

Male					
	Treatment Groups (mg/kg)				
	50 ^a	100 ^b	200 ^b	20 IV ^b	20 IV ^c
Plasma					
C _{max} (ug/mL)	21.0	42.0	123	44.8	
T _{max} (minute)	20	30	60		
Alpha (minute ⁻¹)					0.0593 ± 0.012
Beta (minute ⁻¹)					0.000710 ± 0.0011
t _{1/2} (Beta) (minute)	379	290	279	163	
k ₀₁ (minute ⁻¹)					0.0289 ± 0.0057
k ₁₀ (minute ⁻¹)					0.0246 ± 0.018
k ₁₂ (minute ⁻¹)					0.0337 ± 0.017
k ₂₁ (minute ⁻¹)					0.00171 ± 0.0017
Cl (mL*min/kg)	17.9	12.3	6.25	11.0	
V ₁ (L/kg)					0.407 ± 0.082
MRT (minute)	345	317	254	122	
AUC _{inf} (ug/mL*min)	2230	6493	25583	1450	
F (fraction)	0.62	0.90	1.76		

Experiment Number: S0545
Route: Gavage, IV
Species/Strain: Rat/Sprague-Dawley

Toxicokinetics Data Summary
Test Compound: DI-n-butyl phthalate
CAS Number: 84-74-2

Date Report Requested: 12/27/2016
Time Report Requested: 11:23:14
Lab: Research Triangle Institute

LEGEND

Data are displayed as mean \pm SEM

MODELING METHOD & BEST FIT MODEL

^a Models 200 and 201, PCNONLIN software, SCI Software, Lexington, KY; Noncompartmental analysis.

^b Models 200 and 201, PCNONLIN software, SCI Software, Lexington, KY; Noncompartmental analysis. Secondary rise in plasma concentration indicates that additional factors such as enterohepatic recirculation should be considered in the analysis of the data.

^c Compartmental modeling techniques with established models or models written to simultaneously solve IV and oral data sets (PCNONLIN); 2-compartmental model using equations derived from simultaneous fitting of the IV and low oral dose data (Studies AB and AC).

ANALYTE

Mono-n-butyl phthalate

TK PARAMETERS

C_{max} = Observed or Predicted Maximum plasma (or tissue) concentration

T_{max} = Time at which C_{max} predicted or observed occurs

Alpha = Hybrid rate constant of the alpha phase

Beta = Hybrid rate constant of the beta phase

$t_{1/2(beta)}$ = Half-life for the beta phase

k_{01} = Absorption rate constant, k_a

k_{10} = Elimination rate constant from the central compartment also k_e or k_{elim}

k_{12} = Distribution rate constant from first to second compartment etc.

k_{21} = Distribution rate constant from second to first compartment etc.

Cl = Clearance, includes total clearance

V_1 = Volume of distribution of the central compartment, includes V_d and V_{volume} of distribution, V_z apparent volume of distribution NCA, V_{app} apparent volume of distribution for intravenous studies

MRT = Mean residence time

AUC_{inf} = Area under the plasma concentration versus time curve, AUC, extrapolated to time equals infinity

F = Bioavailability, absolute bioavailability

**** END OF REPORT ****