

US EPA ARCHIVE DOCUMENT

DP Barcode: D219143

MRID No.: 435732-48

DATA EVALUATION RECORD  
ACUTE CONTACT TOXICITY TEST WITH THE HONEY BEE  
§ 141-1

2/22/1996

1. CHEMICAL: Isoxaflutole PC Code No.: 123000

2. TEST MATERIAL: RPA 201772 Purity: 96.8%

3. CITATION

Authors: Dr. Ralf Petto  
Title: Laboratory testing for toxicity (acute contact and oral LD<sub>50</sub>) of RPA 201772 to honeybees (*Apis mellifera* L.)

Study Completion Date: May 27, 1994

Laboratory: RCC Umweltchemie GmbH & Co KG, D-64380 RoBdorf

Sponsor: Rhone-Poulenc Agro

Laboratory Report ID: 463500

MRID No.: 435732-48

DP Barcode: D219143

4. REVIEWED BY: C. Renée Costello, Biologist, EFED

Signature: C. Renée Costello Date: 2/20/96

5. REVIEWED BY: F. Nicholas Mastrotta, Wildlife Biologist, EFED

Signature: F. Nicholas Mastrotta Date: 2/22/96

6. STUDY PARAMETERS

Test Species: *Apis mellifera* L.

Age of Test Organisms at Test Initiation: Similar age

Exposure Duration: 48 hours

7. CONCLUSIONS: Acute contact LD50 >100 ug/bee  
Acute oral LD50 > 168.7 ug/bee  
Toxicity category Practically nontoxic

8. ADEQUACY OF THE STUDY

A. Classification: Core

B. Rationale: N/A

C. Repairability: N/A

9. GUIDELINE DEVIATIONS: N/A

10. SUBMISSION PURPOSE: Registration.

**11. MATERIALS AND METHODS****A. Test Organisms**

Guideline Criteria	Reported Information
Species	Honey Bee ( <i>Apis mellifera L.</i> )
Age at beginning of test Worker bees of uniform age.	Worker bees of similar age
Source	RCC
Were bees from disease-free colonies?	Not reported
Were bees kept in conditions conforming to proper cultural practices?	Yes

**B. Test System**

Guideline Criteria	Reported Information
Test Chambers	Stainless steel (10 x 8.5 x 5.5 cm). Front closed with removable glass sheets, bottom with perforated ventilation holes. Top had 2 openings for food, inner sides were covered with filter paper.
Temperature during exposure	26 to 28°C
Relative humidity during exposure	54 to 64%
Lighting	Darkness except for observation period.
Feeding	No food for 1-2 hours prior to testing; then <i>ad libitum</i> .

**C. Test Design**

Guideline Criteria	Reported Information
Nominal dosage levels tested	Contact test: 100, 50, 25, 12.5, and 6.25 ug/bee Oral test: 168.7, 68.4, 33.8, 19.4, and 11.2 ug/bee
Number of bees exposed per dosage level	30
Other experimental design information	10 bees/chamber; 3 reps
Bees randomly or impartially assigned to test groups	Not reported
Control	Solvent, untreated and positive control (dimethoate).
Solvent control	Acetone/ready to use syrup 20 µl per bee (this is in excess of the recommended amount of 5 ul per bee).
Total observation period and frequency of interim observations.	48 hours total, continuous for 1st 30 minutes, then 45 and 60 minutes, 2 hours, and 4 hours 1st day, then 24 hours, 48 hours the 2nd day.

2

**12. REPORTED RESULTS**

Guideline Criteria	Reported Information
Quality assurance and GLP compliance statements were included in the report?	Yes
Observed adverse effects on bees at respective dosages	Contact test: the only mortalities occurred in the positive control (100% after 4 hours). No behavioral anomalies. Oral test: No mortalities with the exception of the positive control (100% after 2 hours). Increased cleaning behavior at all levels until the 4 hour check, then nothing abnormal.
Control and Solvent Control Mortality	0%
Were raw data included?	Yes

**Mortality and Observations**

No mortalities with the exception of the positive control (contact test 100% after 4 hours; oral test 100% after 2 hours).

**Agency Statistical Analysis**

Visual observation.

3

**RHÔNE-POULENC AG COMPANY**

February 14, 1996

Mr. Dan Kenny  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Registration Division  
Crystal Mall Building 2, Room 266A  
1921 Jefferson Davis Highway  
Arlington, VA 22202

RENEE,  
HOPE THIS  
HELPS!  
-DAN

Dear Mr. Kenny:

Re: Technical Isoxaflutole, EPA File Symbol 264-LAA, PP# 6F4664  
Honeybee Acute Toxicity Study

This letter is in response to the reviewer's question regarding the purity of the active ingredient used as test material in the isoxaflutole (RPA 201772) honeybee acute toxicity study (Study no. 463500, RCC), MRID no. 43573248. We have reviewed the study and found that there was a transcription error in reporting the purity of the test material. The purity should be reported as 968 g/kg instead of 968 kg/kg as stated in the final report. Enclosed is a copy of the certificate of analysis which corresponds to the batch of test product used in the study.

If you have any questions, please contact me at telephone number 919-549-2365.

Sincerely,

*Karen S. Shearer*

Karen S. Shearer  
Registration Manager

kss/96/033

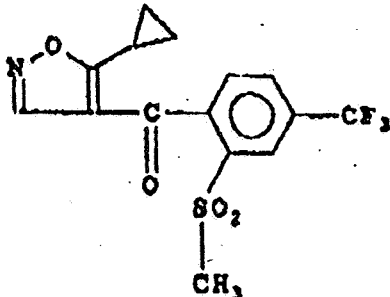
4

**RHONE-POULENC Secteur AGRO**

 14-30 RUE PIERRE BAIZAT B.P. 9163  
 69263 LYON CEDEX 09  
 TEL. 72.29.43.25 - FAX 78.43.44.74  
 TLX 310098 P RHONE

**CERTIFICATE OF ANALYSIS**

Active Ingredient

Name or Code : RPA201772  Alias :			
Storage Log N° : DA874  Chemical Name (IUPAC) : 5-cyclopropyl-4-(2-methylsulfonyl-4-trifluoromethylbenzoyl) isoxazole  Molecular Weight : 359.53		N° Cas :	
Location of Synthesis : DECINES  Synthesis Batch N° : 39 ADM 93  Purity : 968 g/Kg		Appearance : yellow powder  Reference of Analysis : AMA1966	
Date of Analysis : 25/06/93  Date of Re-test : 25/06/95			
- Storage Conditions - Store at about ambient		- Toxicity Classification - Xn R20/21/22	
Date of Emission : Jun 26, 1993  Certificate N° : AQMA93621		I certify that this material was analyzed in a laboratory following Good Laboratory Practice Standards. The characterization data for this material are archived at RHONE-POULENC secteur Agro-LYON-FRANCE- File Location : A489 Authorization : Name and Signature : J.COUSIN 