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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

PC Code: 129108 DP Barcode: D331183 Date: October 4, 2007

194107

MEMORANDUM

SUBJECT:

Florasulam Environmental Fate Studies Reviews and Classifications (Second

Set)

TO:

Dianne Morgan, Product Manager Kathryn Montague, Team Leader

Herbicide Branch

Registration Division (7505P)

FROM:

Cheryl Sutton, Ph.D., Environmental Scientist

Environmental Risk Branch IV

Environmental Fate and Effects Division (7507P)

APPROVED

BY:

Elizabeth Behl, Branch Chief Environmental Risk Branch IV

Environmental Fate and Effects Division (7507P)

This memo serves to document the Environmental Fate and Effects Division's (EFED) reviews of and conclusions on the acceptability of the nine submitted florasulam environmental fate studies for which EFED completed the Data Evaluation Records (DERs). A separate data transmittal memo is being sent to you that addresses EFED's review of the 15 DERs previously completed by PMRA Cananda.

EFED study classifications for each of the nine studies are presented in Table 1.

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EPA MRID	Study Type	EPA/OPP Acceptability Conclusion	Comments	Electronic filename
46808130	hydrolysis	Supplemental	Study not repeated at 25 °C despite hydrolysis (pH 9 only) at 50 °C	129108 46808130 161-1
46808136	Aerobic soil metabolism	Supplemental	Uncharacterized residues at >10% of the applied; only foreign soils used.	129108 46808136 162-1
46808137	Aerobic soil metabolism	Supplemental	Uncharacterized residues at >10% of the applied; only foreign soils used.	129108 46808137 162-1
46808143	Aerobic aquatic metabolism	Supplemental	Follow-up to previous study (MRID 46827910); failed to definitively identify previously unidentified major degradate	129108 46808143 162-4
46808148	Terrestrial Field Dissipation (TFD)	Supplemental	Sampled to insufficient depth; conducted at a foreign site.	129108 46808148 164-1
46808149	TFD	Supplemental	Sampled to insufficient depth; conducted at a foreign site.	129108 46808149 164-1
46808150	TFD	Supplemental	Sampled to insufficient depth; conducted at a foreign site.	129108 46808150 164-1
46843802	TFD	Supplemental	Non-guideline study.	129108 46843802 164-1
46808322	Fish Bioaccumulation	Acceptable	none	129108 46808322 165-4

PMRA Submission Number {.....}

EPA MRID Number 46843802

Data Requirement: PMRA Data Code:

EPA DP Barcode: D331183

OECD Data Point: EPA Guideline: 164-1

Test material: Florasulam

End Use Product name: EF-1343

Formulation type: Soluble concentrate

Concentration of a.i.: 50 g/L

Test material:

Common name:

Florasulam.

Chemical name:

IUPAC name:

2',6',8-Trifluoro-5-methoxy[1,2,4]triazolo[1,5-c]pyrimidine-2-

sulfonanilide.

CAS name:

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy[1,2,4]triazolo[1,5-

c]pyrimidine-2-sulfonamide.

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy-(1,2,4)-triazolo-(1,5-c)-

pyrimidine-2-sulfonamide.

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy(1,2,4)triazolo(1,5-

c)pyrimidine-2-sulphonamide.

CAS No:

145701-23-1.

Synonyms:

DE-570; XDE-570; XR-570.

SMILES string:

C3(F)C=CC=C(F)C=3NS(=O)(=O)C1N=C2N(N=1)C(OC)=NC=C2F

(Suite v3.12 SMILES string from ISIS .MOL).

Primary Reviewer: Dan Hunt

Cambridge Environmental

Signature:

Date: 03/19/07

Secondary Reviewer: Joan Harlin

Cambridge Environmental

Signature:

Date: 03/19/07

QC/QA Manager: Joan Harlin

Cambridge Environmental

Signature:

Date: 03/19/07

Final Reviewer: Cheryl Sutton, Ph.D.

