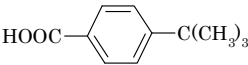


Experimental Data-1

(B9912-1/2)

*p*-tert-Butylbenzoic acid (*p*-tert-ブチル安息香酸)

Chemical Name	: <i>p</i> -tert-Butylbenzoic acid
Synonym	: 4-tert-Butylbenzoic acid 4-(1,1-Dimethylethyl)benzoic acid
Molecular Weight	: 178.23
Melting Point	: 163-164.4°C[CHCD]
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: C <sub>11</sub> H <sub>14</sub> O <sub>2</sub>
Chemical Structure:	
CAS No.	: 98-73-7
METI No.	: (3)-1338
MHLW No.	: -
Specified Chemical Substances:	-
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: GA05
Purity	: >99%
Vehicle	: DMSO

Mutagenicity in Bacterial Test: Negative

IARC Evaluation : not yet cited

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 <i>uvrA</i> /pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
		( 106 )	( 125 )	( 12 )	( 9 )	( 70 )	( 100 )	( 15 )	( 26 )	( 9 )
	106	122	5	11	45	77	7	29	10	3
1 .22	97	107	7	10	53	114	22	33	7	13
	( 102 )	( 115 )	( 6 )	( 11 )	( 49 )	( 96 )	( 15 )	( 31 )	( 9 )	( 8 )
	119	134	6	7	70	84	15	23	5	11
4 .88	99	115	9	9	81	92	18	25	13	9
	( 109 )	( 125 )	( 8 )	( 8 )	( 76 )	( 88 )	( 17 )	( 24 )	( 9 )	( 10 )
	86	134	7	7	59	108	17	18	5	10
19 .5	104	102	14	10	63	85	10	17	5	9
	( 95 )	( 118 )	( 11 )	( 9 )	( 61 )	( 97 )	( 14 )	( 18 )	( 5 )	( 10 )
	99	97	7	13	67	100	13	25	3	5
78 .1	91	108	7	6	60	87	9	29	8	10
	( 95 )	( 103 )	( 7 )	( 10 )	( 64 )	( 94 )	( 11 )	( 27 )	( 6 )	( 8 )
	99	120	9	5	63	116	8	18	6	11
313	90	98	14	6	61	84	13	23	9	13
	( 95 )	( 109 )	( 12 )	( 6 )	( 62 )	( 100 )	( 11 )	( 21 )	( 8 )	( 12 )
	69	89	6	6	71	66	13	15	5	6
1250	72	90	10	8	78	79	7	16	11	3
	( 71 )	( 90 )	( 8 )	( 7 )	( 75 )	( 73 )	( 10 )	( 16 )	( 8 )	( 5 )
	24 *	32 *	0 *	6 *	38 *	40 *	3 *	13 *	3 *	0 *
5000	28 *	38 *	2 *	6 *	21 *	26 *	15 *	9 *	2 *	3 *
	( 26 *)	( 35 *)	( 1 *)	( 6 *)	( 30 *)	( 33 *)	( 9 *)	( 11 *)	( 3 *)	( 2 *)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 641 )	2-AA ( 1255 )	NaN <sub>3</sub> ( 443 )	2-AA ( 266 )	AF-2 ( 1011 )	2-AA ( 913 )	AF-2 ( 482 )	2-AA ( 469 )	9-AA ( 463 )	2-AA ( 260 )

\* Growth inhibition was observed.

Experimental Data-2

(B9912-2/2)

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 <sub>uvrA</sub> /pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 103 )	( 126 )	( 10 )	( 9 )	( 70 )	( 97 )	( 16 )	( 24 )	( 10 )	( 13 )
156	119	152	16	9	60	100	11	23	14	20
	105	113	3	5	61	91	15	18	11	16
	( 112 )	( 133 )	( 10 )	( 7 )	( 61 )	( 96 )	( 13 )	( 21 )	( 13 )	( 18 )
313	112	138	7	5	87	106	25	17	21	10
	84	106	14	10	76	127	17	23	8	10
	( 98 )	( 122 )	( 11 )	( 8 )	( 82 )	( 117 )	( 21 )	( 20 )	( 15 )	( 10 )
625	96	105	7	10	75	96	9	21	9	17
	112	93	9	10	70	117	16	20	15	7
	( 104 )	( 99 )	( 8 )	( 10 )	( 73 )	( 107 )	( 13 )	( 21 )	( 12 )	( 12 )
1250	78	98	6	5	81	70	8	28	5	13
	83	74	9	6	83	89	9	10	11	10
	( 81 )	( 86 )	( 8 )	( 6 )	( 82 )	( 80 )	( 9 )	( 19 )	( 8 )	( 12 )
2500	74	71 *	8	5 *	78	84	16 *	28 *	5	1 *
	76	54 *	3	11 *	66	78	16 *	11 *	5	0 *
	( 75 )	( 63 *)	( 6 )	( 8 *)	( 72 )	( 81 )	( 16 *)	( 20 *)	( 5 )	( 1 *)
5000	23 *	43 *	5 *	3 *	66 *	31 *	8 *	14 *	5 *	1 *
	16 *	31 *	6 *	3 *	37 *	25 *	7 *	9 *	6 *	2 *
	( 20 *)	( 37 *)	( 6 *)	( 3 *)	( 52 *)	( 28 *)	( 8 *)	( 12 *)	( 6 *)	( 2 *)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 802 )	2-AA ( 1561 )	NaN <sub>3</sub> ( 451 )	2-AA ( 254 )	AF-2 ( 938 )	2-AA ( 987 )	AF-2 ( 487 )	2-AA ( 418 )	9-AA ( 322 )	2-AA ( 245 )

\* Growth inhibition was observed.