

TABLE 1.—SUMMARY OF TOXICOLOGICAL DOSE AND ENDPOINTS FOR SPINOSAD 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
Chronic dietary all populations	NOAEL = 2.68 milligrams/kilogram/day (mg/kg/day) UF = 100 Chronic RfD = 0.02 mg/kg/day	FQPA SF = 1x cPAD = chronic RfD ÷ FQPA SF = 0.027 mg/kg/day	Chronic toxicity - dog LOAEL = 8.22 mg/kg/day based on on vacuolation in glandular cells (parathyroid) and lymphatic tissues, arteritis and increases in serum enzymes such as alanine aminotransferase, and aspartate aminotransferase, and triglyceride levels.
Incidental oral Short-term (1–30 days) Residential only	NOAEL = 4.9 mg/kg/day MOE = 100	FQPA SF = 1x	Subchronic feeding study in dogs LOAEL = 9.73 mg/kg/day based on microscopic changes in multiple organs, clinical signs of toxicity, decreases in mean body weights and food consumption and biochemical evidence of anemia and possible liver damage.
Incidental oral Intermediate-term (1–6 months) Residential only	NOAEL = 2.7 mg/kg/day MOE = 100	FQPA SF = 1x	Chronic toxicity study in dogs LOAEL = 8.22 mg/kg/day based on vacuolation in glandular cells (parathyroid) and lymphatic tissues, arteritis, and increases in serum alanine aminotransferase, aspartate aminotransferase, and triglyceride levels.
Dermal (any time period) (Residential)	N/A	N/A	Dermal risk assessment is not required. Short-term, intermediate-term, and long-term dermal risk assessments are not required because: (1) Lack of concern for prenatal and/or postnatal toxicity; (2) the combination of molecular structure and size as well as the lack of dermal or systemic toxicity at 1,000 mg/kg/day in a 21-day dermal toxicity study in rats which indicates poor dermal absorption; and (3) the lack of long-term exposure based on the current use pattern.
Short-term inhalation (1–30 days) (Residential)	Oral NOAEL = 4.9 mg/kg/day UF = 100	FQPA SF = 1x MOE = 100	Subchronic feeding study in dogs LOAEL = 9.73 mg/kg/day based on microscopic changes in a multiple organs, clinical signs of toxicity, decreases in mean body weights and food consumption and biochemical evidence of anemia and possible liver damage.
Intermediate-term inhalation (1–6 months) (Residential)	Oral NOAEL = 2.7 mg/kg/day UF = 100	FQPA SF = 1x MOE = 100	Chronic toxicity study in dogs LOAEL = 8.22 mg/kg/day based on vacuolation in glandular cells (parathyroid) and lymphatic tissues, arteritis, and increases in serum alanine aminotransferase, aspartate aminotransferase, and triglycerides levels
Long-term inhalation (>6 months) (Residential)	Oral NOAEL = 2.7 mg/kg/day UF = 100	FQPA SF = 1x MOE = 100	Chronic toxicity study in dogs LOAEL = 8.22 mg/kg/day based on vacuolation in glandular cells (parathyroid) and lymphatic tissues, arteritis, and increases in serum alanine aminotransferase, aspartate aminotransferase, and triglycerides levels