

Recovery of Radioactivity 24 Hours Following Oral Gavage Administration  
of 1 mg/kg [ $^{14}\text{C}$ ]2-Methyltetrahydrofuran to Male F344 Rats (Study D)<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 CPDE  |
|------------------------------|-------------------------|---------------|-------------------------------------|-----------------------------------|-------------|
| 6                            | 17.0 ± 2.6              | d             | 1.14 ± 0.23                         | 47.3 ± 5.3                        | 65.4 ± 23.4 |
| 12                           | 21.1 ± 1.1              | 0.268 ± 0.217 | 1.17 ± 0.24                         | 53.6 ± 3.4                        | 76.1 ± 26.5 |
| 24 <sup>e</sup>              | 22.3 ± 1.0              | 0.737 ± 0.236 | 1.21 ± 0.23                         | 55.9 ± 3.3                        | 80.1 ± 27.6 |

## Distribution in Tissues (24 hours)

| Tissue                       | nmol-eq MTHF per g Tissue | Tissue/Blood Ratio | % Dose in Total Tissue     |
|------------------------------|---------------------------|--------------------|----------------------------|
| Adipose <sup>f</sup>         | 1.90 ± 0.63               | 1.42 ± 0.35        | 1.06 ± 0.36                |
| Urinary bladder              | 2.74 ± 1.14               | 2.29 ± 0.73        | 0.029 ± 0.038              |
| Blood <sup>f</sup>           | 1.32 ± 0.18               | Unity              | 0.791 ± 0.108              |
| Brain                        | 2.53 ± 0.63               | 1.96 ± 0.58        | 0.145 ± 0.041              |
| Heart                        | 2.34 ± 0.26               | 1.80 ± 0.31        | 0.064 ± 0.005              |
| Kidney                       | 6.73 ± 0.73               | 5.22 ± 1.16        | 0.421 ± 0.042              |
| Liver                        | 5.98 ± 1.73               | 4.73 ± 2.08        | 2.16 ± 0.57                |
| Lung                         | 2.42 ± 0.26               | 1.88 ± 0.45        | 0.075 ± 0.031              |
| Muscle <sup>f</sup>          | 1.12 ± 0.16               | 0.86 ± 0.175       | 3.73 ± 0.51                |
| Skin <sup>f</sup>            | 2.73 ± 0.29               | 2.08 ± 0.13        | 4.21 ± 0.43                |
| Spleen                       | 3.12 ± 0.96               | 2.43 ± 0.88        | 0.053 ± 0.016              |
| Testis                       | 1.69 ± 0.24               | 1.31 ± 0.34        | 0.159 ± 0.023              |
| Stomach <sup>g</sup>         | NA <sup>h</sup>           | NA                 | 0.161 ± 0.016 <sup>i</sup> |
| Small intestine <sup>g</sup> | NA                        | NA                 | 0.932 ± 0.119              |
| Cecum <sup>g</sup>           | NA                        | NA                 | 0.309 ± 0.042 <sup>j</sup> |
| Large intestine <sup>g</sup> | NA                        | NA                 | 0.173 ± 0.018 <sup>k</sup> |
| Carcass <sup>l</sup>         | NA                        | NA                 | 1.06 ± 0.66                |

## Disposition Summary [Dose Recovered (%)]

| Tissues    | Excreted   | Total      |
|------------|------------|------------|
| 15.3 ± 1.2 | 80.2 ± 3.5 | 95.5 ± 3.6 |

<sup>a</sup>All values expressed as mean ± standard deviation (SD) (N=4). The target dose was 1 mg MTHF/kg. The actual dose delivered was 1.06 ± 0.02 mg/kg (9.85 ± 0.16  $\mu\text{Ci}$ ).

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

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

<sup>d</sup>The first feces collection was 0-12 h.

<sup>e</sup>24 hour (h) urine collection includes urine present in the urinary bladder at study termination.

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

<sup>g</sup>Includes contents.

<sup>h</sup>NA = Not applicable.

<sup>i</sup>Sample processing accident. D001 not included in calculations.

<sup>j</sup>Sample processing accident. D005 not included in calculations.

<sup>k</sup>Sample processing accident. D004 and D006 not included in calculations.

<sup>l</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).