EPA Reviewer

Signature:

Company Code Active Code

EPA ARCHIVE DOCUMEN

Use Site Category

EPA PC Code: 129108

Date: 4/10/07

Well 10/4/07 for CA Suttern

PMRA Submission Number {.....}

EPA MRID Number 46843802

CITATION: Gambie, A. 1997. Residues of DE-570 and its 5-hydroxy metabolite in soil at normal harvest following application of EF-1343 to wheat and barley – Europe: 1995-1996. Unpublished study submitted by DowElanco Europe, Oxon, UK. Study ID No: GHE-P-6833. Experiment initiation and completion dates are not applicable. Final report issued December 10, 1997.

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EXECUTIVE SUMMARY

The reviewed study is a summary of florasulam soil residue data at harvest from four study trials in France (seven test plots total), three study trials in Germany (seven test plots total), three study trials in Italy (four test plots total), three study trials in Spain (four test plots total), and five study trials in the UK (fourteen test plots total) conducted in 1995 and 1996. The trials were conducted in the spring using EF-1343, an SC formulation containing 50 g ai/L. Florasulam was applied at target application rates of either 5 g a.i./ha or 7.5 g a.i./ha to winter cereals. The former rate is the same as the proposed maximum application rate (0.0045 lb ai/A or 0.005 kg ai/ha) for use in the United States. Of the 36 test plots, 29 received one test application of florasulam at either the cereal growth stage BBCH 30-32 or at the later growth stage of BBCH 49, and the remaining seven test plots received applications at both growth stages. Soil cores were collected from each of the test plots at normal harvest without any tillage between 57 and 119 days posttreatment. Additional soil cores were collected from two of the plots at a time corresponding to the normal sowing of an autumn following crop (134-140 days; Trial No. R95-015A). The soil cores were sectioned into 0-10 and 10-20 cm horizons except for the three test plots comprising Trial No. R95-049A, which were kept as 0-20 cm cores. Soil samples were extracted by organic extraction, aqueous extraction or both. The extracts were analyzed for florasulam and the transformation product 5-hydroxy XDE-570.

In the 29 test plots receiving one application of florasulam at either 5 g a.i./ha or 7.5 g a.i./ha, at harvest, florasulam was detected in the 0-10 cm soil horizon at 0.06- $0.46 \,\mu g/kg$ (organic and aqueous extracts) in seven of the plots, and was not detected above the LOQ ($0.05 \,\mu g/kg$) in 20 plots. Soil cores from the remaining two plots (comprising Trial No. R95-049A) were kept as 0-20 cm cores; florasulam residues were detected in these cores at 0.07- $0.08 \,\mu g/kg$ (aqueous extraction). Florasulam was only detected in the 10-20 cm soil horizon of two of the 29 test plots receiving one test application, and was 0.05- $0.06 \,\mu g/kg$. In the seven test plots receiving two applications of florasulam, residues of florasulam at harvest in the 0-10 cm depth were below the LOQ in one plot, ranged from 0.06 to $0.14 \,\mu g/kg$ in five plots, and were 0.68- $1.03 \,\mu g/kg$ in the remaining plot (organic and aqueous extracts); florasulam residues were not detected above the LOQ in soil below the 0-10 cm horizon (Trial No. R96-003A).

In the 29 test plots receiving one application of florasulam at either 5 g a.i./ha or 7.5 g a.i./ha, at harvest, the transformation product 5-hydroxy XDE-570 was detected in the 0-10 cm soil horizon at 0.06-1.18 μg/kg (organic and aqueous extracts) in 20 of the plots, and was not detected above the LOQ (0.05 μg/kg) in seven of the plots. Soil cores from the remaining two plots (comprising Trial No. R95-049A) were not divided into 0-10 and 10-20 cm horizons; 5-hydroxy XDE-570 residues were detected in the 0-20 cm combined soil layer of these two plots at 0.46-0.59 μg/kg (aqueous extraction). 5-Hydroxy XDE-570 was detected in the 10-20 cm soil horizon of four of the 29 test plots receiving one test application, with residue levels of 0.06-0.16 μg/kg. In all seven test plots receiving two applications of florasulam, 5-hydroxy XDE-570 residues were detected in the 0-10 cm soil horizon at harvest at 0.08-2.10 μg/kg, and in three of these plots, were detected in the 10-20 cm soil horizon at 0.06-0.10 μg/kg.

