

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

Exposure Scenario	Dose Used in Risk Assessment, UF	FQPA SF* and LOC for Risk Assessment	Study and Toxicological Effects
Acute dietary (general population including infants and children)	N/A	N/A	N/A
Chronic dietary (all populations)	NOAEL= 1.0 mg/kg/day UF = 100 Chronic RfD = 0.01 mg/kg/day	FQPA SF = 1X cPAD = chronic RfD FQPA SF = 0.01 mg/kg/day	2-year chronic/feeding study - rat LOAEL = 8.7 mg/kg/day based on increased incidence of follicular cell hyperplasia and hypertrophy in the thyroid in males
Short-term dermal (1 to 30 days) (Residential)	Dermal study NOAEL = 300 mg/kg/day	LOC for MOE = <100 (Residential) Adults <1,000 (Residential) Infants/children	24-day dermal toxicity study - rat LOAEL = 1,000 mg/kg/day based on inflammatory infiltrate of the liver in females and an increase in acanthosis and hyperkeratosis of the skin in females
Intermediate-term dermal (1 week to 6 months) (Residential)	Dermal study NOAEL = 300 mg/kg/day	LOC for MOE = <100 (Residential) Adults <1,000 (Residential) Infants/children	24-day dermal toxicity study - rat LOAEL = 1,000 mg/kg/day based on inflammatory infiltrate of the liver in females and an increase in acanthosis and hyperkeratosis of the skin in females
Long-term dermal (several months to lifetime) (Residential)	Oral study NOAEL = 1.0 mg/kg/day	LOC for MOE = < 100 (Residential) Adults <1,000 (Residential) Infants/children	2-year chronic/feeding study - rat LOAEL = 8.7 mg/kg/day based on increased incidence of follicular cell hyperplasia and hypertrophy in the thyroid in males
Short-term inhalation (1 to 30 days) (Residential)	Oral study NOAEL = 13.0 mg/kg/day (inhalation absorption rate = 100%)	LOC for MOE = < 100 (Residential) Adults <1,000 (Residential) Infants/children	90-day oral toxicity study - rat LOAEL = 68.6 mg/kg/day based on organ weight changes and microscopic findings in the liver and thyroid of both males and females and in the kidney of males
Intermediate-term inhalation (1 week to 6 months) (Residential)	Oral study NOAEL = 13.0 mg/kg/day (inhalation absorption rate = 100%)	LOC for MOE = <100 (Residential) Adults <1,000 (Residential) Infants/children	90-day oral toxicity study - rat LOAEL = 68.6 mg/kg/day based on organ weight changes and microscopic findings in the liver and thyroid of both males and females and in the kidney of males
Cancer (oral, dermal, inhalation)		N/A	2-year carcinogenicity study in mice Liver tumors observed in female mice The Agency Cancer Assessment Review Committee recommends that no quantification of cancer risk is required.

\*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 180.511 for the residues of buprofezin, in or on the following raw agricultural commodities: Almond, banana, citrus fruits, cotton, cucumber, grape, lettuce (head and leaf), tomato, melon (cantaloupe, honeydew, watermelon, muskmelon), pumpkin, and squash with tolerances for residues of buprofezin ranging from 0.05 to 60 ppm. Tolerances have also been established for residues of buprofezin in/on ruminant fat, liver, and meat

byproducts at 0.05 ppm. Risk assessments were conducted by EPA to assess dietary exposures from buprofezin 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 1-day or single exposure. The Dietary Exposure Evaluation Model (DEEM™) analysis evaluated the individual food consumption as reported by respondents in the United States Department of Agriculture (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 acute dietary analysis assumed tolerance level residues, DEEM™ (ver. 7.76) default processing factors, and 100% crop treated for all registered and proposed commodities (Tier I).