 / Cycle	0 / Cycle	0.50	pt	A						
	Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.1250	lb	A	W	5.00	gal	0.00		

LUIS
EFGMB Chemical Report
For Aquatic Uses

se Group: D1 AQUATIC FOOD CROP

Number of Applications: UNSPECIFIED

Site: RICE

Product No	Application Type/ Application Timing/ Application Equip.	Min Int Btw Apps (Days)	Max Dose Per Cycle or per Year	1.00 / Cycle 0.00 / 0 Yr.	0 / Cycle 0 / Yr.	0.50 pt 0.0000	A	Max Rate Per Application		Type	Min Diluent		Max Spray Volume	
								Qty	Unit		Qty	Unit	Qty	Unit
007969-00079	Spray.													
	Late tillering.	0.00									W	5.00 gal		0.00
	Aircraft.													
007969-00079	Spray.													
	Preemergence.	0.00									W	5.00 gal		0.00
	Aircraft.													
007969-00079	Spray.													
	Preemergence.	0.00									W	5.00 gal		0.00
	Aircraft.													
007969-00079	Spray.													
	Early boot.	0.00									W	20.00 gal		0.00
	Ground.													
007969-00079	Spray.													
	Early boot.	0.00									W	20.00 gal		0.00
	Ground.													

LUIS
EFGWB Chemical Report
For Aquatic Uses

Use Group: D1 AQUATIC FOOD CROP

Number of Applications: UNSPECIFIED

Site: RICE

Product No	Application Type/ Application Timing/ Application Equip.	Min Int Btw Apps (Days)	Max Dose Per Cycle or per Year	Max No. Apps per Cycle or per Year	Max Rate Per Application		Min Diluent		Max Spray Volume	
					qty	Unit	Type	qty	Unit	qty
007969-00079	Spray.									
	Late tillering.	0.00	1.00 / Cycle 0.00 / 0 Yr.	0 / Cycle 0 / Yr.	0.50 pt	A	W	20.00 gal		0.00
	Ground.				0.0000					
007969-00079	Spray.									
	Late tillering.	0.00	1.00 / Cycle 0.00 / 0 Yr.	0 / Cycle 0 / Yr.	0.50 pt	A	W	20.00 gal		0.00
	Ground.				0.1250 lb	A				
007969-00079	Spray.									
	Preemergence.	0.00	1.00 / Cycle 0.00 / 0 Yr.	0 / Cycle 0 / Yr.	0.50 pt	A	W	20.00 gal		0.00
	Ground.				0.1250 lb	A				
007969-00079	Spray.									
	Preemergence.	0.00	1.00 / Cycle 0.00 / 0 Yr.	0 / Cycle 0 / Yr.	0.50 pt	A	W	20.00 gal		0.00
	Ground.				0.0000					

LUIS
EFCMB Chemical Report
For Aquatic Uses

ie Group: D1 AQUATIC FOOD CROP

Number of Applications: 1

Site: RICE

Product No	Application Type/ Application Timing/ Application Equip.	Min Int Btw Apps (Days)	Max Dose Per Cycle or per Year	Max No. Apps per Cycle or per Year	Max Rate Per Application			Min Diluent			Max Spray Volume		
					Qty	Unit	Area	Type	Qty	Unit	Qty	Unit	Area
007969-00080	Spray.	0.00	1.00 / Cycle	1 / Cycle	0.50 pt	A	A	W	0.00		5.00 gal	A	
	Early boot.		0.00 / 0 Yr.	0 / Yr.	0.0000								
	Aircraft.												
007969-00080	Spray.	0.00	1.00 / Cycle	1 / Cycle	0.50 pt	A	A	W	0.00		5.00 gal	A	
	Early boot.		0.00 / 0 Yr.	0 / Yr.	0.1250 lb	A	A						
	Aircraft.												
007969-00080	Spray.	0.00	1.00 / Cycle	1 / Cycle	1.00 pt	A	A	W	0.00		5.00 gal	A	
	Foliar.		0.00 / 0 Yr.	0 / Yr.	0.2500 lb	A	A						
	Aircraft.												
007969-00080	Spray.	0.00	1.00 / Cycle	1 / Cycle	1.00 pt	A	A	W	0.00		5.00 gal	A	
	Foliar.		0.00 / 0 Yr.	0 / Yr.	0.0000								
	Aircraft.												

