Experiment Number: S0559
Route: IV
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: 11:51:54
Lab: NIEHS_Midwest Research Institute

Male

	Treatment Groups (mg/kg)	
	10 IV	**50 IV**
	Blood	
C_{max} (ug/g)	21.4	54.8
$t_{1/2(Alpha)}$ (minute)	1.2	1.3
$t_{1/2(Beta)}$ (minute)	32.6	23.6
k_{10} (minute^-1)	0.21	0.13
$t_{1/2(k10)}$ (minute)	3.3	5.3
k_{12} (minute^-1)	0.32	0.31
k_{21} (minute^-1)	0.06	0.12
Cl (mL/min)	97.1	119
V_1 (mL)	468	912
MRT (minute)	32	27
AUC_{inf} (ug*min/mL)	103	422

LEGEND

Study Start Date: June 14, 1993

Data are displayed as mean values

MODELING METHOD & BEST FIT MODEL

PCNONLIN, Statistical Consultants, Lexington, KY; two-compartment model using an unweighted regression

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

MRT = Mean residence time

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

** END OF REPORT **