

## Thiourea (チオ尿素)

## Experimental Data-1

(B9815-1/2)

Chemical Name	: Thiourea
Synonym	: Thiocarbamide チオウレア
Molecular Weight	: 76.12
Melting Point	: 175-178°C[Aldrich]
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: CH <sub>4</sub> N <sub>2</sub> S
Chemical Structure	$\begin{array}{c} \text{S} \\    \\ \text{H}_2\text{N}-\text{C}-\text{NH}_2 \end{array}$
CAS No.	: 62-56-6
MITI No.	: (2)-1733
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Wako Jyunyaku Kogyo Co.,Ltd.
Lot No.	: WTH1012
Purity	: 98.0%
Vehicle	: Distilled H <sub>2</sub> O

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; Group 3

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
H <sub>2</sub> O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 161 )	( 167 )	( 12 )	( 15 )	( 51 )	( 68 )	( 13 )	( 27 )	( 7 )	( 12 )
1 .22	198	199	15	15	37	89	8	22	3	13
	187	199	10	11	40	62	11	13	7	13
4 .88	( 193 )	( 199 )	( 13 )	( 13 )	( 39 )	( 76 )	( 10 )	( 18 )	( 5 )	( 13 )
	177	190	13	13	29	74	14	21	9	13
19 .5	166	180	8	15	38	59	18	24	5	9
	( 172 )	( 185 )	( 11 )	( 14 )	( 34 )	( 67 )	( 16 )	( 23 )	( 7 )	( 11 )
78 .1	150	193	11	16	56	71	15	21	6	6
	174	199	15	11	47	52	15	18	3	5
313	( 162 )	( 196 )	( 13 )	( 14 )	( 52 )	( 62 )	( 15 )	( 20 )	( 5 )	( 6 )
	191	188	15	16	44	67	20	20	5	11
1250	164	179	10	14	45	64	23	26	6	9
	( 178 )	( 184 )	( 13 )	( 15 )	( 45 )	( 66 )	( 22 )	( 23 )	( 6 )	( 10 )
5000	176	208	8	16	32	78	17	33	3	9
	200	169	8	10	44	64	13	16	6	9
Judgement	( 188 )	( 189 )	( 8 )	( 13 )	( 38 )	( 71 )	( 15 )	( 25 )	( 5 )	( 9 )
	176	153	15	5	25	53	16	23	8	6
Specific Mutagenicity	177	212	10	14	37	68	22	24	5	7
	( 177 )	( 183 )	( 13 )	( 10 )	( 31 )	( 61 )	( 19 )	( 24 )	( 7 )	( 7 )
Positive Control	165	163	8	17	41	79	8	22	3	9
	129	149	16	14	37	55	13	26	6	7
AF-2	( 147 )	( 156 )	( 12 )	( 16 )	( 39 )	( 67 )	( 11 )	( 24 )	( 5 )	( 8 )
	2-AA	2-AA	NaN <sub>3</sub>	2-AA	AF-2	2-AA	AF-2	2-AA	9-AA	2-AA
Control	( 607 )	( 1219 )	( 431 )	( 319 )	( 814 )	( 864 )	( 427 )	( 404 )	( 482 )	( 217 )

Experimental Data-2

(B9815-2/2)

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
H <sub>2</sub> O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 153 )	( 161 )	( 7 )	( 9 )	( 58 )	( 70 )	( 18 )	( 29 )	( 5 )	( 7 )
313	184	178	10	10	59	59	17	31	2	6
	173	144	6	9	54	71	17	25	6	3
	( 179 )	( 161 )	( 8 )	( 10 )	( 57 )	( 65 )	( 17 )	( 28 )	( 4 )	( 5 )
625	141	162	6	7	63	70	22	33	8	8
	142	156	10	10	74	79	15	28	3	7
	( 142 )	( 159 )	( 8 )	( 9 )	( 69 )	( 75 )	( 19 )	( 31 )	( 6 )	( 8 )
1250	148	159	11	7	53	77	11	22	3	13
	151	152	8	8	43	74	18	33	5	3
	( 150 )	( 156 )	( 10 )	( 8 )	( 48 )	( 76 )	( 15 )	( 28 )	( 4 )	( 8 )
2500	130	144	8	11	49	76	11	23	5	7
	143	114	5	6	44	89	18	29	6	7
	( 137 )	( 129 )	( 7 )	( 9 )	( 47 )	( 83 )	( 15 )	( 26 )	( 6 )	( 7 )
5000	155	149	6	8	54	62	22	30	3	7
	144	135	6	8	45	84	24	33	5	8
	( 150 )	( 142 )	( 6 )	( 8 )	( 50 )	( 73 )	( 23 )	( 32 )	( 4 )	( 8 )
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 ( 739 )	2-AA ( 1253 )	NaN <sub>3</sub> ( 424 )	2-AA ( 276 )	AF-2 ( 609 )	2-AA ( 765 )	AF-2 ( 457 )	2-AA ( 431 )	9-AA ( 596 )	2-AA ( 186 )