

15

# DATA EVALUATION RECORD - SUPPLEMENT

XDE-570 (FLORASULAM)

Study Type: OPPTS 870.3150 [ ' 82-1b] (non-rodent); Subchronic Oral Toxicity in Dogs

Work Assignment No. 4-01-128 D (MRID 46808223)

Prepared for  
Health Effects Division  
Office of Pesticide Programs  
U.S. Environmental Protection Agency  
2777 South Crystal Drive  
Arlington, VA 22202

Prepared by  
Pesticides Health Effects Group  
Sciences Division  
Dynamac Corporation  
1910 Sedwick Road, Bldg 100, Ste B.  
Durham, NC 27713

Primary Reviewer  
David A. McEwen, B.S.

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Secondary Reviewer  
Stephanie E. Foster, M.S.

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Program Manager:  
Michael E. Viana, Ph.D., D.A.B.T.

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Quality Assurance:  
Mary L. Menetrez, Ph.D.

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

### Disclaimer

This Data Evaluation Record may have been altered by the Health Effects Division subsequent to signing by Dynamac Corporation personnel

XDE-570 (FLORASULAM)/129108

OPPTS 870.3150/ DACO 4.3.8/ OECD 409

EPA Reviewer: Karlyn J. Bailey Signature: \_\_\_\_\_  
 Registration Action Branch 2, Health Effects Division (7509P) Date: \_\_\_\_\_  
 EPA Secondary Reviewer: Myron Ottley, Ph.D. Signature: \_\_\_\_\_  
 Registration Action Branch 3, Health Effects Division (7509P) Date: \_\_\_\_\_

Template version 02/06

**DATA EVALUATION RECORD – SUPPLEMENT****See TXR # 0054348 for previous DER**

This supplement contains:

- New cover page
- New executive summary

**STUDY TYPE:** Subchronic Oral Toxicity [feeding] – [Dog]; OPPTS 870.3150 [ ' 82-1b ]  
 (non-rodent); OECD 409.

**PC CODE:** 129108**DP BARCODE:** D331116**TXR#:** 0054348**TEST MATERIAL (PURITY):** XDE-570 (Florasulam; 99.3% a.i.; Lot # 940714)**SYNONYMS:** XR-570, XRD-570, DE-570, N-(2,6-difluorophenyl)-8-fluoro-5-methoxy(1,2,4)triazolo(1,5-c)pyrimidine-2-sulfonamide

**CITATION:** Stebbins, K.E. (1995) Amended report for XDE-570: Thirteen-week dietary toxicity study in Beagles. The Toxicology Research Laboratory, Health and Environmental Sciences, The Dow Chemical Company, Midland, MI. Laboratory Project Study ID: DR-0312-6565-021, September 13, 1995 (Amended date: November 20, 1997). MRID 46808223. Unpublished.

**SPONSOR:** Dow AgroSciences Canada, Inc., 2100- 450 1 St. SW, Calgary, AB, Canada

**EXECUTIVE SUMMARY** - In a 90-day oral toxicity study (MRID 46808223), XDE-570 (Florasulam; 99.3% a.i.; Lot # 940714) was administered to 4 Beagle dogs/sex/dose *ad libitum* in the diet at dose levels of 0, 5, 50, or 100 mg/kg/day (time-weighted average test substance intake was 0/0, 6/6, 56/55, and 104/94 mg/kg/day [M/F]) for 13 weeks.

There were no compound-related effects on mortality, clinical signs, body weight, body weight gain, food consumption, ophthalmoscopy, hematology, urinalysis, or gross pathology observed at any dose.

The target organ appeared to be the **liver**. At 100 mg/kg, the following effects were noted: (i) alkaline phosphatase activity was increased ( $p < 0.05$ ) by 213-451% in both sexes on Days 45 and 91; (ii) increased incidence of very slight to slight hepatic vacuolation (4/4 treated vs. 3/4 control males and 3/4 treated vs. 1/4 control females); and (iii) increased ( $p < 0.05$ ) absolute (incr. 22-29%) and relative (to body; incr. 26-27%) liver weight in both sexes.

XDE-570 (FLORASULAM)/129108OPPTS 870.3150/ DACO 4.3.8/ OECD 409

At 50 mg/kg, alkaline phosphatase activity was only increased ( $p < 0.05$ ) by 59-112% in the males and 91-127% in the females on Days 45 and 91, and there was a slight increase in incidence of hepatic vacuolation (3/4 treated [very slight to slight severity] vs. 1/4 control [moderate severity] females).

**The LOAEL is 100 mg/kg/day, based on increased alkaline phosphatase activity, increased absolute and relative liver weights, and increased incidence/severity of hepatic vacuolation in both sexes. The NOAEL is 50 mg/kg/day.**

This study is classified as **acceptable/guideline** and satisfies the guideline requirement for Test Guideline OPPTS 870.3150; OECD 409 for a 90-day oral toxicity study in the dog.

**COMPLIANCE** - Signed and dated Data Confidentiality, GLP Compliance, and Quality Assurance statements were provided.

**Note to EPA reviewer:** The LOAEL has been changed from 50 mg/kg/day to 100 mg/kg/day, because the effects at 50 mg/kg/day were very minor.