Recovery of Radioactivity Through 24 Hours Following Unprotected Dermal Administration of 20 mg/kg [¹⁴C] 5-Amino-o-cresol to Female F344 Rats (Study J)^a

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Feces CPDE	Volatile Organics ^c CPDE	CO₂° CPDE	TotalCPDE
6	50.0 ± 10.5	d	0.0474 ± 0.0124	0.126 ± 0.023	50.2 ± 10.5
12	55.2 ± 11.4	0.0063 ± 0.0127	0.0957 ± 0.0340	0.295 ± 0.130	55.6 ± 11.3
24 ^e	57.1 ± 12.0	4.34 ± 0.65	0.147 ± 0.042	0.430 ± 0.266	62.1 ± 11.6

Distribution in Tissues (24 hours)

Tissue	nmol-eq AOC per g tissue ^f Mean	nmol-eq AOC per g tissue SD	Tissue/Blood Ratio ^g	% Dose in Total Tissue ^f Mean	% Dose in Total Tissue SD
Adipose ⁱ	2.90	0.56	NA ^h	0.0841	0.0353
Urinary Bladder ^j	3.34	2.89	NA	0.0008	0.0007
Blood ⁱ	0	0	NA	0	0
Brain	1.34	0.08	NA	0.0057	0.0016
Heart	3.86	0.60	NA	0.0056	0.0021
Kidney	0.602	1.204	NA	0.0017	0.0034
Liver	3.22	1.48	NA	0.0329	0.0044
Lung	2.40	1.24	NA	0.0048	0.0011
Muscle ⁱ	3.81	4.30	NA	0.589	0.598
Skin ⁱ	17.0	8.6	NA	1.23	0.49
Spleen	4.25	3.08	NA	0.0049	0.0042
Thyroid	34.2	28.5	NA	0.0007	0.0001
Uterus	2.83	0.58	NA	0.0050	0.0037
Stomach ^k	NA	-	NA	0.132	0.093
Small Intestine ^k	NA	_	NA	0.169	0.098
Cecum ^k	NA	_	NA	0.573	0.271
Large Intestine ^k	NA	_	NA	0.742	0.150
Carcass ^I	NA	-	NA	1.00	0.61

Disposition Summary - Overall Percent Dose Recovered (Absorbed + Unabsorbed Dose)

Percent Dose	Mean ± SD		
Absorbed Dose	_		
Tissues	4.59 ± 0.87		
Dose-Site Skin	2.64 ± 0.36		
Excreta	62.1 ± 11.6		
Total % Dose Absorbed	69.3 ± 12.1		
Unabsorbed Dose	_		
Gauze Wash	21.9 ± 6.6		
Dose-Site Rinse	0.0419 ± 0.0263		
Total % Dose Unabsorbed	21.9 ± 6.6		
Overall % Dose Recovered	91.2 ± 7.8		

^aAll values expressed as mean ± standard deviation (SD) (N = 4). The target dose was 20 mg AOC/kg. The actual dose delivered was 31.6 ± 6.9 mg/kg.

^bCPDE = Cumulative percent dose excreted.

^cVolatile organics and CO₂ in exhaled breath.

^dThe first feces collection was 0–12 hour (h).

^e24-hour urine collection includes urine present in the urinary bladder at study termination. \$

^fA value of 0 ± 0 nmol-eq AOC per g tissue or % dose in total tissue indicates a mean < 0.00005 nmol-eq AOC per g tissue or \$ % dose in total tissue.

⁹Radioactivity was not detected in blood; therefore tissue/blood ratios cannot be determined. \$

^hNA = Not applicable.

Percent of dose in these tissues was calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19.0%.

Data for the urinary bladder from animal J001 was not collected at time of sacrifice and is not included in the results.

NTP Study S0852 5-Amino-o-cresol (AOC)

^ICarcass 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).