

Recovery of Radioactivity 72 Hours Following Oral Gavage Administration  
of 0.11 mg/kg [<sup>14</sup>C]o-Chloropyridine to Male F344 Rats (Study B)<sup>a</sup>

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE <sup>b</sup>	Feces CPDE	Volatile Organics <sup>c</sup> CPDE	CO <sub>2</sub> <sup>c</sup> CPDE	Total
6	18.8 ± 3.0	NC <sup>e</sup>	0.518 ± 0.058	4.93 ± 0.63	24.3 ± 3.1
12	29.1 ± 0.9	3.06 ± 2.30	0.564 ± 0.084	8.47 ± 0.84	41.2 ± 3.3
24	34.8 ± 0.7	24.0 ± 3.5	0.579 ± 0.089	9.53 ± 0.83	68.9 ± 3.4
48	37.0 ± 0.8	27.2 ± 3.0	0.587 ± 0.088	10.2 ± 0.9	75.0 ± 3.1
72 <sup>d</sup>	38.3 ± 0.8	28.0 ± 2.5	0.595 ± 0.089	10.5 ± 0.9	77.4 ± 2.6

Distribution in Tissues (72 hours)

Tissue	ng-eq/g Tissue Mean	ng-eq/g Tissue SD	TBR <sup>f</sup> Mean	TBR SD	Dose in Total Tissue (%) Mean <sup>g</sup>	Dose in Total Tissue (%) SD
Adipose <sup>h</sup>	1.43	0.44	0.382	0.122	0.0867	0.0253
Bladder	7.69	1.46	7.69	1.46	0.00221	0.00055
Blood	3.76	0.07	Unity	–	0.171	0.007
Brain	1.28	0.07	0.341	0.018	0.00854	0.00076
Heart	4.69	0.23	1.25	0.069	0.0147	0.0010
Kidney	27.1	3.03	7.22	0.93	0.185	0.013
Liver	49.0	4.8	13.0	1.27	1.44	0.06
Lung	5.68	0.276	1.51	0.086	0.0214	0.0034
Muscle <sup>h</sup>	2.58	0.37	0.687	0.109	1.08	0.15
Skin, Ears	3.16	0.40	0.839	0.105	0.468	0.066
Spleen	6.33	0.33	1.68	0.10	0.0118	0.0001
Testes	1.64	0.06	0.437	0.015	0.0172	0.0010
Small Intestine <sup>i</sup>	NA <sup>k</sup>	–	NA	–	0.125	0.017
Large Intestine <sup>i</sup>	NA	–	NA	–	0.0416	0.0095
Cecum <sup>i</sup>	NA	–	NA	–	0.153	0.040
Stomach <sup>i</sup>	NA	–	NA	–	0.0578	0.0157
Carcass <sup>j</sup>	NA	–	NA	–	2.42	0.07

Disposition Summary [Dose Recovered (%)]

Excreta	Residual Carcass <sup>j</sup>	Tissues	Total
77.4 ± 2.6	0.624 ± 0.176	3.88 ± 0.24	81.9 ± 2.6

<sup>a</sup> Values are mean ± standard deviation (SD) for five rats. The average oral dose was 0.107 mg/kg (ca. 13.6  $\mu$ Ci/rat).

<sup>b</sup> CPDE = Cumulative percent dose excreted.

<sup>c</sup> Volatile organics and CO<sub>2</sub> in exhaled breath.

<sup>d</sup> 72 hour (h) urine includes cage rinse.

<sup>e</sup> NC = No collection was scheduled for this time interval.

<sup>f</sup> TBR = Tissue/Blood ratio.

<sup>g</sup> Percent dose was calculated using the following values for the mass of total tissue, expressed as percent of body weight taken from Caster et al., 1956; Lutz et al., 1977; Adolph, 1949; Supplee et al., 1952; Bischoff et al., 1971; and Donaldson, 1919: adipose, 7.0%; blood, 5.2%; muscle, 48.0%; skin, 17% and plasma, 52.0% of blood.

<sup>h</sup> Adipose and muscle values are averaged results for two sampling locations.

<sup>i</sup> Includes contents.

<sup>j</sup> Carcass values are based on the residual digested carcass after the removal of the listed tissues (i.e., percent dose measured in skin, adipose, blood, and muscle was subtracted from the total percent dose measured in the carcass.)

<sup>k</sup> NA = Not applicable