

though it may be a different value derived from the dose response curve. To estimate risk, a ratio of the point of

departure to exposure ( $MOE_{\text{cancer}} = \text{point of departure/exposures}$ ) is calculated. A summary of the toxicological endpoints

for acetamiprid used for human risk assessment is shown in the following Table 2 of this unit:

TABLE 2.—SUMMARY OF TOXICOLOGICAL DOSE AND ENDPOINTS FOR ACETAMIPRID FOR USE IN HUMAN RISK ASSESSMENT

Exposure Scenario	Dose Used in Risk Assessment, UF	FQPA SF* and Level of Concern for Risk Assessment	Study and Toxicological Effects
Acute dietary (general population including infants and children)	NOAEL = 10 mg/kg/day UF = 100 Acute RfD = 0.10 mg/kg/day	FQPA SF = 1X aPAD = acute RfD/FQPA SF = 0.10 mg/kg/day	Acute neurotoxicity study LOAEL = 30 mg/kg/day based on decrease in locomotor activity in males.
Chronic dietary (all populations)	NOAEL = 7.1 mg/kg/day UF = 100 Chronic RfD = 0.07 mg/kg/day	FQPA SF = 1X cPAD = chronic RfD/FQPA SF = 0.07 mg/kg/day	Chronic feeding/oncology study in rats. LOAEL = 17.5 mg/kg/day based on decrease in body weight/body weight gain and hepatocellular vacuolation.
Short-term (1 to 30 days) and intermediate-term (1 to 6 months) Incidental Oral	NOAEL = 15 mg/kg/day	LOC for MOE = 100 (Residential)	13-Week feeding study in rats; subchronic neurotoxicity in rats; developmental toxicity in rats. LOAEL = 50 mg/kg/day based on decrease in body weight/body weight gain, food consumption, and food efficiency.
Short-term (1 to 30 days) and intermediate-term (1 to 6 months) dermal	Oral NOAEL = 17.9 mg/kg/day (dermal absorption factor = 30%)	LOC for MOE = 100 (Residential) LOC for MOE = 100 (Occupational)	2-Generation reproduction study. LOAEL = 51 mg/kg/day based on delay in preputial separation, vaginal opening, eye opening and pinna unfolding; reduced litter size, viability and weaning indices in offspring.
Long-term dermal (> 6 months)	Oral NOAEL = mg/kg/day (dermal absorption factor = 30%)	LOC for MOE = 100 (Residential) LOC for MOE = 100 (Occupational)	Chronic feeding/oncology study in rats. LOAEL = 17.5 mg/kg/day based on decrease in body weight/body weight gain and hepatocellular vacuolation.
Short-term (1 to 30 days) and intermediate-term (1 to 6 months) Inhalation	Oral NOAEL = 17.9 mg/kg/day (inhalation absorption factor = 100%)	LOC for MOE = 100 (Residential) LOC for MOE = 100 (Occupational)	2-Generation reproduction study. LOAEL = 51 mg/kg/day based on delay in preputial separation, vaginal opening, eye opening and pinna unfolding; reduced litter size, viability and weaning indices in offspring.
Long-term inhalation (> 6 months)	Oral NOAEL = 7.1 mg/kg/day (inhalation absorption factor = 100%)	LOC for MOE = 100 (Residential) LOC for MOE = 100 (Occupational)	Chronic feeding/oncology study in rats. LOAEL = 17.5 mg/kg/day based on decrease in body weight/body weight gain and hepatocellular vacuolation.
Cancer (oral, dermal, inhalation) - Not likely to be carcinogenic.			

\*The reference to the FQPA SF refers to any additional SF retained due to concerns unique to the FQPA.

### C. Exposure Assessment

1. *Dietary exposure from food and feed uses.* Tolerances have been established (40 CFR 180.578) for the residues of acetamiprid, in or on a variety of raw agricultural commodities. Tolerances for acetamiprid range from 0.2 to 20 ppm in plant commodities and range from 0.01 to 0.2 ppm in livestock commodities. Risk assessments were conducted by EPA to assess dietary exposures from acetamiprid in food as follows:

i. *Acute exposure.* Acute dietary risk assessments are performed for a food-use pesticide if a toxicological study has indicated the possibility of an effect of

concern occurring as a result of a one day or single exposure. The Dietary Exposure Evaluation Model (DEEM™) analysis evaluated the individual food consumption as reported by respondents in the USDA 1989–1992 nationwide Continuing Surveys of Food Intake by Individuals (CSFII) and accumulated exposure to the chemical for each commodity. The following assumptions were made for the acute exposure assessments: The assessment assumed that 100% of the proposed crops and all other crops having acetamiprid tolerances were treated and that all treated crops and livestock had residues of concern at the tolerance

level. The general U.S. population and all population subgroups have exposure and risk estimates which are below EPA's LOC (i.e., the aPADs are all below 100%). The most highly exposed subgroup is children 1 to 6 years of age, which utilizes 40% of the aPAD.

ii. *Chronic exposure.* In conducting this chronic dietary risk assessment the DEEM™ analysis evaluated the individual food consumption as reported by respondents in the USDA 1989–1992 nationwide CSFII and accumulated exposure to the chemical for each commodity. The following assumptions were made for the chronic exposure assessments: The assessment