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Residues of florasulam and 5-hydroxy XDE-570 were not detected in the two soil cores collected post-harvest at 134-140 days posttreatment in two of the test plots comprising Trial No. R95-015A. The timing of the post-harvest samples corresponded to the normal sowing of an autumn following crop, and followed one application of florasulam at 7.5 g a.i./ha to one of the plots and two applications of florasulam at 7.5 g a.i./ha to the other plot.

Study Acceptability: This study is classified supplemental. No significant deviations from good scientific practices were noted. The study design was not consistent with Subdivision N Guideline 164-1 and could not be reviewed under the USEPA Pesticide Assessment Guideline for terrestrial field dissipation studies.

MATERIALS AND METHODS

The reviewed study is a summary of florasulam soil residue data at harvest from 18 study trials (36 test plots) conducted in five European countries during 1995 and 1996 (p. 6). Of the 18 study trials, four were conducted in France (seven test plots total), three were conducted in Germany (seven test plots total), three were conducted in Italy (four test plots total), three were conducted in Spain (four test plots total), and five were conducted in the UK (14 test plots total; Appendix 1, pp. 13-50).

The trials were conducted in the spring using EF-1343, an SC formulation containing 50 g ai/L (p. 6). Florasulam was applied at target application rates of either 5 g a.i./ha or 7.5 g a.i./ha to winter cereals. Of the 36 test plots, 29 received one test application of florasulam at either the cereal growth stage BBCH 30-32 or at the later growth stage of BBCH 49, and the remaining seven test plots received applications at both growth stages (Appendix 1, pp. 13-50). Additional soil cores were collected from two of the plots at a time corresponding to the normal sowing of an autumn following crop (Trial No. R95-015A). Experimental details are summarized in the table below. The study author stated that full experimental details can be found in the respective study reports for each trial.

Soil cores were collected from each of the test plots at normal harvest without any tillage between 57 and 119 days posttreatment, with the exception of the additional soil cores collected from Trial No. R95-015A at 134 and 140 days posttreatment (p. 6 and Table 1, pp. 8-9). Cores were sectioned into 0-10 and 10-20 cm horizons except for the three test plots comprising Trial No R95-049A, which were kept as 0-20 cm cores (Appendix 1, pp. 37-39). Samples were extracted by organic extraction, aqueous extraction or both. The extracts were analyzed for florasulam and the transformation product 5-hydroxy XDE-570. Further details of the extraction and analysis were not provided.

PMRA Submission Number {.....}

EPA MRID Number 46843802

Experimental details.

