

UDP Results for the RC Millimole Regression**Starting at Estimated LD50****5000 mg/kg Upper Limit****Results for 46 chemicals for the 3T3 NRU and 47 chemicals for the NHK NRU**

(see notes to Table 6-4 for chemicals excluded)

Summary of Animals Used by Cell Type

Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Change
3T3	0.12	Cyto	0.309	7.00	1.14	0.0034	14.0%
		Default	0.253	8.13			
	0.25	Cyto	0.293	7.77	1.22	0.0011	13.5%
		Default	0.249	8.99			
	0.5	Cyto	0.243	8.54	1.25	<.0001	12.7%
		Default	0.208	9.79			
	1.25	Cyto	0.210	9.13	1.23	<.0001	11.8%
		Default	0.165	10.36			
	2	Cyto	0.185	9.28	1.05	<.0001	10.2%
		Default	0.131	10.33			
Average Animal Difference:						1.18	
Average Animal Difference:						1.18	
NHK	0.12	Cyto	0.320	7.13	1.00	0.0045	12.3%
		Default	0.248	8.12			
	0.25	Cyto	0.303	7.88	1.07	0.0015	12.0%
		Default	0.241	8.96			
	0.5	Cyto	0.254	8.66	1.11	0.0001	11.4%
		Default	0.199	9.77			
	1.25	Cyto	0.214	9.25	1.14	<.0001	11.0%
		Default	0.154	10.39			
	2	Cyto	0.191	9.40	0.93	<.0001	9.0%
		Default	0.123	10.33			
Average Animal Difference:						1.05	
Average Animal Difference:						1.05	

Summary of Animal Deaths by Cell Type

Cell Type	Sigma	Method	3 Animals at Limit Dose	5 Reversals	Likelihood Ratio	Max Animals	Animals	Died	Percent Dead
3T3	0.12	Cyto	23.8%	54.6%	18.9%	2.6%	7.00	3.36	46.5%
		Default	23.3%	51.6%	21.5%	3.6%	8.13	3.44	43.7%
	0.25	Cyto	23.2%	31.7%	40.6%	4.6%	7.77	3.72	46.6%
		Default	22.5%	31.8%	38.2%	7.6%	8.99	3.80	43.8%
	0.5	Cyto	20.9%	18.3%	53.2%	7.6%	8.54	4.11	47.1%
		Default	19.6%	19.1%	47.7%	13.6%	9.79	4.18	44.3%
	1.25	Cyto	15.1%	12.7%	60.5%	11.7%	9.13	4.51	48.3%
		Default	13.3%	13.3%	53.0%	20.4%	10.36	4.63	45.9%
	2	Cyto	13.0%	11.7%	62.3%	13.0%	9.28	4.62	48.8%
		Default	10.5%	12.4%	56.4%	20.8%	10.33	4.74	46.9%
NHK	0.12	Cyto	25.4%	49.3%	22.2%	3.1%	7.13	3.34	46.4%
		Default	25.0%	50.7%	20.8%	3.5%	8.12	3.39	43.2%
	0.25	Cyto	24.5%	29.9%	40.3%	5.3%	7.88	3.69	46.5%
		Default	23.9%	31.5%	37.2%	7.4%	8.96	3.73	43.4%
	0.5	Cyto	22.0%	18.1%	51.6%	8.3%	8.66	4.09	47.0%
		Default	21.0%	18.8%	46.8%	13.3%	9.77	4.12	43.9%
	1.25	Cyto	15.5%	12.5%	59.7%	12.2%	9.25	4.51	48.3%
		Default	13.9%	13.2%	52.4%	20.5%	10.39	4.60	45.7%
	2	Cyto	12.6%	11.9%	61.9%	13.6%	9.40	4.63	48.9%
		Default	10.9%	12.3%	56.0%	20.8%	10.33	4.71	46.7%