LUIS
EFGWB Chemical Report
For Aquatic Uses

Use Group: D1 AQUATIC FOOD CROP

Number of Applications: 1

Site: RICE

<u>Product No</u>	<u>Application Type/ Application Timing/ Application Equip.</u>	<u>Min Int Btw Apps (Days)</u>	<u>Max Dose Per Cycle or per Year</u>	<u>Max No. Apps per Cycle or per Year</u>	<u>Max Rate Per Application</u>		<u>Min Diluent</u>		<u>Max Spray Volume</u>	
					<u>qty</u>	<u>Unit</u>	<u>Type</u>	<u>qty</u>	<u>Unit</u>	<u>Area</u>
007969-00080	Spray.	0.00	1.00 / Cycle	1 / Cycle	0.50	pt	W	0.00	5.00	gal
	Late tillering. Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.0000					
007969-00080	Spray.	0.00	1.00 / Cycle	1 / Cycle	0.50	pt	W	0.00	5.00	gal
	Late tillering. Aircraft.		0.00 / 0 Yr.	0 / Yr.	0.1250	lb				

RHÔNE-POULENC AG COMPANY

EPA Correspondence No. 90-142

May 23, 1990

Mr. Jay S. Ellenberger
U.S. Environmental Protection Agency
Office of Pesticide Programs
Special Review and Registration Division
Document Processing Desk
Crystal Mall Building 2, Room 266A
1921 Jefferson Davis Highway
Arlington, Virginia 22202

Dear Mr. Ellenberger:

Re: Acifluorfen- Sodium /Reregistration Phase 3

We would like to inform the Environmental Protection Agency that Rhône-Poulenc Ag Company (RPAC) has decided to exit the acifluorfen-sodium herbicide market. On May 11, 1990, RPAC entered into an agreement to transfer the entire RPAC acifluorfen registration data to BASF Corporation (BASF). In addition, BASF has agreed to purchase the existing inventory of TACKLE® Herbicide, EPA Reg. No. 264-468.

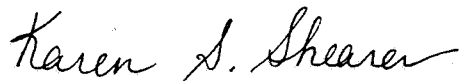
It is our understanding that BASF intends 1) to register RPAC as a source of supply for sodium acifluorfen; and 2) to amend the BLAZER® registration to add TACKLE® herbicide as an alternate formula so that they may distribute TACKLE® material under their BLAZER® brand product name. After discussion with Ms. Joanne Miller/EPA Registration Division concerning these registration actions, it became clear that prior EPA approval would be required and could not be obtained before the Phase 3 reregistration deadline. Ms. Miller advised us that it would be beneficial to maintain the TACKLE® registration until EPA accepted the above requests and, therefore, necessary for RPAC to submit a Phase 3 response.

Mr. Jay S. Ellenberger
May 23, 1990
Page 2

PG0009:0009

We are providing this explanation to fulfill the Phase 3 requirements. If it is not adequate, please inform us promptly. We are willing to cooperate with the Agency and BASF in order to accomplish the fore-mentioned objectives.

Sincerely,



Karen S. Shearer
Registration Manager

cc: J. Miller - EPA/Reg. Div.
H. Diessler - BASF Corporation

kss/90/159



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

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

Date: 3/1/91

MEMORANDUM

SUBJECT: LUIS Reports for: SODIUM ACIFLUORFEN
Pesticide Chemical Code: 114402
Case Number: 2605

TO: Addressees: (See below)

FROM: Phyllis Johnson, BAB
Biological and Economic Analysis Division (H7503W)

Attached is a package of LUIS Reports for chemical SODIUM ACIFLUORFEN. Coordinators for the science branches will receive a package for their own files and a package clearly labeled for distribution to each science branch. Each package will contain several reports relating to this A.I. to help in your evaluation of this chemical. These reports are being delivered in their entirety so you should not be receiving additional LUIS reports on this chemical.