Trial No	Report No GHE-P-	Country	Application date (mm/dd/yy)		Soil texture	% Sand	% Silt	% Clay	рН	% ос	CEC (meq/100 g)	Application rate (g a.i./ha)	
			App 1	App 2					,			App 1	App 2
R96-114A	6342	France	04/30/96	-	Sandy silt loam	20.48	66.69	12.83	7.6	0.9	9.4	7.5	-
R96-116A	6344	France	04/26/96	-	Silt loam	11.57	75.15	13.28	6.8	0.9	10.4	7.5	-
R96-112A	6340	France	04/09/96	-	Silty clay loam	18.92	58.03	23.06	6.5	1.0	11.8	5	-
			04/09/96	-								7.5	-
R95-015A	5389	France	04/28/95	-	Clay loam	22.17	39.91	37.92	8.1	1.7	NA	5	-
			04/28/95	-								7.5	-
			04/28/95	05/04/95							1.0	7.5	7.5
RF96-011A	6345	Germany	05/20/96	06/14/96	Silty clay loam	1.98	74.09	23.94	8.2	1.6	18.5	6.5	7.5
			05/20/96	-	,							7.1	-
			06/14/96	-			,					7.5	-
RF95-006A	5476	Germany	05/10/95	-	Silty clay loam	16.00	59.00	25.00	4.5	1.35	NA	7.5	-
			05/10/95	-								7.5	-
RF95-009A	5477	Germany	04/25/95	_	Clay loam	23	50	27	6.2	1.56	NA	7.5	-
			04/25/95	_					ĺ			7.5	-
R95-011A	5387	Italy	03/31/95	ing.	Clay	4.25	40.67	55.07	7.9	1.9	NA	5	-
R96-010A	6337	Italy	04/16/96	-	Clay	6.36	43.55	50.10	8.5	2.3	32.5	5	-
			04/16/96	-								5	-
R95-012A	5388	Italy	03/31/95	-	Silty clay	7.37	49.27	43.35	7.3	1.5	NA	5	
R96-006A	6333	Spain	02/21/96	-	Silty clay	17.68	45.87	36.45	8.6	1.1	12.6	4.2	-
			02/21/96	-								4.6	-
R95-046A	5386	Spain	03/02/95	-	Sandy clay loam	50.29	25.34	24.37	8.0	0.9	NA	5	·-
R95-045A	5385	Spain	03/01/95	- :	Sand	86.38	5.86	7.76	8.3	0.4	NA	5	-

Data were obtained from Table 1, pp. 8-9 and Appendix 1, pp. 13-50 of the study report. The study author stated that full experimental details can be found in the respective study reports for each trial (p. 6). The reviewer noted that explanations were not provided for the footnote references and superscripts in Table 1 of the study report.

PMRA Submission Number {.....}

EPA MRID Number 46843802

Experimental details continued.

Trial No	Report No GHE-P-	Country	Application date (mm/dd/yy)		Soil texture	% Sand	% Silt	% Clay	pН	% ос	CEC (meq/100 g)	Application rate	
_	İ		App 1	App 2					ļ			Applicating (g a.i./ha App 1 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	App 2
R95-049A	5390	UK	04/10/95	_	Clay loam	33.20	42.12	24.68	6.7	1.5	NA	7.5	-
			05/26/95	-	·	j						7.5	-
1			04/10/95	05/26/95								7.5	7.5
R95-049B	5390	UK	05/05/95	-	Sandy clay loam	51.08	25.49	23.42	6.6	1.1	9	7.5	-
			06/05/95	-								7.5	-
			05/05/95	06/05/95								7.5	7.5
R96-002A	6329	UK	05/05/96	-	Sandy loam	64.64	23.46	11.90	7.4	2.3	14.2	7.5	-
		ļ	05/29/96	-							,	7.5	-
			05/05/96	05/29/96						l		7.5	7.5
R96-003A	6330	UK	05/12/96	_	Sandy loam	53.99 29	29.28	16.72	6.2	1.5	12.5	7.5	-
			06/12/96	-								7.5	-
			05/12/96	06/12/96								7.5	7.5
R95-051A	5391	UK	05/03/95	_	Sandy loam	67.81	14.63	17.57	7.7	1.4	NA	7.5	-
			04/18/95	05/03/95		·						7.5	7.5

Data were obtained from Table 1, pp. 8-9 and Appendix 1, pp. 13-50 of the study report. The study author stated that full experimental details can be found in the respective study reports for each trial (p. 6). The reviewer noted that explanations were not provided for the footnote references and superscripts in Table 1 of the study report.

