DATE OUT: 07 Dec 2006

SUBJECT: **PRODUCT CHEMISTRY REVIEW** **MP [ ] EP [x]**
DP BARCODE No.: D332128
Reg. File Symbol No.: 62719-LAO
PRODUCT NAME: GF-1274
COMPANY: Dow AgroSciences LLC
Decision No.: 369825 **PC CODE:** 108702
FOOD USE: [x] **Integrated Formulation** [ ]

FROM: Bruce F. Kitchens, Chemist
Technical Review Branch
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Bruce F. Kitchens 1/24/07
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TO: RM #23, Joanne Miller/James Stone
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INTRODUCTION:

The registrant, Dow AgroSciences, is submitting an application to register the proposed end-use product, GF-1274. The active ingredient in this product is Pyroxsulam (99% a.i.) at a label nominal concentration of 7.50% a.i. This product is intended for use as an herbicide. In support of this request, the registrant has submitted a basic Confidential Statement of Formula (CSF) dated 17 July 2006, a draft label, and product chemistry data contained in MRID#s 469077-01 and 469077-02. The Technical Review Branch (TRB) has been asked to review this submission.

SUMMARY OF FINDINGS

TRB has reviewed this submission and reports the following findings:

1. The source of the active ingredient is currently undergoing registration. The use of this proposed product is contingent upon registration of the source of the active ingredient.

2. All inert ingredients are cleared for use in formulated pesticide products. In addition, all inert ingredients are exempt from the requirement of a food tolerance.

3. The nominal concentration of the active ingredient listed on the proposed CSF and the draft label are the same.

4. The draft label contains the appropriate storage and disposal statements.

5. The active ingredient's certified limits as proposed on the basic CSF are acceptable.

CONCLUSIONS:

TRB has reviewed this submission and concludes the following:

1. The basic formula CSF for the proposed end-use product, GF-1274 dated 17 July 2006 is acceptable. Acceptance of the end-use product for registration is contingent upon the registration of the source of the active ingredient.

2. This submission satisfies the data requirements as specified in 40 CFR 158.155, 158.160, 158.165, 158.167, 158.175, and 158.180 with respect to product identity and composition, description of materials used to produce the product, description of formulation process, discussion of formation of impurities, certified limits, and enforcement analytical method.

3. This submission satisfies the data requirements as specified in 40 CFR 158.190 with respect to physical and chemical properties.

PRODUCT CHEMISTRY DATA (SERIES 830 Subgroup A)

Subgroup A – Product Identity and Composition	Data Required Fulfilled	MRID No.
830.1550. Chemical Identity	Y	469077-02
830.1600. Beginning Materials	Y	469077-02
830.1650. Formulation Process	Y	469077-02
830.1670. Discussion of Impurities	Y	469077-02
830.1700. Preliminary Analysis	NR	
830.1750. Certified Limits	Y	469077-02
830.1800. Enforcement Analytical Method	Y	469077-02

PRODUCT CHEMISTRY DATA (SERIES 830 Subgroup B)

Subgroup B – Physical and Chemical Properties	Data Required Fulfilled	Value or Qualitat. Descrip.	MRID No.
830.6302. Color	NR		
830.6303. Physical State	Y	Solid @ 20°C	469077-02
830.6304. Odor	NR		
830.6314. Oxidation/Reduction Action	NA	Product does not contain oxidizing or reducing agents	
830.6315. Flammability	NA	Product does not contain flammable components	
830.6316. Explodability	Y	Not impact sensitive	469077-02
830.6317. Storage stability	N		
830.6319. Miscibility	NA	Product not an EC	
830.6320. Corrosion Characteristics	N		
830.6321. Dielectric Breakdown Voltage	NA	Product not used around electrical equipment	
830.7000. pH	Y	5.5	469077-02
830.7100. Viscosity	NA	Product is a solid	
830.7000. Density/Bulk Density	Y	0.50 g/ml (loose)	469077-02

Explanations: A = The Requirements Were Fulfilled; N = The Requirements Were Not Fulfilled; NA = Not Applicable; G = Data Gap; U = Requires Upgrading; I = Incomplete or In Progress; W = Waived.

Enforcement Analytical Method: (MRID No.)

The active ingredient, Pyroxsulam (XDE-742), was determined by high performance liquid chromatography (HPLC) using UV detection and an external standard by analytical method DAS-AM-05-032. Method was validated for mean recovery, method precision, linearity and validation range.

Equipment and Parameters

Instrument:	Agilent 1100 HPLC system
Detector:	VWD Ultraviolet detector (UV)
Wavelength:	280 nm
Column:	Phenomenex Luna C8 (2) column, 150 mm x 4.6 mm i.d., 3 µm particle size
Mobile Phase:	Acetonitrile/Water
Internal Std:	Diethyphthalate