

TABLE 1.—SUBCHRONIC, CHRONIC, AND OTHER TOXICITY—Continued

Guideline No.	Study Type	Results
870.3200	21/28-Day dermal toxicity	NOAEL = 1,000 mg/kg/day LOAEL not established
870.3700	Prenatal developmental— Rodents	Maternal NOAEL = 300 mg/kg/day LOAEL = 600 mg/kg/day based on increased maternal deaths and decreased body weight gains and food consumption. Developmental NOAEL = 600 mg/kg/day LOAEL not established.
870.3700	Prenatal developmental— Nonrodents	Maternal NOAEL = 500 mg/kg/day LOAEL = 1,000 mg/kg/day based on increased abortions. Developmental NOAEL = 500 mg/kg/day LOAEL = 1,000 mg/kg/day based on increased abortions.
870.3800	Reproduction and fertility effects	Parental/Systemic NOAEL = 100 mg/kg/day (Males) / 500 mg/kg/day (Females) LOAEL = 500 mg/kg/day (Males) / 1,000 mg/kg/day (Females), based on kidney effects (M&F) and increased deaths (F). Reproductive NOAEL = 750 mg/kg/day (Males) / 1,000 mg/kg/day (Females). LOAEL not established. Offspring NOAEL = 500 mg/kg/day LOAEL = 1,000 mg/kg/day based on decreased pup weight and body weight gain and slightly lower survival.
870.4100	Chronic toxicity—Dogs	NOAEL = 150 mg/kg/day LOAEL not established.
870.4200	Carcinogenicity—Mice	NOAEL = 300 mg/kg/day (Males/Females) LOAEL = 1,000 mg/kg/day based on decreased body weight and body weight gain (M) and increased kidney lesions (F).(no) evidence of carcinogenicity
870.4300	Carcinogenicity—Rats	NOAEL = 100 mg/kg/day LOAEL = 500 mg/kg/day based on chronic progressive kidney glomerulonephropathy (M&F).(no) evidence of carcinogenicity
870.5100	Bacterial reverse mutation	Negative.
870.5300	<i>In vitro</i> mammalian cell gene mutation	Negative, but did not test a soluble dose.
870.5375	<i>In vitro</i> mammalian chro- mosome aberration (HL)	Negative.
870.5395	Mammalian micronucleus (mouse)	Negative.
870.7485	Metabolism and phar- macokinetics	Total recovery of the administered dose was 105%, with the principal route of excretion being expired $^{14}\text{CO}_2$, which contained approximately 61% of the radioactivity for the fluroxypyr MHE. The urine contained approximately 30% and the feces contained 5% of the administered dose. At 48 hours post dose, approximately 7% of the administered dose was recovered in the blood, carcass, and skin. Approximately 52% of the administered dose was absorbed and expired as $^{14}\text{CO}_2$ within 12 hours post dose, and an additional 18% of the administered dose was excreted in the urine within 12 hours post dose. Based on the percentage of dose in the expired $^{14}\text{CO}_2$, urine, and tissues, approximately 90% of the dose was absorbed. Once absorbed, it was extensively metabolized and rapidly expired as $^{14}\text{CO}_2$ and eliminated in the urine with a half-life of 6 hours. Peak plasma concentrations of ^{14}C -radioactivity were attained by 7 hours post dose.

B. Toxicological Endpoints

The dose at which no adverse effects are observed (the NOAEL) from the toxicology study identified as appropriate for use in risk assessment is used to estimate the toxicological level of concern (LOC). However, the lowest dose at which adverse effects of concern

are identified (the LOAEL) is sometimes used for risk assessment if no NOAEL was achieved in the toxicology study selected. An uncertainty factor (UF) is applied to reflect uncertainties inherent in the extrapolation from laboratory animal data to humans and in the variations in sensitivity among members

of the human population as well as other unknowns. An UF of 100 is routinely used, 10X to account for interspecies differences and 10X for intraspecies differences.

Three other types of safety or uncertainty factors may be used: “Traditional uncertainty factors;” the