RESULTS AND DISCUSSION

In the 29 test plots receiving one application of florasulam at either 5 g a.i./ha or 7.5 g a.i./ha, at harvest, florasulam was detected in the 0-10 cm soil horizon at 0.06-0.46 μ g/kg (organic and aqueous extracts) in seven of the plots, and was not detected above the LOQ (0.05 μ g/kg) in 20 of the plots (Table 1, pp. 8-9). Soil cores from the remaining two plots (comprising Trial No. R95-049A) were kept as 0-20 cm cores; florasulam residues were detected in these cores at 0.07-0.08 μ g/kg (aqueous extraction). Florasulam was detected in the 10-20 cm soil horizon of two of the 29 test plots receiving one test application, at 0.05-0.06 μ g/kg. In the seven test plots receiving two applications of florasulam, residues of florasulam at harvest were below the LOQ in one of the plots, were 0.06-0.14 μ g/kg in five of the plots, and were 0.68-1.03 μ g/kg in the remaining plot (organic and aqueous extracts); florasulam resides were not detected above the LOQ in soil below the 0-10 cm horizon (Trial No. R96-003A).

In the 29 test plots receiving one application of florasulam at either 5 g a.i./ha or 7.5 g a.i./ha, at harvest, the transformation product 5-hydroxy XDE-570 was detected in the 0-10 cm soil horizon at 0.06-1.18 μ g/kg (organic and aqueous extracts) in 20 of the plots, and was not detected above the LOQ (0.05 μ g/kg) in seven of the plots (Table 2, pp. 10-11). Soil cores from the remaining two plots (comprising Trial No. R95-049A) were not divided into 0-10 and 10-20 cm horizons; 5-hydroxy XDE-570 residues were detected in the 0-20 cm combined soil layer of these two plots at 0.46-0.59 μ g/kg (aqueous extraction). 5-Hydroxy XDE-570 was detected in the 10-20 cm soil horizon of four of the 29 test plots receiving one test application, at 0.06-0.16 μ g/kg. In all seven test plots receiving two applications of florasulam, 5-hydroxy XDE-570 residues in the 0-10 cm soil horizon at harvest ranged from 0.08 to 2.10 μ g/kg, and were detected in 10-20 cm soil horizon of three of these plots at 0.06-0.10 μ g/kg.

Residues of florasulam and 5-hydroxy XDE-570 were not detected in the two soil cores collected post-harvest at 134-140 days posttreatment in two of the test plots comprising Trial No. R95-015A (Tables 1-2, pp. 8-11). The timing of the post-harvest samples corresponded to the normal sowing of an autumn following crop, and followed one application of florasulam at 7.5 g a.i./ha to one of the plots and two applications of florasulam at 7.5 g a.i./ha to the other plot.

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Data Evaluation Record on the terrestrial field dissipation of florasulam

