Experiment Number: S0559
Route: Inhalation
Species/Strain: Rat/Fischer 344

Toxicokinetics Data Summary
Test Compound: Carbon disulfide
CAS Number: 75-15-0

Date Report Requested: 12/27/2016
Time Report Requested: 11:51:44
Lab: Research Triangle Institute_Midwest Research Institute

	Female	
	Treatment Groups (ppm)	
	500	800
	Blood	
C_{max} (ug/g)	6.6	10.8
$t_{1/2(Alpha)}$ (minute)	2.7	2.0
$t_{1/2(Beta)}$ (minute)	77.4	66.4
k_{10} (minute^-1)	0.16	0.18
$t_{1/2(k10)}$ (minute)	4.4	3.9
k_{12} (minute^-1)	0.094	0.16
k_{21} (minute^-1)	0.015	0.020
Cl (mL/min)	0.39	0.38
V_1 (mL)	2.5	2.1
V_{ss} (mL)	18.4	18.8
MRT (minute)	47.3	49.5
AUC_{inf} (ug*min/g)	1280	2110

LEGEND

Study Start Date: October 3, 1994

Data are displayed as mean values

MODELING METHOD & BEST FIT MODEL

Nonlinear regression analysis using PCNONLIN, Statistics Consultants, Inc., Lexington, KY; linear two-compartment model

ANALYTE

Free Carbon disulfide

TK PARAMETERS

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

$t_{½(alpha)}$ = Half-life for the alpha phase

$t_{½(beta)}$ = Half-life for the beta phase

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

$t_{1/2(k10)}$ = Half-life for the elimination process from the central compartment

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

V_{ss} = Volume of distribution at steady state

MRT = Mean residence time

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

** END OF REPORT **