Summary of Animals Used by GHS Toxicity Category and Cell Type

Toxcat	Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Change
1	3T3	0.12	Cyto	0.639	10.42	0.20	0.4501	1.9%
			Default	0.491	10.61			
		0.25	Cyto	0.647	11.01	0.24	0.5000	2.1%
			Default	0.332	11.25			
		0.5	Cyto	0.582	11.37	0.39	0.4501	3.3%
			Default	0.193	11.75			
		1.25	Cyto	0.529	11.64	0.40	0.4011	3.3%
			Default	0.125	12.04			
		2	Cyto	0.456	11.48	0.35	0.4501	3.0%
			Default	0.122	11.83			
		Average Animal Difference:					0.31	
2	NHK	0.12	Cyto	0.544	11.24	-0.67	0.3089	-6.4%
			Default	0.529	10.57			
		0.25	Cyto	0.460	11.84	-0.81	0.1354	-7.3%
			Default	0.412	11.03			
		0.5	Cyto	0.422	12.21	-0.64	0.0603	-5.5%
			Default	0.269	11.57			
		1.25	Cyto	0.407	12.39	-0.42	0.1118	-3.5%
			Default	0.159	11.97			
		2	Cyto	0.392	12.17	-0.45	0.0746	-3.9%
			Default	0.126	11.71			
		Average Animal Difference:					-0.60	
2	3T3	0.12	Cyto	0.722	8.11	-0.07	0.3429	-0.9%
			Default	0.240	8.05			
		0.25	Cyto	0.763	8.83	-0.39	0.5000	-4.6%
			Default	0.112	8.44			
		0.5	Cyto	0.800	9.37	-0.41	0.5000	-4.6%
			Default	0.159	8.96			
		1.25	Cyto	0.762	9.85	-0.44	0.4196	-4.6%
			Default	0.136	9.42			
		2	Cyto	0.605	10.03	-0.43	0.5000	-4.5%
			Default	0.088	9.60			
		Average Animal Difference:					-0.35	
2	NHK	0.12	Cyto	0.233	7.31	0.88	0.0464	10.7%
			Default	0.318	8.18			
		0.25	Cyto	0.225	7.92	0.78	0.0464	8.9%
			Default	0.183	8.70			
		0.5	Cyto	0.300	8.33	0.96	0.0645	10.3%
			Default	0.242	9.28			
		1.25	Cyto	0.226	8.79	0.96	0.0331	9.9%
			Default	0.212	9.75			
		2	Cyto	0.140	9.19	0.57	0.0464	5.9%
			Default	0.112	9.77			
		Average Animal Difference:					0.83	

Summary of Animals Used by GHS Toxicity Category and Cell Type

Toxcat	Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Change
3	3T3	0.12	Cyto	0.267	6.45	0.27	0.5000	4.1%
			Default	0.385	6.72			
		0.25	Cyto	0.264	7.00	0.06	0.4073	0.8%
			Default	0.309	7.06			
		0.5	Cyto	0.177	7.69	0.06	0.4688	0.8%
			Default	0.207	7.75			
		1.25	Cyto	0.096	8.67	0.02	0.4073	0.2%
			Default	0.087	8.69			
		2	Cyto	0.053	9.16	-0.03	0.3483	-0.4%
			Default	0.066	9.13			
		Average Animal Difference:					0.08	
4	NHK	0.12	Cyto	0.230	6.43	0.52	0.2198	7.5%
			Default	0.414	6.95			
		0.25	Cyto	0.366	7.08	0.11	0.4073	1.5%
			Default	0.350	7.19			
		0.5	Cyto	0.331	7.86	-0.10	0.4073	-1.2%
			Default	0.220	7.76			
		1.25	Cyto	0.172	8.74	-0.03	0.5000	-0.3%
			Default	0.116	8.71			
		2	Cyto	0.095	9.18	-0.04	0.4073	-0.5%
			Default	0.062	9.14			
		Average Animal Difference:					0.09	
3	3T3	0.12	Cyto	0.100	6.53	0.81	0.0485	11.1%
			Default	0.381	7.35			
		0.25	Cyto	0.111	7.14	1.02	0.0388	12.5%
			Default	0.367	8.16			
		0.5	Cyto	0.072	7.68	1.20	0.0152	13.5%
			Default	0.376	8.88			
		1.25	Cyto	0.058	8.47	0.90	0.0058	9.6%
			Default	0.227	9.38			
		2	Cyto	0.066	8.90	0.66	0.0058	6.9%
			Default	0.151	9.56			
		Average Animal Difference:					0.92	
4	NHK	0.12	Cyto	0.233	6.85	0.51	0.1627	7.0%
			Default	0.363	7.36			
		0.25	Cyto	0.182	7.35	0.84	0.0603	10.3%
			Default	0.322	8.20			
		0.5	Cyto	0.134	7.79	1.09	0.0120	12.3%
			Default	0.351	8.88			
		1.25	Cyto	0.083	8.56	0.85	0.0074	9.0%
			Default	0.209	9.42			
		2	Cyto	0.070	8.95	0.58	0.0094	6.0%
			Default	0.132	9.53			
		Average Animal Difference:					0.77	

