

US EPA ARCHIVE DOCUMENT

Memorandum

Subject: Addendum. PP. 7F3514, HED Risk Assessment  
for Use of Permethrin on Wheat. D 186285.  
Undated Memo of Stephanie Willett.

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Worker Margin of Exposure and Cancer Risk for

Pounce 3.2 EC. [ E.P.A. Reg. No. 279-3014].

Short term and intermediate term margin of exposure (MOE) for mixers and loaders using Pounce 3.2 EC, a formulation of permethrin, was 49 and 30 respectively based on protective clothing requirements present on the December 2, 1992 label. An MOE of 100 or greater is generally considered acceptable. Subsequent to this date worker protection standards were promulgated (April, 1994) requiring specified personal protective equipment for defined categories of hazard (toxicity). The registrant has since submitted revised labeling which incorporates the language requirements for the new worker protection standards. (i.e. required personal protective equipment). The recalculation of worker exposure based on current label language has resulted in increased MOE's for both short and intermediate term exposure from 49 and 30 to levels of 1600 and 1000 respectively for the use of Pounce 3.2 EC on wheat. All other previously calculated MOE's and cancer risks were acceptable prior to the issuance of the worker protection standards. However, as a consequence of these new standards all previously calculated MOE's are now substantially increased and cancer risks markedly decreased for Pounce 3.2 EC

[ EPA Reg. No. 279-3014], Pounce 25 WP

[ EPA Reg. No. 279- 3051], and Pounce WSB

[ EPA Reg. No. 279 - 3083] when applying permethrin to wheat.

Dietary Risk for Permethrin. DRES had previously conducted a dietary risk analysis for the use of permethrin on wheat (see previous memo of Wintersteen dated 6/29/94) in the absence of anticipated residue data and percent crop treated data for some commodities. The resulting dietary risk exceeded the  $1 \times 10^{-6}$  level of concern. The attached DRES analysis dated 3/20/95 incorporates new percent crop treated data provided by BEAD. The percent of the RfD utilized for the general population and all subgroups for both published and pending (including wheat) tolerances is considerably below the reference dose (RfD) and ranges between 0.06 to 0.29 percent. The upper bound on the cancer risk for all published and pending tolerances (including wheat) was calculated to be  $2.0 \times 10^{-6}$  risk. In an attempt to reduce this calculated risk the pending tolerances for raspberries and sunflowers were deleted from the calculations as were the proposed tolerance increases on pistachio nuts and asparagus. Neither of these actions by themselves or together decreased the calculated risk to the level of  $1 \times 10^{-6}$ .

Attachments

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