Disposition of Radioactivity 72 Hours Following Oral Administration of 200 mg/kg [^{14}C] 2,2'-Dimorpholinodiethyl Ether to Male Harlan Sprague Dawley Rats (Group C)[a]

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE[b]	Cage Rinse CPDE	Feces CPDE	Volatile Organics CPDE	CO_2 CPDE	GI Content	Total CPDE
4	12.3 ± 5.7	4.70 ± 3.80	–	0.0150 ± 0.0041	0.226 ± 0.035	–	17.2
8	30.6 ± 8.1	8.29 ± 4.31	–	0.0349 ± 0.0065	0.408 ± 0.071	–	39.3
12	50.6 ± 9.9	11.3 ± 4.4	–	0.0585 ± 0.0090	0.571 ± 0.058	–	62.6
24	72.7 ± 12.6	14.0 ± 4.8	2.08 ± 1.28	0.0725 ± 0.0153	0.854 ± 0.089	–	89.2
48	77.7 ± 12.2	14.3 ± 4.8	3.72 ± 1.26	0.0873 ± 0.0193	1.14 ± 0.11	–	97.0
72[c]	78.3 ± 12.3	14.7 ± 4.8	4.28 ± 1.18	0.103 ± 0.017	1.40 ± 0.140	0.120 ± 0.026	99.0

Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR Mean[d]	TBR SD[d]	% Recovery Mean	% Recovery SD
Blood[e]	9.12	1.65	unity	–	0.0831	0.0115
Adipose[e]	21.1	7.3	2.02	0.42	0.190	0.0773
Muscle[e]	17.4	3.1	1.81	0.21	0.904	0.211
Skin[e]	41.7	12.7	4.34	1.26	1.01	0.32
Brain	14.5	4.0	1.46	0.33	0.0122	0.0030
Heart	26.4	7.8	2.68	0.70	0.0105	0.00316
Kidneys	212	72	21.0	6.0	0.179	0.057
Liver	181	66	18.4	5.8	0.948	0.313
Lung	60.4	22.8	5.88	2.03	0.0371	0.0123
Spleen	154	51	15.7	4.5	0.0398	0.0109
Adrenals	101	39	9.41	1.82	0.00161	0.00027
Thymus	43.4	36.6	2.96	0.92	0.00827	0.00337
Thyroid	594	235	57.9	22.7	0.00094	0.00084
Urinary Bladder	40.3	27.6	4.73	3.18	0.00073	0.00015
Pancreas	24.4	6.6	2.63	0.67	0.00808	0.00262
Testes	9.69	2.44	1.00	0.20	0.0163	0.0038
Cecum	25.1	8.2	2.67	0.84	0.00674	0.00304
Large Intestine	22.6	5.0	2.49	0.41	0.0110	0.0036
Small Intestine	29.8	8.9	3.17	0.93	0.0489	0.0178
Stomach	21.6	5.3	2.37	0.40	0.0129	0.0025

Disposition Summary

Sample	% Dose Recovered
Urine + Cage Rinse	93.0 ± 9.0
Urine	78.3 ± 12.3
Cage Rinse	14.7 ± 4.8
Feces	4.28 ± 1.18
Volatile Organics	0.103 ± 0.017
CO_2	1.40 ± 0.14
GI Content	0.120 ± 0.026
Carcass	0.0350 ± 0.0783
Tissues	3.55 ± 0.91
Total Recovered	**102.5 ± 8.9**

[a]All values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 200 mg DMDEE/kg. The actual dose delivered was 197 ± 4 mg/kg (39.7 ± 0.7 µCi/kg).
[b]CPDE = Cumulative percent dose excreted
[c]72 hour (h) urine collection includes urine present in the urinary bladder at study termination.
[d]Animal C001 blood was excluded from calculations. TBR = Tissue to blood ratio.
[e]Tissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).