



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OPPTS/OPP/RD/TRB/PRODUCT CHEMISTRY TEAM

WASHINGTON, D.C. 20460

DATE OUT: September 29, 2005

SUBJECT: Product Chemistry Review of Hartz Reference 121
Barcode #:318632 Decision #:357507 Reg No:2596-RLU
PC Code(s):044312, 129032, 109701 Food Use:NO

FROM: Linda L. Kutney, Chemist *Linda L. Kutney*
Product Chemistry Team *9/29/05*
Technical Review Branch/RD (7505C)

TO: Daniel Kenny, Rita Kumar RM-01
Insecticide Rodenticide Branch/ RD (7505C)

INTRODUCTION:

The Hartz Mountain Corporation has submitted product chemistry data to support registration of their new product, Hartz Reference 121, to be dermally applied insecticide for dogs and puppies. Data were submitted under MRID 46552701.

Hartz intends that the most recently submitted basic and alternate CSFs, dated 9/26/05, supersede all previously submitted CSFs.

Ms Tricia A. Sheehy of Hartz (201-271-4800 X7561) explained over the phone on 9/8/05 that this product consists of two components which must be kept separate until they are joined to comprise the active product. This physical separation of the two product components is necessary in order to extend its shelf life.

SUMMARY OF FINDINGS:

1. The product consists of equal amounts of liquid in Chamber A and Chamber B.
2. The nominal concentration of ais given on the proposed label are:

45.00 % Permethrin (Chamber A)
AND
14.85 % Dinotefuran (Chamber B)
1.50 % Sumilarv (Chamber B)
3. The nominal concentration for all of the proposed CSFs agrees with the label claim (PRN 91-2 is satisfied).
4. All conditions required for alternate formulations listed in 40CFR 152.43 are satisfied.

TRB CONCLUSIONS:

1. The physical or chemical hazards statement on the label must be revised to state, 'Combustible. Do not use or store near heat or open flame,' in accordance with 40 CFR 156.78.
2. We note that the nominal concentration of sumilarv is 1.50%, not 1.48%, as listed on the label, but this slight difference is acceptable.
3. The basic proposed CSF, dated 9/26/05 is acceptable.
4. The alternate proposed CSF, dated 9/26/05, is not acceptable because the purity of the Dinotefuran source is [REDACTED] not 89.0%, as used on the CSF.
5. Subgroup A and B product chemistry data requirements are adequate except:

Discussion of Impurities - Must be accepted by the Agency before registration (GDLN 830.1670)

Submission of Analytical Enforcement Methods for all 3 ais Must be accepted by the Agency before registration. These methods may not be marked 'Confidential' (GDLN 830.1800).

Storage Stability (GDLN 830.6317) - In Progress

Corrosion Characteristics (GDLN 830.6320) - In Progress

Product ingredient source information not included.

PRODUCT CHEMISTRY DATA (SERIES 830 Subgroup A & Subgroup B)

Section 830 Subgroup A & Subgroup B			
Subgroup A, Guideline 830.--:	Data OK?	MRID	
1550. Chemical Identity (CSF)	Yes	CSF	
1600. Beginning Materials	Yes	46552701	
1650. Formulation Process	Yes	46552701	
1670. Discussion of Impurities	NO	--	
1750. Certified Limits (CSF)	Yes	CSF	
1800 Enforcement Analytical Method	NO	--	
Subgroup B, Guideline 830.--:	Data OK?	Description	MRID
6302 Color	Yes	Chamber A- Permethrin- colorless to light yellow	46552701
6303 Physical State	Yes	Clear Liquids	46552701
6304 Odor	Yes	Ethyl Lactate Smell	46552701
6314 Oxidation/Reduction	Yes	Both components did not react with water or monoammonium phosphate but did slightly discolor in zinc. Chamber B- Dinotefuran- pyriproxifen compartment of the formulation showed immediate reaction with potassium	46552701

		permanganate-with color change and effervescent foaming.	
6315 Flammability/Flame Extension	Yes	Chamber A- Permethrin 139 F Chamber B- Dinotefuran-pyriproxifen 143 F Dinotefuran:pyriproxifen 2.5:1 152F	46552701
6316 Explodability	Yes	Not reported to contain explosive components.	46552701
6317 Storage Stability	NO	Study in progress.	46552701
6319 Miscibility	Yes	NA. Not mixed with petroleum solvents.	46552701
6320 Corrosion Characteristics	NO	Study in progress.	46552701
6321 Dielectric Breakdown Voltage	Yes	Not used around electrical equipment.	46552701
7000 pH	Yes	Chamber A: The Permethrin component does not contain water, so the pH does not exist. Chamber B: Dinotefuran:pyriproxifen is about 5.8 at 25C.	46552701
7100 Viscosity	Yes	Chamber A: Permethrin 16 cP Brookfield spindle 2 at 10 rpm Chamber B: Dinotefuran/pyriproxifen 40 cP Brookfield spindle 2 at 10 rpm	46552701

7300. Density/Bulk Density	Yes	Chamber A: Permethrin 9.23 lb/gal Chamber B: Dinotefuran:pyripr oxifen 8.99 lb/gal	46552701
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Explanations: NA = Not Applicable