# 201-15176

**Anh Nguyen**
04/13/04 01:32 PM

To: NCIC HPV@EPA
cc:
Subject: Environmental Defense comments on O,O-Diethyl dithiophosphate (CAS# 298-06-6)

----- Forwarded by Anh Nguyen/DC/USEPA/US on 04/13/2004 01:30 PM -----

**rdenison@environmentaldefense.org**
04/13/2004 11:03 AM

To: NCIC OPPT@EPA, ChemRTK HPV@EPA, Rtk Chem@EPA, Karen Boswell/DC/USEPA/US@EPA, cynthia.graham@bayerpolymers.com
cc: MTC@mchsi.com, kflorini@environmentaldefense.org, rdenison@environmentaldefense.org
Subject: Environmental Defense comments on O,O-Diethyl dithiophosphate (CAS# 298-06-6)

(Submitted via Internet 4/13/04 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and cynthia.graham@bayerpolymers.com)

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Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for O,O-Diethyl dithiophosphate (CAS# 298-06-6).

Bayer CropScience LP, in response to EPA's High Production Volume (HPV) Chemical Challenge, has submitted robust summaries and a test plan describing available data and proposed studies for O,O-diethyl dithiophosphate (DEA). According to this submission, DEA is a closed-system intermediate, and is thus subject to a reduced battery of studies relative to those applicable to non-closed system intermediates. According to the test plan, the use of DEA as a closed-system intermediate is being documented in a separate, proprietary document submitted to the EPA that describes the process sites and transport of DEA as a closed-system intermediate. Hence, we are forced to defer to EPA to ensure that the requirements for demonstrating closed-system intermediate status are fully met for this chemicals.

The test plan concisely describes available data and proposes additional studies necessary to address SIDS elements required for a closed-system intermediate. These studies, many of which are published in the open literature, are described in more detail in the robust summaries. Most of the studies described are somewhat dated and most preceded the development of GLP. However, they appear to have been carefully designed and conducted and the results should be acceptable to address the respective SIDS elements.

Data briefly described in the test plan and in more detail in the robust summaries indicate that, should it be released, DEA would be expected to be rapidly degraded in air by reaction with hydroxyl radicals, by hydrolysis on contact with water and by microbial biodegradation in the soil. DEA also appears to have low toxicity to mammals. However, DEA is toxic to fish and highly toxic to daphnia. Data documenting its toxicity to algae are not available and the sponsor claims such data are not required because DEA has been demonstrated to be highly toxic to Daphnia. We disagree: the two endpoints are independent of each other and data on both are required to meet the SIDS requirements; the sponsor needs to determine its toxicity to algae as well.

Studies of repeated dose toxicity, reproductive toxicity and teratogenicity are not available for DEA. Repeat dose studies and reproductive toxicity studies are not required for a closed-system intermediate, assuming DEA qualifies for such a status. However, studies of teratogenicity are required and have been proposed. Studies of chromosomal aberration, the only other SIDS element not currently addressed by the available data, are also proposed in the test plan.

In summary, with the exception of the need to also test for toxicity to algae, we find this a satisfactory submission under EPA's HPV Chemical Challenge.

Thank you for this opportunity to comment.

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