

**Disposition of Radioactivity 24 Hours Following Oral Dose Administration of 130 mg/kg  
[<sup>14</sup>C]N,N-Dimethylacetamide to Male Fischer 344 Rats– Group 4<sup>a</sup>**

**Disposition in Non-digestive Tract Tissues**

| <b>Tissue</b>              | <b>ng-eq DMAAm<br/>per g Tissue</b> | <b>Tissue/Blood Ratio</b> | <b>% Dose in Total Tissue<sup>b</sup></b> |
|----------------------------|-------------------------------------|---------------------------|-------------------------------------------|
| Blood                      | 1252 ± 263                          | Unity                     | 0.0739 ± 0.0157                           |
| Adipose (Total)            | 988 ± 238                           | 0.794 ± 0.166             | 0.0551 ± 0.0134                           |
| Bladder                    | 16734 ± 8851                        | 12.7 ± 5.3                | 0.00409 ± 0.00178                         |
| Brain                      | 1427 ± 253                          | 1.15 ± 0.12               | 0.00867 ± 0.00132                         |
| Heart                      | 1237 ± 310                          | 0.985 ± 0.083             | 0.00340 ± 0.00113                         |
| Kidney                     | 3793 ± 1316                         | 3.20 ± 1.59               | 0.0225 ± 0.0079                           |
| Liver                      | 4958 ± 372                          | 4.07 ± 0.72               | 0.178 ± 0.012                             |
| Lung                       | 2805 ± 410                          | 2.27 ± 0.22               | 0.00925 ± 0.00142                         |
| Muscle (Total)             | 1060 ± 196                          | 0.853 ± 0.073             | 0.342 ± 0.065                             |
| Pancreas                   | 1779 ± 309                          | 1.44 ± 0.17               | 0.00506 ± 0.00115                         |
| Skin (ears)                | 5411 ± 705                          | 4.53 ± 1.29               | 0.820 ± 0.111                             |
| Spleen                     | 2034 ± 259                          | 1.65 ± 0.18               | 0.00308 ± 0.00030                         |
| Testes                     | 1700 ± 304                          | 1.37 ± 0.18               | 0.0144 ± 0.0020                           |
| Thymus                     | 2496 ± 357                          | 2.02 ± 0.24               | 0.00255 ± 0.00054                         |
| Thyroid                    | 4777 ± 1039                         | 3.93 ± 1.11               | 0.000316 ± 0.000072                       |
| Carcass                    | –                                   | –                         | 0.684 ± 0.177                             |
| <b>Total Non-digestive</b> | <b>–</b>                            | <b>–</b>                  | <b>2.23 ± 0.25</b>                        |

**Disposition in Digestive Tract Tissues and Contents**

| <b>Tissue</b>                                       | <b>% Dose in Tissue</b> |
|-----------------------------------------------------|-------------------------|
| Stomach and Contents                                | 0.0237 ± 0.0036         |
| Small Intestines and Contents                       | 0.114 ± 0.043           |
| Cecum and Contents                                  | 0.116 ± 0.019           |
| Large Intestines and Contents                       | 0.0782 ± 0.0291         |
| <b>Total in Digestive Tract Tissue and Contents</b> | <b>0.331 ± 0.071</b>    |

**Percent Dose Recovered in Excreta**

| <b>Sample</b>                 | <b>Collection<br/>Interval (h)</b> | <b>% Dose Excreted</b> |
|-------------------------------|------------------------------------|------------------------|
| Urine                         | 0 – 4                              | 10.0 ± 2.5             |
| Urine                         | 4 – 8                              | 16.5 ± 5.3             |
| Urine                         | 8 – 12                             | 14.5 ± 6.7             |
| Urine                         | 12 – 24 <sup>c</sup>               | 39.0 ± 11.3            |
| <b>Subtotal</b>               | <b>–</b>                           | <b>80.0 ± 7.2</b>      |
| Feces                         | –                                  | 4.41 ± 5.88            |
| <b>Total Excreted</b>         | <b>–</b>                           | <b>84.4 ± 5.7</b>      |
| <b>Total % Dose Recovered</b> | <b>–</b>                           | <b>87.0 ± 4.9</b>      |

<sup>a</sup> Values are mean ± standard deviation; *n* = 5; h = hour.

<sup>b</sup> The total body weight of rats was assumed to be comprised of 7.4% blood, 7.0% adipose, 40.4% muscle, and 19% skin (ILSI, 1994).

<sup>c</sup> Includes cage rinse and urine present in bladder at time of sacrifice.