PMRA Submission Number {......}

EPA MRID Number 46843802

Concentration of florasulam residues at ha	ion of flor	asulam re	sidues at k	arvest	express	rvest expressed as µg/kg son	g soil.							
Trial No	Country	Applicat	Application date	Appli	Application	Days		Flora	Florasulam		-	5-Hydroxy XDE-570	XDE-570	
)/mm)	(mm/dd/vv)	ra	rate	-tsod		gu)	(µg/kg)			(µg/kg)	- 1	
*********				(g a.i./ha)	i./ha)	treatment	0-1(0-10 cm		10-20 cm	0-1(0-10 cm	10-2	10-20 cm
		Ann.1	App.2	App.1	App.2		Organic	Aqueous	Organic	Aqueous	Organic	Aqueous	Organic	Ague
R96-114A	France	04/30/96	-	7.5	-	49	<0.05	na	QN	na	0.13	na	<0.05	na
R96-116A	France	04/26/96		7.5	-	06	<0.05	na	MD	na	0.36	na	<0.05	na
R96-112A	France	04/09/96		5	1	98	R	na	ND	na	0.07	na	<0.05	na
		04/00/96		7.5	-	98	<0.05	na	CN	na	0.12	na	<0.05	na
B05_015A	France	04/28/95		5	,	63	<0.05	QN	R	QN	0.07	0.10	<u>R</u>	B
WC10-COV	A THE	04/28/95		7.5	1	63	<0.05	<0.05	E	QN	0.16	0.22	<0.05	2
						140	Q	Æ	Q _N	QN	ND	ND	Ð	呈
		04/28/95	05/04/95	7.5	7.5	57	<0.05	0.07	<0.05	QN	0.16	0.28	<0.05	0.0 0.0
-					· !	134	R	R	Q _Z	QN	ON	<0.05	ND QN	P
PE06	Germany	96/02/50	06/14/96	6.5	7.5	69	<0.05	na	R	na	80.0	na	<0.05	na
011A	Communy	96/02/50	1	7.1		26	R	na	R	na	<0.05	na	ND	na
1771		06/14/06		7.5	ı	69	R	na	Ð	na	0.10	na	<0.05	na
PF05-	Germany	┿		7.5	,	68	R	QN PN	R	QN	0.08	0.05	Ð	剧
006A	Comment			7.5	ı	68	Q.	£	QN N	ND	0.11	90.0	<0.05	<0.0 <0.0
BF05-	Germany	+		7.5	<u>'</u>	78	R	na	QN.	na	90.0	na	R	na
009A				7.5	,	78	R	£	Æ	QN	0.09	na	N	na
D05 011A	Italy	03/31/05		2		96	R	R	Ð	QN.	ND	ND	QN	뒫
P06-010A	Italy	04/16/96		V	,	98	£	na	£	na	ND	na	R	na
10.0-001	, mar	04/16/96	1	2		98	<0.05	na	ND QN	na	ND	na	Ð	na
R95-012A	Italv	03/31/95	1	8		96	Æ	R	QN	ND	ND	R	Q	P
17.0			,] ;	10 01 01	1	CITY THE	Mat dotootod	d no = Not analyzed	analyzed			

PMRA Submission Number {.....}

EPA MRID Number 46843802

Concentration of florasulam residues at harvest expressed as µg/kg soil, continued.

Trial No	Country	Applica	tion date	Application		Days post-	Florasulam				5-Hydroxy XDE-570				
		(mm/dd/yy)		rate		treatment	(µg/kg)					(µg	/kg)		
	j			(g a.i./ha)			0-10 cm		10-2	0 cm	0-10	0 cm	10-2	20 cm	
		App.1	App.2	App.1	App.2		Organic	Aqueous	Organic	Aqueous	Organic	Aqueous	Organic	Aqueous	
R96-006A	Spain	02/21/96	-	4.2	-	119	< 0.05	na	< 0.05	na	< 0.05	na	na	na	
		02/21/96	-	4.6	-	119	< 0.05	na	< 0.05	na	< 0.05	na	ND	na	
R95-046A	Spain	03/02/95	-	5	-	84	0.18	0.22	< 0.05	< 0.05	0.15	0.19	< 0.05	< 0.05	
R95-045A	Spain	03/01/95	-	5 .	-	96 ¹	0.12	0.10	0.06	0.05	0.26	0.19 ¹	0.12	0.10	
R95-049A UI	UK	04/10/95	-	7.5	-	115	na	0.08	na	na	na	0.46	na	na	
	}	05/26/95	-	7.5	-	69	na	0.07	na	na	na	0.59	na	na	
		04/10/95	05/26/95	7.5	7.5	69	na	0.11	na	na	na	1.15	na	na	
R95-049B	UK	05/05/95	-	7.5	-	107	0.06	0.07	ND	ND	0.34	0.76	ND	< 0.05	
		06/05/95	-	7.5	-	76	0.12	0.12	< 0.05	< 0.05	0.45	0.66	0.06	0.06	
		05/05/95	06/05/95	7.5	7.5	76	0.14	0.14	ND	< 0.05	0.72	1.04	0.10	0.10	
R96-002A	UK	05/05/96	-	7.5	r - ,	94	0.05	na	ND	na	0.42	na	< 0.05	na	
		05/29/96	-	7.5	-	70	< 0.05	na	ND	na	0.46	na	< 0.05	na	
		05/05/96	05/29/96	7.5	7.5	70	0.12	< 0.05	< 0.05	na	1.09	1.00	0.06	na	
R96-003A	UK	05/12/96	-	7.5	-	96	0.38	0.24	< 0.05	na	1.18	1.05	0.09	na	
		06/12/96	-	7.5	-	65	0.46	0.26	0.06	na	0.74	0.52	0.16	na	
		05/12/96	06/12/96	7.5	7.5	65	1.03	0.68	< 0.05	na	2.10	1.79	0.10	na	
R95-051A	UK	05/03/95	-	7.5	-,	72	< 0.05	< 0.05	ND	ND	0.08	0.07	< 0.05	< 0.05	
		04/18/95	05/03/95	7.5	7.5	72	0.06	<0.05	ND	ND	0.14	0.10	< 0.05	< 0.05	

