

US EPA ARCHIVE DOCUMENT



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

February 6, 2007
PC Code: 081901
DP Barcodes: ~~306484~~, 301353

306584

MEMORANDUM

SUBJECT: Revised Vischem Data Requirements for the Me Too Registration of Chlorothalonil

FROM: Lucy Shanaman, Chemist
Environmental Risk Branch III
Environmental Fate and Effects Division (7507P)

Lucy Shanaman 2/06/07

Daniel Rieder, Branch Chief
Environmental Risk Branch III
Environmental Fate and Effects Division (7507P)

Daniel Rieder 2/7/07

TO: Anthony Kish, Product Manager
Fungicide Branch
Registration Division (7505P)

All environmental fate data which was submitted and/or referenced by Vischem Corp. in order to meet their data requirements for the Me-Too registration of chlorothalonil for turf and ornamental uses has now been reviewed by EFED. The results of that evaluation have been tabulated below. Revisions have been made to this table, as compared to the data requirement table appearing in Appendix G of the June 15, 2006 chlorothalonil Me-Too assessment. These revisions result from new Data Evaluation Reports, including the subsequent changes to the environmental fate data requirements, and have been highlighted in the table below. Finalized copies of the new DERs will accompany this report.

US EPA ARCHIVE DOCUMENT



2057444

Revised Environmental Fate Data References for the Me-Too Assessment				
Study Type	Study Classification	Data Requirements Fulfilled	Comments	MRID
Hydrolysis (161-1)	acceptable	yes		0040539
Aqueous Photolysis (161-2)	acceptable	yes		45710223
Soil Photolysis (161-3)	supplemental	yes	In spite of the deficiencies noted for this study, it does provide useful information for describing the photolysis of chlorothalonil on soil. The deficiencies were such that would be expected to enhance soil photolysis, yet chlorothalonil was stable in each test system. It is doubtful that a new study, strictly adhering to guideline requirements, would produce differing results. No additional data is required at this time.	00087349
	unacceptable		cited in previous action as study conducted on silica gel plates	00087348
	supplemental		cited in previous action as light source not identified	00040543
	unacceptable		cited in previous action as study conducted on glass beads	00040541
	unacceptable		cited in previous action as study conducted on silica gel plates	00040542
Aerobic Soil (162-1) Metabolism	supplemental	no	A material balance could not be determined, and it could not be determined if all major transformation products were identified.	00040547
	unacceptable		The experiment was conducted in liquid media rather than soil.	00087285
	supplemental			00087351

Revised Environmental Fate Data References for the Me-Too Assessment				
Study Type	Study Classification	Data Requirements Fulfilled	Comments	MRID
Anaerobic Soil / Aquatic Metabolism (162-2, 162-3)	supplemental	no	accession no. 258779 - does not provide enough useful information to fully assess anaerobic metabolism	00147975
Aerobic Aquatic Metabolism (162-4)	supplemental	no	does not provide enough useful information to fully assess aerobic aquatic metabolism	45908001
Adsorption / Desorption (163-1)	acceptable	yes	.	00115105
	supplemental		test concentrations did not differ by a factor of at least 10, temperature and lighting conditions were not reported, a desorption phase was not conducted, material balances were not determined, and test soils were sieved using 250 micron openings.	00029406
	supplemental		temperature of the soil column during leaching was not reported, it was not stated whether leaching was conducted in the dark, it could not be determined if the foreign soils used in the study were typical of the pesticide use area in the U.S, soil columns were leached with only 30 cm of water, the method used to maintain a constant column head during leaching of the soil column was not reported, the soil columns were leached using 0.005M CaSO ₄ solution, rather than 0.01M CaCl ₂ solution, only two test soils were used for the unaged column leaching study, and none of the test soils had an organic matter content ≤1%.	00137232

Revised Environmental Fate Data References for the Me-Too Assessment				
Study Type	Study Classification	Data Requirements Fulfilled	Comments	MRID
	unacceptable			00040546
	unacceptable		older study, cited in previous action, unable to locate DER	00138144
Laboratory Volatility (163-2)	acceptable	yes	also hydrolysis study	0040539
Bioaccumulation in Fish (165-4)	acceptable	yes		45710224
Bioaccumulation in Aquatic Non-Target (165-5)	supplemental	not required	literature reference, no DER requested	44286001
	supplemental		older study, cited in previous action, unable to locate DER	00029411
	supplemental		older study, cited in previous action, unable to locate DER	00086630
	not applicable		MRID number non-existent	00866200
Terrestrial Field Dissipation (164-1)	supplemental	no	previously classified as unacceptable, combined packet was reviewed as if a single submission, as such, the analytical methods were inadequate in identifying transformation products, and there were gaps and inconsistencies in the sampling methodology.	00071627, 00087369, 00087332, 00087301
	supplemental		sampling intervals were inadequate to define the half-life under field conditions, a storage stability study was not conducted, the pattern of formation and decline of the transformation products of chlorothalonil could not be determined, sampling was not done to a sufficient depth to define leaching, and, a site use history was not provided.	00071625
Aquatic Field Dissipation (164-2)	acceptable	yes	this study did not conform exactly to Subdivision N Guidelines, but it did supply adequate information to	00127861

Revised Environmental Fate Data References for the Me-Too Assessment				
Study Type	Study Classification	Data Requirements Fulfilled	Comments	MRID
			describe to fate of chlorothalonil, and the degradate of toxicological concern under aquatic conditions in the open environment.	
Small Retrospective Groundwater (166-1)	acceptable	yes		44006001, 44091501, 44291101, 44483401
Small Prospective Groundwater (166-2)	waived	not required	waived	43959401, 43959402, 44254801