

Distribution of Radioactivity 24 Hours Following Dermal Administration of 15 mg/kg [¹⁴C] 2-Methoxy-4-Nitroaniline to Male Harlan B6C3F₁ Mice – Group 12

Percent of Dose Recovered in Excreta

Sample	Collection Interval (h)	12-01	12-02	12-03	12-04	Mean	SD
Urine	0 to 4	N.S.	N.S.	N.S.	N.S.	0	0
Urine	4 to 8	N.S.	N.S.	N.S.	N.S.	0	0
Urine	8 to 12	3.62	N.S.	1.38	3.68	2.17	1.800
Urine	12 to 24 ^a	2.16	3.73	0.33	3.25	2.37	1.51
Cage Rinse	0 to 24	5.06	4.5	4.01	2.36	3.98	1.16
-	Subtotal	5.06	4.5	4.01	2.36	8.52	2.15
Feces	0 to 24	0.60	0.72	2.78	0.43	1.13	1.10
-	Subtotal	0.60	0.72	2.78	0.43	1.13	1.10
Total	-	11.4	9.0	8.5	9.7	9.65	1.29

Distribution in Tissues (24 h)

Tissue	ng-eq/g Mean	ng-eq/g SD	TBR Mean	TBR SD	Recovery Mean	Recovery SD
Adipose Perirenal ^b	95	85.6	3.43	2.75	0.043	0.036
Muscle (hind leg) ^b	10.8	2.42	0.482	0.251	0.027	0.006
Skin (abdominal) ^b	69.1	41.5	2.37	1.09	0.073	0.04
Blood ^b	27.5	6.04	1	0	0.009	0.001
Plasma ^b	25.9	11.3	0.915	0.243	0.005	0.002
Spleen	93.2	71	2.99	2.22	0.00	0.00
Liver	107	13.8	4.11	1.4	0.032	0.004
Kidney	166	65.9	5.85	1.18	0.015	0.005
Brain	5.53	0.91	0.223	0.08	0.001	0
Heart	21.1	6.52	0.668	0.127	0.001	0
Lung	36.6	21.2	1.27	0.501	0.002	0.001
Pancreas	31.3	14	1.1	0.296	0.002	0.001
Total	-	-	-	-	0.202	0.081

Disposition Summary – Percent of Dose Recovered

UNABSORBED	12-01	12-02	12-03	12-04	Mean	SD
Gauze	38.6	40.9	38.1	33.8	37.8	3.0
Dose Skin Wash	23.6	18.7	26.6	30.6	24.9	5.0
Total Unabsorbed	62.2	59.6	64.7	64.4	62.7	2.4
Total in Dose Site	0.49	0.55	1.44	0.81	0.8	0.4
ABSORBED	-	-	-	-	-	-
Urine ^c	5.06	4.5	4.01	2.36	8.52	2.15
Feces	0.6	0.72	2.78	0.43	1.13	1.10
Tissues	0.129	0.146	0.305	0.227	0.202	0.081
Total Absorbed	11.57	9.10	8.81	9.95	9.9	1.2
Total Recovery	74.3	69.2	74.9	75.1	73.4	2.8

^a Includes urine present in bladder at time of sacrifice.

^b Tissue weights for dispersed tissues were calculated based on body weight as follows: adipose 7.0%, muscle 38.4%, skin 16.5%, blood 4.9%, and plasma 2.8%. ILSI (1994). *Physiological Parameter Values for PBPK Models*. International Life Sciences Institute.

^c Includes Cage Rinse

N.S. = no sample.