



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF PREVENTION,
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

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SUBJECT: New Chemical Screen Review Of Cloransulam-Methyl Technical / FirstRate Herbicide Environmental Fate Data

TO: Robert Taylor, Product Manager
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The environmental fate package for Cloransulam-Methyl Technical / FirstRate Herbicide has passed the EFGWB new chemical screen.

The registrant, DowElanco, previously received an Experimental Use Permit (62719-EUP-28) for use of the herbicide on soybeans. For the EUP application, environmental fate studies were submitted in support of Guidelines 161-1 (Hydrolysis), 162-1 (Aerobic Soil Metabolism), and 163-1 (Leaching and Mobility). In the science review chapter for the EUP, EFGWB made the following conclusions and recommendations pertinent to further registration actions:

- (1) The submitted studies satisfied the environmental fate data requirements for Guidelines 161-1, 162-1, and 163-1.
- (2) EFGWB did not anticipate that volatilization data would be required because of the reported low vapor pressure of cloransulam-methyl (4×10^{-14} Pa; 3×10^{-16} torr).
- (3) EFGWB would concur with a future waiver request for bioaccumulation in fish based on the reported low octanol/water partition coefficients ($\log K_{ow}$ values ranged from 1.12 to -0.57 between pH 5.0 to 8.5).
- (4) Future registration actions will require additional environmental fate data on anaerobic metabolism, photolysis, and terrestrial field dissipation.

For the New Chemical Registration, DowElanco has submitted the following studies to meet additional environmental fate requirements:

<u>Guideline</u>	<u>MRID No.</u>	<u>Study</u>
161-2	437154-02	Cook, W.L., and D.G. Saunders. 1995. Aqueous Photolysis of XDE-565. Study ID: ENV92002/GH-C 3674 (pages 1-171). Unpublished study performed and submitted by DowElanco, Indianapolis, IN.
161-3	437600-01	Merritt, D.A., and W.L. Cook. 1995. Photodegradation of DE-565 (cloransulam-methyl) on Soil. Study ID: ENV92003/GH-C 3668 (pages 1-89). Unpublished study performed and submitted by DowElanco, Indianapolis, IN.
162-3	437154-03	Erhardt-Zabik, S., P.L. Havens, and K.F. Hawes. 1995. The Anaerobic Aquatic Metabolism of XDE-565. Study ID: ENV91110/GH-C 3527 (pages 1-87). Unpublished study performed and submitted by DowElanco, Indianapolis, IN.
164-1	437600-02	Zabik, J.M., J.R. Miller, J.A. Ostrander, D.W. Roberts, and G.D. Thompson. 1995. Amended Report for Terrestrial Field Dissipation of Cloransulam-methyl. Study ID: ENV93031/GH-C 3621R (pages 1-224). Unpublished study performed and submitted by DowElanco, Indianapolis, IN.

A preliminary screen indicates that these studies appear to be suitable for review according to Subdivision N guidelines.