

US EPA ARCHIVE DOCUMENT



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

MAR 15 1985

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Methamidophos (Monitor®) on Tobacco: Deferral from
Residue Chemistry Branch/HED (TS-769)

Record No. 142065
Tox Chem. No. 387A

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RL 3/14/85
Budd 3/15/85
W. Miller 3/15/85

Mobay Chemical Corporation applied apparently for registration of Monitor on tobacco and RCB asked TB to comment on safety of the proposed use (Memo from Richard Loranger; December 27, 1984.) According to RCB, one cigarette (weighing 1 gram) would contain 20 ug (20 ppm) of Monitor and there would be about 1 ug of Monitor and 1 ug of acephate (resulting from pyrolysis of Monitor) in the smoke from one cigarette.

The following studies are required to evaluate safety of the use of pesticides on tobacco:

1. 90-Day inhalation study (rat)
2. Two-generation reproduction study (rat)
3. Teratogenic studies in two species (rat and rabbit)
4. Chronic feeding study (rat)
5. Mutagenic studies (Gene mutations, structural chromosomal aberrations and other genotoxic effects such as DNA damage and repair and numerical chromosome aberrations.)
6. General metabolism studies (Single dose testing using analytically pure radiolabeled pesticides and testing with repetitive doses of analytically pure nonradiolabeled pesticides.)

In the case of Monitor, only one teratogenic study (with rabbits), one mutagenic study (Ames test) and general metabolic studies are currently available, whereas the remaining required studies are missing.

In the case of acephate, only the 90-day inhalation study is missing. However, acephate has recently been considered a weak carcinogen (Category C; Toxicology Branch/HED meeting, 1/24/85).

Considering that most of the studies listed above are missing for Monitor, that one of the required studies is missing for acephate and that acephate is a weak carcinogen, Toxicology Branch has, at this time, no basis to comment on safety of the proposed use of Monitor on tobacco.

OPP:HED:TOX:K.LOCKE:sb 3/14/85 X77351