The reports have been developed by representatives from your disciplines to support science reviews for Phase IV Review. If you have any questions concerning the data or if you have any suggestions concerning more useful ways to present the data, please direct them to either Gabe Patrick (308-8124) or Steve Jarboe, (308-8114), Biological Analysis Branch, Biological and Economic Analysis Division.

ADDRESSES:

Jay Ellenberger, Chief, SRRD, (H7508C)

Esther Saito, SACS Coordinator, HED, (H7509C)

William Evans, SACS Coordinator, EFED, (H7507C)

cc: Memorandum only

Angela Nugent, SRRD, (H7508W)

Mark Carpenter, SB/PMSD, (H7502C)

Ingrid Sunzenauer, SACS/EFED, (H7507C)

Edwin R. Budd, SACS/HED, (H7509C)

TABLE OF CONTENTS OF PACKAGE

- I. General Chemical Reports
 - A. Formulation(s), Product Type(s), and Restricted Chemical Information
 - B. Type of Pesticide
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 - D. Sites and Use Groups
 - E. Use Limitations and Restricted Entry Intervals at the Product Level
 - F. Use Limitations and Restricted Entry Intervals at the Site Level
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 - I. Geographical Limitations at the Product Level
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 - K. Geographical Limitations at the Application Method Level
 - L. Issues (at Product, Site, Application Level)
- II. Chemistry Branch Reports (if applicable)
- III. Non-Antimicrobial Aggregate Reports (if applicable)
- IV. Antimicrobial Aggregate Reports (if applicable)

ALPHABETIC ACTIVE CHEMICAL CODE LIST

ASCII FILE (JULY 90) FROM PEGGY OPS (PMSD)
PROGRAMMED BY YUEN-SHAUNG NG (BAB/BEAD)

TYPES: NONE OR BLANK = PREFERRED NAME FOR INGREDIENT STATEMENTS,
+=OFFICIAL, #=ANSI, C=COMMON, S=SYNONYM,
T=TRADE OR OTHER, *=NO ACTIVE PRODUCT

12/33/91

PAGE 1

CHEMICAL		
TYPE	CODE	CHEMICAL NAME
	114402	Sodium 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitrobenzoate
C	114402	Sodium acifluorfen
R	114402	CAS Reg. No. 62476-59-9
S	114402	Acifluorfen, sodium salt
S	114402	Sodium 5-((2-chloro-alpha,alpha,alpha-trifluoro-p-tolyl)oxy)-2-nitrobenzoate
S	114402	Benzoic acid, 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitro-, sodium salt
T	114402	Blazer 2L
T	114402	RH-6201
T	114402	Blazer 2S
T	114402	Blazer
T	114402	MC 10978
T	114402	Tackle 2AS

LUIS
General Chemical Report
(DYNAMAC REPORT)

Formulation(s), Product Type(s), Restricted Chemical Information

Date: 27 FEB 1991
Page: 1

Form Description.....	Reg.No.....	AI Percent.	AI Codes.	Density..	Prod Cat.	Type of Prod.	Homeowner.	Restricted Use Reason.....
12 EMULSIFIABLE CONCENTRATE	000264-00469	20.7000	114402	2.0	H	EP	N	

15 SOLUBLE CONCENTRATE/LIQUID	007969-00076	13.4000	114402	1.33	H	EP	N	
15 SOLUBLE CONCENTRATE/LIQUID	007969-00077	29.2000	103901	2.67	H	EP	N	
15 SOLUBLE CONCENTRATE/LIQUID	007969-00080	06.8000	114402	0.67	H	EP	N	
15 SOLUBLE CONCENTRATE/LIQUID	ARS7000300	33.4000	103901	3.0	H	EP	N	
15 SOLUBLE CONCENTRATE/LIQUID	LA87000100	21.4000	114402	2.0	H	EP	N	
15 SOLUBLE CONCENTRATE/LIQUID	MS87000300		114402		H	EP	N	

16 LIQUID-READY TO USE	000239-02509	00.1200	114402		H	EP	Y	

90 FORM NOT IDENTIFIED	000264-00500	21.1000	114402	2.0	H	MP	N	
90 FORM NOT IDENTIFIED	000264-00501	27.5000	114402	3.0	H	MP	N	
90 FORM NOT IDENTIFIED	007969-00079	20.1000	114402	2.0	H	EP	N	
90 FORM NOT IDENTIFIED	007969-00087	39.6000	114402		H	MP	N	

114402 Sodium acifluorfen

LUIS

General Chemical Report

Type(s) of Pesticide

(DYNAMAC REPORT)

Date: 27 FEB 1991

Page: 1

Description.....