Data were obtained from Tables 1-2, pp. 8-11 and Appendix 1, pp. 13-50 of the study report. ND = Not detected. na = Not analyzed.

¹ Data in the Summary table were not consistent with data reported in Appendix 1 of the study report (p. 36). The reviewer reported the data from the Appendix.

STUDY DEFICIENCIES

The study design was not consistent with Subdivision N Guideline 164-1 and could not be reviewed under the USEPA Pesticide Assessment Guideline for terrestrial field dissipation studies.

REVIEWER COMMENTS

1. The reviewer notes that study report summary Tables 1 and 2 contained footnote references but no footnotes (pp. 8-11).

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Attachment 1: Structures of Parent Compound and Transformation Products

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Florasulam [DE-570; XDE-570; XR-570]

IUPAC Name: 2',6',8-Trifluoro-5-methoxy[1,2,4]triazolo[1,5-c]pyrimidine-2-

sulfonanilide.

CAS Name: N-(2,6-difluorophenyl)-8-fluoro-5-methoxy[1,2,4]triazolo[1,5-

c]pyrimidine-2-sulfonamide.

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy-(1,2,4)-triazolo-(1,5-c)-

pyrimidine-2-sulfonamide.

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy(1,2,4)triazolo(1,5-

c)pyrimidine-2-sulphonamide.

CAS Number:

145701-23-1.

SMILES String:

C3(F)C=CC=C(F)C=3NS(=O)(=O)C1N=C2N(N=1)C(OC)=NC=C2F

(Suite v3.12 SMILES string from ISIS .MOL).

Identified Compounds

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Florasulam [DE-570; XDE-570; XR-570]

IUPAC Name: 2',6',8-Trifluoro-5-methoxy[1,2,4]triazolo[1,5-c]pyrimidine-2-

sulfonanilide.

CAS Name: N-(2,6-difluorophenyl)-8-fluoro-5-methoxy[1,2,4]triazolo[1,5-

c]pyrimidine-2-sulfonamide.

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy-(1,2,4)-triazolo-(1,5-c)-

pyrimidine-2-sulfonamide.

N-(2,6-difluorophenyl)-8-fluoro-5-methoxy(1,2,4)triazolo(1,5-

c)pyrimidine-2-sulphonamide.

CAS Number: 145701-23-1.

SMILES String: C3(F)C=CC=C(F)C=3NS(=O)(=O)C1N=C2N(N=1)C(OC)=NC=C2F

(Suite v3.12 SMILES string from ISIS .MOL).

5-Hydroxy DE-570 [5-OH; 5-OH-XDE-570; 5-OH DE-570; 5-hydroxy-XDE-570]

IUPAC Name: Not reported.

CAS Name: N-(2,6-difluorophenyl)-8-fluoro-5-hydroxy(1,2,4)triazolo(1,5c)pyrimidine-

2-sulphonamide.

CAS Number: Not reported.

SMILES String: C3(F)C=CC=C(F)C=3NS(=O)(=O)C1N=C2N(N=1)C(O)=NC=C2F (Suite

v3.12 SMILES string from ISIS .MOL).

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