

TABLE 1.—TOXICITY PROFILE OF PYRIPROXYFEN TECHNICAL

Guideline No./Study Type	MRID No. (year)/ Classification /Doses	Results
870.3100 90-Day oral toxicity rodents—mouse	43210504 (1990) Acceptable/ guideline 0; 200; 1,000; 5,000; or 10,000 ppm M: 0, 28.2, 149.4, 838.1, or 2,034.5 milligram/kilogram/day (mg/kg/day) F: 0, 37.9, 196.5, 963.9, or 2,345.3 mg/kg/day	NOAEL = 149.4 mg/kg/day in males (M), 196.5 mg/kg/day in females (F) LOAEL = 838.1 mg/kg/day (M), 963.9 mg/kg/day (F) based on pathological changes in the kidney, increased absolute and relative (to body) liver weight, decreased red blood cell parameters (both sexes), and decreased body weight gain (M)
870.3100 90-Day oral toxicity rodents—rat	41321716 (1989) Acceptable/ guideline 0; 400; 2,000; 5,000; or 10,000 ppm M: 0, 23.49, 117.79, 309.05, or 641.81 mg/kg/day F: 0, 27.68, 141.28, 356.30, or 783.96 mg/kg/day	NOAEL = 23.49 mg/kg/day (M), 27.68 mg/kg/day (F) LOAEL = 117.79 mg/kg/day (M), 141.28 based on increased total cholesterol and phospholipids (M), decreased red blood cell, hematocrit, and hemoglobin counts, increased relative (to body) liver weight (M), and negative trend in red blood cell volume (F)
870.3150 90-Day oral toxicity non-rodents—dog	42178307 (1988) Acceptable/ guideline 0, 100, 300, or 1,000 mg/kg/day	NOAEL = 100 mg/kg/day (M) and (F) LOAEL = 300 mg/kg/day (M) and (F) based on increased absolute and relative (to body) liver weight (both sexes), and hepatocyte enlargement (F)
870.3200 21-Day dermal toxicity—rat	43994102 (1993) Acceptable/ guideline 0, 100, 300, or 1,000 mg/kg/day	NOAEL = 1,000 mg/kg/day (M) and (F) LOAEL = not established
870.3265 28-Day inhalation toxicity—rat	42178308 (1988) Supplementary 0, 269, 482, or 1,000 mg/meter cubed (m ³) 0, 0.269, 0.482, or 1.000 mg/liter (L)	NOAEL = 0.482 mg/L (M) and (F) LOAEL = 1.000 mg/L based on salivation (both sexes), sporadic decreased body weight (M), and increased lactate dehydrogenase (M)
870.3700a Prenatal developmental—rats (non-guideline)	44985002 (1988) Acceptable/ nonguideline 0, 100, 300, 500, or 1,000 mg/kg/day	Parental NOAEL = 100 mg/kg/day Parental LOAEL = 300 mg/kg/day based on clinical signs, decreased body weight gains, increased water consumption (both sexes) and increased food consumption, changes in organ weights, and gross pathological changes (M) Developmental NOAEL = 1,000 mg/kg/day highest dose tested (HDT)
870.3700a Prenatal developmental—rats (non-guideline)	44985001 (1988) Acceptable/ nonguideline 0, 30, 100, 300, or 500 mg/kg/day	Maternal NOAEL = 100 mg/kg/day Maternal LOAEL = 300 mg/kg/day based on clinical signs, decreased body weight gains, and decreased food consumption Developmental NOAEL = 100 mg/kg/day Developmental LOAEL = 300 mg/kg/day based on decreased body weight and increased incidence of dilation of the renal pelvis.
870.3700b Prenatal developmental—rabbit	41321720, 42178311, 43215401, 43215402, 43215403 (1989) Acceptable/ guideline 0, 100, 300, or 1,000 mg/kg/day	Maternal NOAEL = 100 mg/kg/day Maternal LOAEL = 300 mg/kg/day based on premature delivery/abortions, soft stools, emaciation, lusterless fur, decreased activity, and bradypnea. Developmental NOAEL = 300 mg/kg/day Developmental LOAEL = 1,000 mg/kg/day based on decreased viable litters available for evaluation
870.3700a Prenatal developmental—rat	42178312 (1988) Acceptable/ guideline 0, 100, 300, or 1,000 mg/kg/day	Maternal NOAEL = 100 mg/kg/day Maternal LOAEL = 300 mg/kg/day based on decreased body weight, body weight gain, and food consumption and increased water consumption . Developmental NOAEL = 300 mg/kg/day Developmental LOAEL = 1,000 mg/kg/day based on increased incidence of skeletal variations at gestation day 21 and unspecified visceral variations at postnatal day (PND) 56.
870.3800 Reproduction and fertility effects—rat	42178313 (1991) Acceptable/ guideline 0; 200; 1,000; or 5,000 ppm M: 0, 18, 87, or 453 mg/kg/day F: 0, 20, 96, or 498 mg/kg/day	Parental/Systemic NOAEL = 87 mg/kg/day (M), 96 mg/kg/day (F) Parental/Systemic LOAEL = 453 mg/kg/day (M), 498 mg/kg/day (F) based on decreased body weight, body weight gain, and food consumption (both sexes) and increased liver weight (both sexes) and histopathological lesions of liver and kidneys (M) Reproductive NOAEL = 453 mg/kg/day (M), 498 mg/kg/day (F) Reproductive LOAEL = not established. Offspring NOAEL = 87 mg/kg/day (M), 96 mg/kg/day (F) Offspring LOAEL = 453 mg/kg/day (M), 498 mg/kg/day (F) based on decreased body weight on lactation days 14 and 21