HERBICIDE

114402 Sodium acifluorfen

LUIS
General Chemical Report
Use Groups

(DYNAMAC REPORT)

Date: 27 FEB 1991
Page: 1

Use Group. Description.....

TERRESTRIAL FOOD CROP

A1

TERRESTRIAL NON-FOOD CROP

C1

TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

C2

AQUATIC FOOD CROP

D1

(DYNAMIC REPORT)

Date: 27 FEB 1991

Page: 1

LOUIS

General Chemical Report

Site and Use Groups

Site.....	Use Group.....	Use Group Category Desc..
PEANUTS	TERRESTRIAL FOOD CROP	Food/Feed Uses
RICE	AQUATIC FOOD CROP	Food/Feed Uses
RICE	TERRESTRIAL FOOD CROP	Food/Feed Uses
SOYBEANS, EDIBLE	TERRESTRIAL FOOD CROP	Food/Feed Uses
MULCH	TERRESTRIAL NON-FOOD+OUTDOOR RESIDE	Non-Food/Non-Feed Uses
ORNAMENTAL AND/OR SHADE TREES	TERRESTRIAL NON-FOOD+OUTDOOR RESIDE	Non-Food/Non-Feed Uses
ORNAMENTAL HERBACEOUS PLANTS	TERRESTRIAL NON-FOOD+OUTDOOR RESIDE	Non-Food/Non-Feed Uses
ORNAMENTAL LAWNS AND TURF	TERRESTRIAL NON-FOOD+OUTDOOR RESIDE	Non-Food/Non-Feed Uses
ORNAMENTAL WOODY SHRUBS AND VINES	TERRESTRIAL NON-FOOD+OUTDOOR RESIDE	Non-Food/Non-Feed Uses
PATHS/PATIOS	TERRESTRIAL NON-FOOD CROP	Non-Food/Non-Feed Uses

LUIS
General Chemical Report
Geographic Limitations
at Product Level

Date: 27 FEB 1991
Page: 1

(DYNAMAC REPORT)

Reg.No..... Allowed Code. Location..... Disallowed Code. Location.....

AR87000300	AR Arkansas
LA87000100	LA Louisiana
MS87000300	MS Mississippi

LUIS
General Chemical Report
Geographic Limitations
at Site Level
(DYNAMAC REPORT)

Date: 27 FEB 1991
Page: 1

Reg.No.....	Use Group.....	Site.....	Allowed.....	Disallowed.....
007969-00079	AQUATIC FOOD CROP	RICE		California
007969-00080	AQUATIC FOOD CROP	RICE		California

LUIS
General Chemical Report
Geographic Limitations
at the Application Method Level

(DYNAMAC REPORT)
Date: 27 FEB 1991
Page: 1

Reg.No..... Use Group..... Site..... Application Type..... Application Timing..... Application Equipment. Allowed..... Disallowed.....
ZERO Records Listed

IUTR
General Chemical Report
(DYNAMAC REPORT)
Use Limitations and Restricted Entry Intervals
at Product Level

Date: 2/18/1991
Page: 1

Reg.No.....	Code	... Limitation Reason.....	Rest'd Entry (Days)
AR87000300	H	50 ___ day(s) preharvest interval.	
	G	Do not apply where crayfish are considered commercial resources.	
LA87000100	H	50 ___ day(s) preharvest interval.	
	G	Do not apply where crayfish are considered commercial resources.	
MS87000300	G	Do not apply where crayfish are considered commercial resources.	
	H	50 ___ day(s) preharvest interval.	

