



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

CONFIDENTIAL

AUG 15 1988

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: E. I. du Pont de Nemours & Company, Inc. Response to
the Mancozeb Registration Standard

ID NO(S). 352-341
RCB NO(S). 4073
MRID NO(S). 406782-01

FROM: H. Fonouni, Ph.D., Chemist *H. E. Fonouni*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

TO: L. Rossi, PM-21
Herbicide/Fungicide Branch
Registration Division (TS-767C)

THRU: William J. Boodee, Section Head
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C) *WJB*

In response to the Mancozeb Registration Standard (Guidance Document, April 1987), E. I. du Pont de Nemours & Company, Inc. has forwarded product chemistry information/data on the technical chemical. The information/data submitted and our conclusions are discussed below. In addition, revised Table A has been included to reflect the remaining product chemistry data requirements for this material.

62-1 Preliminary Analysis of Product Samples
MRID NO: 406782-01

The information/data provided appear in Confidential Appendix A.

The information/data provided do not satisfy the requirements for this topic. Compositional analysis must be provided for the unregistered technical using method(s) which would distinguish mancozeb per se from other potential carbon disulfide producing contaminants. In addition, analytical data should be provided for other impurities present in the sample; refer to Confidential Appendix A.

62-2 Certification of Ingredient Limits

MRID NO: 406782-01

The information/data provided appear in Confidential Appendix B.

The information/data provided do not satisfy the requirements for this topic. Certified limits must be established for products containing the unregistered technical using analytical method(s) which would distinguish mancozeb per se from other potential carbon disulfide producing contaminants. In addition, certified limits (upper) should be established for each impurity present at $\geq 0.1\%$ of the product; refer to Confidential Appendix B.

62-3 Analytical Methods to Verify Certified Limits

MRID NO: 406782-01

The information/data provided appear in Confidential Appendix C.

The information/data provided do not satisfy the requirements for this topic. Analytical method(s) capable of distinguishing mancozeb per se from other potential carbon disulfide producing contaminants must be provided. In addition, validation data should be provided for the methods used; refer to Confidential Appendix C.

Attachment I - Table A (2 pages)

cc: Mancozeb Registration Standard File, SF, Reviewer
(H. Fonouni), RBP, TOX (R. Coberly), PMSD/ISB (E. Eldredge),
PM 21 (L. Rossi)

Attachment II - Confidential Appendix A (2 pages)

Attachment III - Confidential Appendix B (4 pages)

Attachment IV - Confidential Appendix C (3 pages)

cc: Mancozeb Registration Standard File, SF, Reviewer
(H. Fonouni), RBP, TOX (R. Coberly), PMSD/ISB (E. Eldredge),
PM 21 (L. Rossi).

cc: Mancozeb Registration Standard File, SF, RF, Reviewer
(H. Fonouni), RBP, TOX (R. Coberly), PMSD/ISB (E. Eldredge),
PM 21 (L. Rossi), Circu.

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TABLE A
 GENERIC DATA REQUIREMENTS FOR THE UNREGISTERED TECHNICAL MANCOZEB, E. I. DU PONT DE NEMOURS & COMPANY, INC.

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Additional Data Required? [Yes] [No]	Reference Citation (MIRD No.)
40 CFR 158.120 Product Chemistry				
Product Identity and Composition				
61-1 - Identity of Ingredients	TGAI	R	X	
61-2 - Materials and Process	TGAI	R	X	
61-3 - Formation of Impurities	TGAI	R	X	
Analysis and Certification of Product Ingredients				
62-1 - Preliminary Analysis	TGAI	R	X ¹	406782-01
62-2 - Certification of Ingredient Limits	TGAI	R	X ²	
62-3 - Analytical Methods to Verify Certified Limits	TGAI	R	X ³	
Physical and Chemical Characteristics				
63-2 - Color	TGAI	R	X	
63-3 - Physical State	TGAI	R	X	
63-4 - Odor	TGAI	R	X	
63-5 - Melting Point	TGAI	R	X	
63-6 - Boiling Point	TGAI	N/A ⁴		
63-7 - Bulk Density	TGAI	R	X	
63-8 - Solubility	TGAI or PAI	R	X	
63-9 - Vapor Pressure	PAI	R	X	
63-10 - Dissociation Constant	PAI	R	X	
63-11 - Octanol/Water Partition Coefficient	PAI	R	X	
63-12 - PH	TGAI	R	X	

(Continued, footnotes follow)

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TABLE A
GENERIC DATA REQUIREMENTS FOR THE UNREGISTERED TECHNICAL MANCOZEB, E. I. DU PONT DE NEMOURS & COMPANY, INC.

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Additional		Reference Citation (MIRD No.)
			Data Required?		
			[Yes]	[No]	
158.120 Product Chemistry (Cont'd)					
Physical and Chemical Characteristics					
63-13- Stability	TGAI	R	X		
Other Requirements					
64-1 - Submittal of Samples	TGAI and PAI	CR ⁵		X	

TGAI = Technical Grade Active Ingredient (Technical Chemical); PAI = Purified Active Ingredient; R = Required; CR = Conditionally Required; N/A = Not Applicable.

- 1/ Compositional analysis must be provided using method(s) which would distinguish mancozeb per se from other potential carbon disulfide producing contaminants.
- 2/ Certified limits must be established for products containing the unregistered technical using analytical method(s) which would distinguish mancozeb per se from other potential carbon disulfide producing contaminants. Certified limits (upper) should also be established for each impurity present at $\geq 0.1\%$ (w/w) of the product.
- 3/ Analytical method(s) capable of distinguishing mancozeb per se from other carbon disulfide producing contaminants must be provided.
- 4/ Not applicable, since the product is a solid at room temperature.
- 5/ If samples are needed, the Agency will request them.

Mancozeb residue chemistry review

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Pages 5 through 10 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.

Mancozeb residue chemistry review

Page _____ is not included in this copy.

Pages 11 through 13 are not included in this copy.

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