Summary of Animals Used by GHS Toxicity Category and Cell Type

Toxcat	Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Change
5	3T3	0.12	Cyto	0.313	7.01	2.17	0.0018	23.6%
			Default	0.247	9.17			
		0.25	Cyto	0.263	7.79	2.57	0.0004	24.8%
			Default	0.113	10.36			
		0.5	Cyto	0.189	8.33	2.49	0.0004	23.0%
			Default	0.071	10.82			
		1.25	Cyto	0.124	8.52	2.24	0.0004	20.8%
			Default	0.055	10.77			
		2	Cyto	0.097	8.61	1.85	0.0004	17.7%
			Default	0.049	10.45			
		Average Animal Difference:					2.26	
6	NHK	0.12	Cyto	0.369	7.16	1.98	0.0051	21.7%
			Default	0.226	9.14			
		0.25	Cyto	0.296	7.92	2.42	0.0004	23.4%
			Default	0.093	10.34			
		0.5	Cyto	0.206	8.49	2.31	0.0004	21.4%
			Default	0.054	10.80			
		1.25	Cyto	0.117	8.68	2.06	0.0004	19.2%
			Default	0.047	10.74			
		2	Cyto	0.098	8.77	1.63	0.0004	15.7%
			Default	0.055	10.40			
		Average Animal Difference:					2.08	
6	3T3	0.12	Cyto	0.354	4.68	2.00	0.0027	30.0%
			Default	0.369	6.69			
		0.25	Cyto	0.427	5.87	2.04	0.0086	25.8%
			Default	0.433	7.91			
		0.5	Cyto	0.336	7.50	2.05	0.0014	21.5%
			Default	0.265	9.56			
		1.25	Cyto	0.250	8.43	2.47	0.0007	22.7%
			Default	0.058	10.90			
		2	Cyto	0.210	8.46	2.32	0.0007	21.5%
			Default	0.028	10.78			
		Average Animal Difference:					2.18	
6	NHK	0.12	Cyto	0.362	4.94	1.70	0.0068	25.6%
			Default	0.344	6.64			
		0.25	Cyto	0.451	6.07	1.74	0.0183	22.3%
			Default	0.425	7.81			
		0.5	Cyto	0.353	7.71	1.79	0.0021	18.8%
			Default	0.274	9.49			
		1.25	Cyto	0.250	8.75	2.12	0.0004	19.5%
			Default	0.043	10.87			
		2	Cyto	0.244	8.78	2.04	0.0004	18.9%
			Default	0.027	10.82			
		Average Animal Difference:					1.88	

Notes:

*P-Value is from one-side Wilcoxon Signed Ranked test for difference in animal use between the default and cytotoxicity methods. **Boldfaced** values are significant values at n<0.05.

Numbers are numbers of animals unless otherwise specified

Sigma - reciprocal of slope

Cyto= using NRU-predicted LD50 as starting dose

Default - using default starting dose of 175 mg/kg