



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

SEP 13 1985

PMSD/ISB
0259

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Response by Dupont to the data gaps identified by the Product Chemistry Chapter of the Methomyl Registration Standard (Accession No. 251423).

FROM: Wei T. Chin, Chemist *W.T. Chin*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

TO: Jay S. Ellenberger
Project Manager, Team #12
Registration Division (TS-767C)

and

Amy Rispin, Chief
Science Integration Staff
Hazard Evaluation Division

THRU: C. L. Trichilo, Chief *R. Schmitt for*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

SUMMARY: In response to the data gaps identified in the Methomyl Registration Standard (January 1982), the Dupont Company has submitted additional data (Accession No. 251423) dated September 1983. These data include supplementary information on data gaps identified by the Product Chemistry Chapter of the Methomyl Registration Standard. RCB has reviewed these data and has updated Tables A and B of the Product Chemistry Chapter of the Standard.

Attachment: Confidential Appendices A and B (2 pages)

Copies to: Methomyl Registration Standard, R.F., W.T. Chin,
PMSD/ISB, J. Ellenberger, PM Team #12.

cc: Methomyl Registration Standard, R.F., Reviewer, PMSD/ISB,
S.F., circ.

RDI: RBP, 9/9/85, R. Schmitt, 9/13/85

Description of Beginning Materials and Manufacturing Process (61-2)

The manufacturing process for technical methomyl is discussed in Confidential Appendix A of this report.

This information partially satisfies the requirements under this topic; however, the suppliers of the beginning materials and their address was not given. These are required. This data gap remains outstanding.

Discussion of the Formation of Impurities (61-3)

The registrant has provided a discussion of how various impurities in methomyl are formed. In addition, Dupont has stated that no nitrosating agents are added to formulations of methomyl products. This satisfies the requirements for this topic.

Preliminary Analysis (62-1)

The registrant gives a typical composition of technical methomyl produced by the manufacturing process. This is discussed in Confidential Appendix B of this report. The registrant, however, has not stated how many different batches of methomyl were analyzed to arrive at the percentages of methomyl and impurities found in the technical product. At least five batches must be analyzed. This is a data gap.

Certification of Limits (62-2)

The registrant has not certified limits for methomyl and impurities. This is a data gap.

Physical and Chemical Properties (63-2-63-21)

The registrant has submitted data on physical and chemical properties as follows:

63-3 Physical State: white crystalline solid

63-4 Odor: slightly sulfurous

63-5 Melting Point: 78-79 °C

63-7 Specific Gravity: 1.2946 (25°/4°)

63-8 Solubility:

<u>Solvent</u>	<u>Solubility (g/100 g of solvent)</u>
Water	5.8
Methanol	100
Acetone	72
Ethanol	42
Isopropanol	22
Toluene	3

The registrant should clarify the temperature at which these solubilities were measured. The temperature should be 25° C. This is a data gap.

63-11 Octanol/Water Partition Coefficient: 1.08

63-12 PA: Neutral

Product Chemistry

Table A. Generic Data Requirements for Technical Methomyl

<u>Guideline Citation and Name of Test</u>	<u>Test Substance</u>	<u>Guideline Status</u>	<u>Are Additional Data Required?</u> (yes) (no)		<u>Reference Citation</u>
<u>Product Identity and Composition:</u>					
\$61-1 Identity of Ingredients	TGAI	R		x	See Registration Standard
\$61-2 Materials and Process	TGAI	R	x		
\$61-3 Formation of Impurities	TGAI	R		x	See Registration Standard
<u>Analysis & Certification of Product Ingredients:</u>					
\$62-1 Preliminary Analysis	TGAI	R	x		
\$62-2 Certification of Limits	TGAI	R	x		
\$62-3 Analytical Methods to Verify Certified Limits	TGAI	R		x	See Registration Standard
<u>Physical and Chemical Characteristics:</u>					
\$63-2 Color	TGAI	R		x	See Registration Standard
\$63-3 Physical State	TGAI	R		x	See Registration Standard
\$63-4 Odor	TGAI	R		x	See Registration Standard
\$63-5 Melting Point	TGAI	R		x	See Registration Standard
\$63-6 Boiling Point	TGAI	N/A		x	
\$63-7 Bulk Density	TGAI	R		x	EPA Accession No. 251423
\$63-8 Solubility	TGAI	R		x	EPA Accession No. 251423
\$63-9 Vapor Pressure	PAI	R		x	EPA Accession No. 251423
\$63-10 Dissociation Constant	PAI	R		x	
\$63-11 Octanol/Water Partition Coefficient	PAI	R		x	EPA Accession No. 251423
\$63-12 pH	TGAI	R		x	EPA Accession No. 251423
\$63-13 Stability	TGAI	R		x	See Registration Standard

TGAI: Technical grade active ingredient; R = Required; N/A = Not applicable.

Product Chemistry

Table B. Product-Specific Data Requirements for Manufacturing-Use Products Containing Methomyl

<u>Guideline Citation and Name of Test</u>	<u>Test Substance</u>	<u>Guideline Status</u>	<u>Are Additional Data Required?</u> (yes) (no)		<u>Reference Citation</u>
<u>Product Identity and Composition:</u>					
\$61-1 Product Identity and Disclosure of Ingredients	MP	R	x		
\$61-2 Description of Beginning Materials and Manufacturing Process	MP	R	x		
\$61-3 Discussion of Formation of Impurities	MP	R		x	EPA Accession No. 251423
<u>Analysis & Certification of Product Ingredients:</u>					
\$62-1 Preliminary Analysis of Product Samples	MP	R	x		
\$62-2 Certification of Ingredient Limits	MP	R	x		
\$62-3 Analytical Methods to Verify Certified Limits	MP	R		x	

MP = Manufacturing-use product; R = Required; N/A = Not applicable.

Methomyl residue chemistry review

Page _____ is not included in this copy.

Pages 6 through 7 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
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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.
