

US EPA ARCHIVE DOCUMENT

PMSD 1972:



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

CONFIDENTIAL

DEC 18 1987

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Mobay Corporation - Response to the Product Chemistry Chapter - Azinphos-Methyl (Guthion) Registration Standard (MRID Nos. 403678-01 and 403678-05; October 6, 1987) - EPA Registration No. 3125-108 RCB No. 2906

FROM: Gobind P. Makhijani, Chemist *RB Perfetta for*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

TO: Dennis Edwards/Jenkins, PM Team 12
Insecticide-Rodenticide Branch
Registration Division (TS-767C)

and

Amy S. Rispin, Chief
Science Integration Staff
Hazard Evaluation Division (TS-769C)

THRU: William J. Boodee, Section Chief *RB Perfetta for*
Reregistration Section
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

In response to the Azinphos-Methyl (Guthion) Reregistration Guidance Document (issued September 1986), Mobay Chemical Corporation has submitted the remaining product chemistry data, received by EPA on October 6, 1987 (MRID Nos. 403678-01 and 403678-05).

These data and our conclusions are discussed below. Revised tables A and B are provided at the end of this report.

62-1 - Preliminary Analysis

The registrant has provided (MRID No. 403678-05) preliminary analyses of 5 batches of azinphos-methyl (Guthion), sampled in January 1980. The results of the preliminary analyses of

these five batches are discussed in Confidential Appendix A (column 2).

The registrant should submit analyses of five more recent batches, produced during the last 2 years. These batches should be spaced over a time period longer than 1 month.

A data gap still exists here.

62-2 - Certification of Limits

The registrant has submitted a Confidential Statement of Formula (CSF) (EPA form 8570, Rev. 2-85) in which the upper and lower limits for the active ingredient and the upper limits for the impurities present at > 0.1 percent by weight in the technical product have been certified. (MRID No. 403678-05).

These limits are discussed in Confidential Appendix A (column 3).

The CSF should be amended, at the time of resubmission of preliminary results of five recent batches.

A data gap still exists here.

62-3 - Analytical Methods to Verify Certified Limits

The registrant has submitted analytical methods for the determination of active ingredients and other impurities in the technical product. These (MRID No. 403678-05) procedures are discussed in Confidential Appendix B.

All the methods have been validated by the registrant and no further information is required.

Attachment I: Tables A and B (4 pages)

cc: Azinphos-Methyl Registration Standard, SF, Reviewer, RBP, PMSD/ISB (E. Eldredge), D. Edwards (PM 12) RF, Circu., Tox (Coberly)

Attachment II: Confidential Appendix A and B (pages)

cc: Azinphos-Methyl Registration Standard, SF, Reviewer, RBP, PMSD/ISB (E. Eldredge), D. Edwards (PM 12) Tox (Coberly)

cc: Azinphos-Methyl Registration Standard, SF, RF, Reviewer, PMSD/ISB (E. Eldredge), D. Edwards (PM 12) Circu., RBP, Tox (Coberly)

Table A
Generic Data Requirements for Azinphos-Methyl TGAI (EPA Registration No. 3125-108)

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Data Required?		Reference
			Yes	No	
<u>§158.120 Product Chemistry</u>					
<u>Product Identity and Composition</u>					
61-2 - Description of Beginning Materials and Manufacturing Process	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
61-3 - Discussion of Formation of Impurities	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
<u>Analysis and Certification of Product Ingredients</u>					
62-1 - Preliminary Analysis of Product Samples	TGAI	CR	<input checked="" type="checkbox"/> 1/	<input type="checkbox"/>	
62-2 - Certification of Ingredient Limits	TGAI	R	<input checked="" type="checkbox"/> 2/	<input type="checkbox"/>	
62-3 - Analytical Methods to Verify Certified Limits	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID Nos. 403678-01 and 403678-05
<u>Physical and Chemical Characteristics</u>					
63-2 - Color	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-02
63-3 - Physical State	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-02
63-4 - Odor	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-02
63-5 - Melting Point	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-02

