

TABLE 1.—TOXICOLOGY PROFILE FOR SETHOXYDIM TECHNICAL—Continued

Guideline No.	Study Type	Results
870.3800	Reproduction and fertility effects (rats)	<i>Systemic</i> NOAEL \geq 150 mg/kg/day LOAEL >150 mg/kg/day <i>Reproductive</i> NOAEL \geq 150 mg/kg/day LOAEL >150 mg/kg/day <i>Offspring</i> NOAEL = 30 mg/kg/day LOAEL = 150 mg/kg/day, based on decreased body weight in F2b pups during lactation and tail abnormalities seen in F1a and F1b offspring
870.4100	Chronic toxicity (dogs)	<i>Males</i> NOAEL = 17.5 mg/kg/day LOAEL = 110 mg/kg/day <i>Females</i> NOAEL = 19.9 mg/kg/day LOAEL = 129 mg/kg/day, based on increase hemosiderosis in the spleen and depressed myeloid erythropoiesis in the sternal bone marrow, increased absolute and relative liver weights, increased alkaline phosphatase and ALT levels
870.4200	Carcinogenicity (mice)	<i>Males</i> NOAEL = 13.8 mg/kg/day LOAEL = 41.2 mg/kg/day, based on early onset of liver effects including hepatocellular hypertrophy and fatty degeneration in male mice. No evidence of carcinogenicity
870.4300	Combined chronic/carcinogenicity (rats)	<i>Male</i> NOAEL = 12 mg/kg/day LOAEL = 48 mg/kg/day, based on liver toxicity (centrilobular hepatocellular hypertrophy) <i>Females</i> NOAEL = 66 mg/kg/day LOAEL = 204 mg/kg/day, based on decreased body weight, body weight gain, liver toxicity (centrilobular hepatocellular hypertrophy), and lung lesions (heart failure cells and interstitial fibrosis) No evidence of carcinogenicity
870.5100	Bacterial reverse mutation	<i>Negative</i> Concentrations 313–5,000 μ g/plate
870.5300	<i>In vitro</i> mammalian cell gene mutation	<i>Negative</i> Concentrations 500–5,000 μ g/mL
870.5300	<i>In vitro</i> mammalian cell gene mutation	Negative 10,000 mg/kg
870.5300	<i>In vitro</i> mammalian cell gene mutation	<i>Negative</i>
870.5550	Unscheduled DNA synthesis (rat hepatocyte cells)	<i>Negative</i> Concentrations 10 to 507 μ g/mL
870.5915	<i>In vivo</i> sister chromatid exchange (chinese hamster bone marrow)	<i>Negative</i> Dose 0, 0.5, 1.67, 5 gram (g)/kg
870.7485	Metabolism and pharmacokinetics (rats)	Excretion is extremely rapid and tissue accumulation is negligible, assuming DMSO vehicle does not affect excretion or storage of NP-55, 78% excreted into urine and 20.1% in feces
870.7485	Metabolism and pharmacokinetics (rats)	Administration of radioactively labeled NP-55 yielded 0.8% radioactivity in urine identified as hydroxymetabolites represented by 6-OH M2SO2 and 2 other metabolites found by mass spectrometry were MSO and M1SO