Use Limitations and Restricted Entry Intervals
at Site Level

Reg.No.....	Use Group.....	Site.....	Code	Limitation Reason.....	Rest'd Entry (Days)
000264-00468	TERRESTRIAL FOOD CROP	PEANUTS	H	75 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
			G	Do not graze rotated cereal grain crops or harvest for livestock forage or straw.	
000264-00468	AQUATIC FOOD CROP	RICE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
000264-00468	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
			G	Do not graze rotated cereal grain crops or harvest for livestock forage or straw.	
007969-00076	TERRESTRIAL FOOD CROP	PEANUTS	H	75 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00076	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00077	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00079	TERRESTRIAL FOOD CROP	PEANUTS	H	75 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00079	AQUATIC FOOD CROP	RICE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00079	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE	H	75 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00080	TERRESTRIAL FOOD CROP	PEANUTS	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00080	AQUATIC FOOD CROP	RICE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
007969-00080	TERRESTRIAL FOOD CROP	SOYBEANS, EDIBLE	H	50 ___ day(s) preharvest interval.	
			G	Do not use treated plants for feed or forage.	
AR87000300	TERRESTRIAL FOOD CROP	RICE	G	No parts of treated plants may be used as food or feed.	
LA87000100	TERRESTRIAL FOOD CROP	RICE	G	No parts of treated plants may be used as food or feed.	
MS87000300	TERRESTRIAL FOOD CROP	RICE	G	No parts of treated plants may be used as food or feed.	

114402 Sodium acifluorfen

LUIS
General Chemical Report
(DYNAMAC REPORT)
Use Limitations and Restricted Entry Intervals
at Application Method Level

Date: 27 FEB 1991
Page: 1

Req.No..... Use Group..... Site..... Application Type..... Application Timing... Application Equipment. Code
ZERO Records Listed

... Limitation Reason.... Rest'd Entry (Days)

114402 Sodium acifluorfen

LUIS
General Chemical Report
Use Limitations
at Antimicrobial Application Method Level
Reg.No..... Use Group..... Site..... Application Type..... Application Timing..... Application Equipment. Code
ZERO Records Listed
Date: 27 FEB 1991
Page: 1
... Limitation Reason.....

(DYNAMAC REPORT)

General Chemical Report

LUIS

Date: 27 FEB 1991

Page: 1

Issues

Reg.No..... Iss.Cat. Description..... Site..... Use Group..... Application Type..... Application Timing..... Application Equipment.....

000264-00468	J	Do not use where crayfish farming is practiced.	RICE	AQUATIC FOOD CROP	
007969-00079	J	Do not harvest crayfish from treated rice areas for food.	RICE	AQUATIC FOOD CROP	
007969-00080	E	Do not harvest crayfish from treated rice areas for food.	RICE	AQUATIC FOOD CROP	
AR87000300	P	Chemical not found on label.			
LA87000100	P	Chemical not found on label.			
MS87000300	P	Chemical not found on label.			

LUIS

Aggregate Report Showing Maximum Rate per Site

Site:	Max. Rate / App. Qty Unit	Area	Type	Min. Diluent Qty Unit	Finished Spray Qty Unit	Area	Max. Rate / App. at Soil Level Texture Qty Unit	Repeat Area	App. App. Timing:	Reg #
Site: MULCH										
Site: 1 --										
Site: ORNAMENTAL AND/OR SHADE TREES										000239-02509
Site: 1 --										
Site: ORNAMENTAL HERBACEOUS PLANTS										000239-02509
Site: 1 --										
Site: ORNAMENTAL LAWNS AND TURF										000239-02509
Site: 1 --										
Site: ORNAMENTAL WOODY SHRUBS AND VINES										000239-02509
Site: 1 --										
Site: PATHS/PATIOS										000239-02509
Site: 1 --										
Site: PEANUTS										000239-02509
Site: 2 lb		A								
Site: RICE										007969-00079
Site: 0.5 pt		A	OT	00	10 gal	A				
Site: RICE										AR87000300
Site: .25 lb		A								
Site: *** Maximum Rate ***										000264-00468

Report Finished

LUIS (DYNAMAC - DRAFT)
Antimicrobial Aggregate Report

Req #	App. Timing	Max. Dose Rate / App. Qty Unit	Max. Dose Diluent Qty Unit	Diluent Concentration Qty Unit	Max. PPM per AI
Use Group:					
ZERO Records Listed					

Site: App. Type: App. Equip:

Report Finished