W

Table A
 Generic Data Requirements for Azinphos-Methyl TGAI (EPA Registration No. 3125-108) (cont'd)

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Data Required?		Reference
			Yes	No	
<u>§158.120 Product Chemistry</u>					
<u>Physical and Chemical Characteristics (cont'd)</u>					
63-6 - Boiling Point	TGAI	N/A	<input type="checkbox"/>	<input type="checkbox"/>	
63-7 - Density, Bulk Density, or Specific Gravity	TGAI	N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-8 - Solubility	TGAI or PAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-9 - Vapor Pressure	PAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-10 - Dissociation Constant	PAI	N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
63-11 - Octanol/Water Partition Coefficient	PAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-12 - pH	TGAI	N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
63-13 - Stability	TGAI	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
Other Requirements					
64-1 - Submittal of Samples	TGAI or PAI	CR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3/

1/ Analyses of 5 more recent batches, produced during the last 2 years is required.

2/ The CSF should be amended at the time of resubmission of preliminary results.

3/ If samples are needed, the Agency will request them.

5

Table B
 Product-Specific Data Requirements for Manufacturing-Use Products Containing Azinphos-Methyl
 EPA Registration No. 3125-108

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Data Required?		Reference
			Yes	No	
<u>§158.120 Product Chemistry</u>					
<u>Product Identity and Composition</u>					
61-1 - Product Identity and Disclosure of Ingredients	MP	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MRID No. 402228-01
61-2 - Description of Beginning Materials and Manufacturing Process	MP	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
61-3 - Discussion of Formation of Impurities	MP	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
<u>Analysis and Certification of Product Ingredients</u>					
62-1 - Preliminary Analysis of Product Samples	MP	CR	<input checked="" type="checkbox"/> ^{1/}	<input type="checkbox"/>	
62-2 - Certification of Ingredient Limits	MP	R	<input checked="" type="checkbox"/> ^{2/}	<input type="checkbox"/>	
62-3 - Analytical Methods to Verify Certified Limits	MP	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID Nos. 403678-01 and 403678-05
<u>Physical and Chemical Characteristics</u>					
63-14 - Oxidizing or Reducing Action	MP	CR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-15 - Flammability	MP	N/A	<input type="checkbox"/>	<input type="checkbox"/>	

57

Table B
 Product-Specific Data Requirements for Manufacturing-Use Products Containing Azirphos-Methyl (cont'd)
 EPA Registration No. 3125-108

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Data Required?		Reference
			Yes	No	
<u>§158.120 Product Chemistry</u>					
<u>Physical and Chemical Characteristics (cont'd)</u>					
63-16 - Explodability	MP	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-17 - Storage Stability	MP	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
63-18 - Viscosity	MP	N/A	<input type="checkbox"/>	<input type="checkbox"/>	
63-19 - Miscibility	MP	N/A	<input type="checkbox"/>	<input type="checkbox"/>	
63-20 - Corrosion Characteristics	MP	R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MRID No. 402228-01
<u>Other Requirements</u>					
64-1 - Submittal of Samples	TGAI or PAI	CR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>3/</u>

1/ Analyses of 5 more recent batches, produced during the last 2 years is required.
 2/ The CSF should be amended at the time of resubmission of preliminary results.
 3/ The Agency will request samples if needed.

Azinphos-methyl residue chemistry review

Page _____ is not included in this copy.

Pages 7 through 16 are not included in this copy.

The material not included contains the following type of information:

- Identity of product inert ingredients
 - Identity of product impurities
 - Description of the product manufacturing process
 - Description of product quality control procedures
 - Identity of the source of product ingredients
 - Sales or other commercial/financial information
 - A draft product label
 - The product confidential statement of formula
 - Information about a pending registration action
 - FIFRA registration data
 - The document is a duplicate of page(s) _____
 - The document is not responsive to the request
-

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.
