



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

PMSD/ISB
1833

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SEP 29 1987

MEMORANDUM

SUBJECT: Stauffer Chemical Company Response to the Product Chemistry Chapter of the Phosmet Registration Standard (MRID No. 402748-01) RCB No. 2628

FROM: Gobind P. Makhijani, Chemist *Gobind Makhijani*
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TO: George T. LaRocca/Adam Heyward, PM Team 15
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Registration Division (TS-767C)

and

Amy Rispin
Science Integration Staff
Hazard Evaluation Division (TS-769C)

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

In response to the issuance of the Phosmet Reregistration Guidance Document, published in September 1986, Stauffer Chemical Company has submitted partial product chemistry data, dated June 30, 1987 (MRID No. 402748-01) for phosmet (EPA Registration Nos. 476-2177 and 476-2178).

These data and our conclusions are discussed below. Also revised tables A and B are provided at the end of this report. The remaining product chemistry data will be submitted by the registrant in January 1988.

Physical and Chemical Characteristics

The registrant has submitted the following information for phosmet:

	<u>PAI</u>	<u>TGAI</u>
63-2 - Color	Clear, colorless crystals	Pink powder
63-3 - Physical State	Crystalline solid	Powder
63-4 - Odor	Odorless	Garlic-like odor
65-5 - Melting Point	71.6 to 72 °C	66 to 69 °C
63-7 - Density	1.439 g/mL	-
63-8 - Solubility	-	20 ± 2 mg/L in water at 20 °C > 100 g/100 mL in acetone, chloroform, and xylene at 25 °C. < 1.0 g/100 mL in ethanol and kerosene at 25 °C.
63-10 - Dissociation Constant	Not required	Not required
63-12 - pH	1% solution - 6.72	1% solution 3.74
63-13 - Stability	-	Half life at 60 °C - 62 days, at 80 °C - 3.3 days

Attachment I: Tables A and B (3 pages)

cc: Phosmet Registration Standard, S.F., Reviewer, RBP,
PMSD/ISB (Eldredge), G. LaRocca (PM 15), R.F., Circu.,
TOX (Coberly)

cc: Phosmet Registration Standard, R.F., Reviewer, RBP,
PMSD/ISB (E. Eldredge, S.F., G. LaRocca (PM 15), Circu.,
TOX (Coberly)

TABLE A
 GENERIC DATA REQUIREMENTS FOR TECHNICAL PHOSMET
 (EPA Registration Nos. 476-2177 and 476-2178)

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Additional Data Required? [Yes] [No]	Reference Citation
<u>Product Identity and Composition</u>				
61-1 - Identify of Ingredients	TGAI	R	[X]	
61-2 - Materials and Process	TGAI	R	[X]	
61-3 - Formation of Impurities	TGAI	R	[X]	
<u>Analysis and Certification of Product Ingredients</u>				
62-1 - Preliminary Analysis	TGAI	R	[X]	
62-2 - Certification of Ingredient Limits	TGAI	R	[X]	
62-3 - Analytical Methods to Verify Certified Limits	TGAI	R	[X]	
<u>Physical and Chemical Characteristics</u>				
63-2 - Color	TGAI	R	[]	MRID No. 402748-01
63-3 - Physical State	TGAI	R	[]	MRID No. 402748-01
63-4 - Odor	TGAI	R	[]	MRID No. 402748-01
63-5 - Melting Point	TGAI	R	[]	MRID No. 402748-01

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TABLE A
 GENERIC DATA REQUIREMENTS FOR TECHNICAL PHOSMET
 (EPA Registration Nos. 476-2177 and 476-2178)

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Additional Data Required? [Yes] [No]	Reference Citation
<u>Physical and Chemical Characteristics</u> (cont'd)				
63-6 - Boiling Point	TGAI	N/A	[] [X]	
63-7 - Density	TGAI	R	[] [X]	MRID No. 402748-01
63-8 - Solubility	TGAI or PAI	R	[] [X]	MRID No. 402748-01
63-9 - Vapor Pressure	PAI	R	[X] ^{1/} []	
63-10 - Dissociation Constant	PAI	N/A	[] [X]	
63-11 - Octanol/Water Partition Coefficient	PAI	R	[] [X]	See Registration Standard
63-12 - pH	TGAI	R	[] [X]	MRID No. 402748-01
63-13 - Stability	TGAI	R	[] [X]	MRID No. 402748-01
64-1 - Submittal of Samples	TGAI or PAI	R	[X] ^{2/} []	

DATA REQUIREMENT FOOTNOTES:

TGAI = Technical grade active ingredient; PAI = Purified active ingredient; R = Required; NA = Not applicable.

^{1/} This data requirement will be waived if the vapor pressure of the active ingredient is less than 1 x 10⁻⁷ torr.

^{2/} If samples are needed, the Agency will request them.

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TABLE B
 PRODUCT SPECIFIC DATA REQUIREMENTS FOR MANUFACTURING-USE PRODUCTS CONTAINING PHOSMET
 (EPA Registration Nos. 476-2177 and 476-2178)

Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Additional Data Required? [Yes] [No]	Reference Citation
<u>Product Identity</u>				
61-1 - Product Identity and Disclosure of Ingredients	MUP	R	[X] []	
61-2 - Description of Beginning Materials and Manufacturing Process	MUP	R	[X] []	
61-3 - Discussion of Formation of Impurities	MUP	R	[X] []	
<u>Analysis and Certification of Product Ingredients</u>				
62-1 - Preliminary Analysis	MUP	CR	[X] []	
62-2 - Certification of Ingredient Limits	MUP	R	[X] []	
62-3 - Analytical Methods to Verify Certified Limits	MUP	R	[X] []	
<u>Other Requirements:</u>				
64-1 - Submittal of Samples	EP, TGAI, PAI	CR	[X]* []	

R = Required; CR = Conditionally Required; EP = End-Use Product; MUP = Manufacturing-Use Product; TGAI = Technical Grade of the Active Ingredient; PAI = Pure Active Ingredient.
 * = If samples are required, the Agency will request them.

57