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

JUL 27 1992

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OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: Report of RfD/Peer Review on Triphenyltin Hydroxide (TPTH)
Caswell No. 896E
CAS. No. 76-87-9
EPA Chem Code: 083601
Reg. Group: List A

FROM: George Z. Ghali, Ph.D. G. Ghali 6.9.92
Science Analysis and Coordination Branch
Health Effects Division (H7509C)

TO: Susan Lewis, PM Team 21
Herbicide-Fungicide Branch
Registration Division (H7505C)
and
Lois Rossi, Chief
Reregistration Branch
Special Review and Reregistration Division (H7508W)

The toxicology data base for Triphenyltin Hydroxide (TPTH) had been evaluated by the HED RfD/Peer Review Committee on March 1, 1990 and an RfD was established for this chemical. When the issue was submitted to the Agency RfD Work Group in their meeting of March 21, 1990, verification of the RfD was deferred.

Subsequently, the RfD was reassessed by the HED RfD/Peer Review Committee on June 6, 1991 and a final conclusion was deferred until reevaluation of some studies. An RfD value was then established by the HED RfD/Peer Review Committee on December 13, 1991.

The HED RfD/Peer Review Committee recommended that the Reference Dose should be established on the basis of a NOEL of 0.1 mg/kg/day for decreased leucocyte counts observed at 0.25 mg/kg/day or higher doses in a chronic toxicity study in rats (Thompson-Hayward Chemical Corp., 1970, MRID No. 00080390), using an uncertainty factor of 100 to account for the intra- and inter-species differences. An additional uncertainty factor of 3 was recommended to account for the instability of the test chemical in feed (reported in other feeding studies with triphenyltin hydroxide, but not reported in this older study). On this basis the RfD was calculated to be 0.0003 mg/kg/day.

The Committee also recommended to use the 1989 chronic feeding study in rats (MRID No. 41085702) as a co-critical study to support the RfD for this chemical. This study demonstrated an LEL of 0.4 mg/kg/day, the lowest dose tested, for death and behavioral reactions in females and decreases in immunoglobulin in males and females.

A. Individuals in Attendance

1. Peer Review Committee and Associates Present in One or Both Meetings (signature indicates concurrence with the peer review unless otherwise stated).

William Burnam

Reto Engler

Marcia Van Gemert

Henry Spencer

Gary Burin

2. Peer Review Members and Associates in Absentia (committee members and associates who were unable to attend the discussion; signatures indicate concurrence with the overall conclusions of the committee).

Karl Baetcke

Lawrence Chitlik

Roger Gardner

James Rowe

Stephen Dapson

George Ghali

Rick Whiting

3. Scientific Reviewer (committee or non-committee members responsible for data presentation; signatures indicate technical accuracy of panel report).

John Doherty

4. Others:

Larry Dorsey of SACB/HED/OPP as an observer

CC: Penny Fenner-Crisp
Richard Schmitt
Kerry Dearfield

Attachments