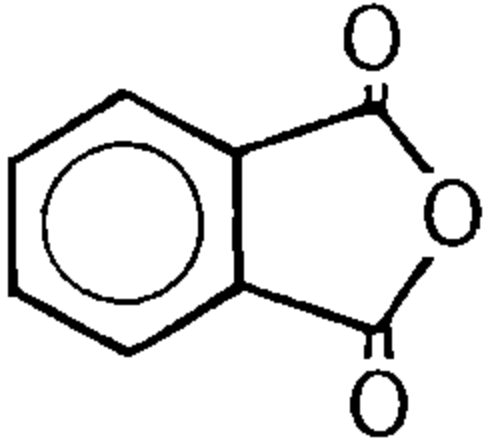


Phthalic anhydride (無水フタル酸)

Experimental Data

Chemical Name: Phthalic anhydride
Synonym: 1,3-Isobenzofurandione
Molecular weight: 148.11
Melting point: 131~134°C
Boiling point: 284~295°C
Flashing point: 151°C
Chemical Structure

CAS No : 85-44-9
MITI No: (3)-1344
Source of Substance: Wako Pure Chem. Ind., Ltd.
Lot.No. : CTL0191
Purity: 99.5 %
Vehicle: DMSO

Con. μg/ plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DSMO	(152)	(142)	(10)	(8)	(16)	(22)	(48)	(49)	(8)	(9)
	135	142	11	13	18	21	39	53	10	6
	126	108	9	13	23	31	47	31	5	5
20	(131)	(125)	(10)	(13)	(21)	(26)	(43)	(42)	(8)	(6)
	129	137	11	7	15	22	55	43	3	6
	150	146	9	11	24	22	53	47	5	7
39	(140)	(142)	(10)	(9)	(20)	(22)	(54)	(45)	(4)	(7)
	130	120	11	15	17	24	57	48	10	7
	135	124	5	8	22	26	44	44	5	10
78	(133)	(122)	(8)	(12)	(20)	(25)	(51)	(46)	(8)	(9)
	100	148	9	14	13	18	51	44	7	8
	124	156	11	15	17	29	51	36	6	5
156	(112)	(152)	(10)	(15)	(15)	(24)	(51)	(40)	(7)	(7)
	51*	151	8*	9	20	21	7*	45	0*	8
	61*	129	5*	8	10	15	8*	44	0*	9
313	(56*)	(140)	(7*)	(9)	(15)	(18)	(8*)	(45)	(0*)	(9)
	66*	152	0*	8	10*	25	0*	51	0*	8
	57*	139	0*	17	9*	21	6*	37	0*	8
625	(62*)	(146)	(0*)	(13)	(10*)	(23)	(3*)	(44)	(0*)	(8)
	30*	137	0*	9	6*	22	0*	41	0*	7
	44*	128	0*	13	11*	20	0*	48	0*	13
1250	(37*)	(133)	(0*)	(11)	(9*)	(21)	(0*)	(45)	(0*)	(10)
	41*	155	0*	16	11*	21	0*	48	0*	6
	0*	130	0*	14	14*	29	0*	43	0*	11
2500	(21*)	(143)	(0*)	(15)	(13*)	(25)	(0*)	(51)	(0*)	(9)
	0*	55*	0*	9*	7*	23*	0*	14*	0*	9*
	0*	63*	0*	7*	9*	23*	0*	7*	0*	6*
5000	(0*)	(59*)	(0*)	(8*)	(8*)	(23*)	(0*)	(11*)	(0*)	(8*)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
Control	(717)	(779)	(257)	(179)	(130)	(1452)	(438)	(417)	(321)	(149)

Mutagenicity
in Bacterial Test: Negative

IARC Evaluation: not yet cited

Experimental Data

Con. μ g/ plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DSMO	(166)	(166)	(10)	(9)	(19)	(23)	(30)	(21)	(5)	(5)
	150		10				29		9	
	151		9				26		3	
10	(151)		(10)				(28)		(6)	
	141		8		15		28		6	
	153		6		21		38		6	
20	(147)		(7)		(18)		(33)		(6)	
	166		9		17		23		5	
	136		11		16		16		5	
39	(151)		(10)		(17)		(20)		(5)	
	134	158	13	7	23	24	25	14	8	2
	142	166	7	8	26	22	28	26	6	6
78	(138)	(162)	(10)	(8)	(25)	(23)	(27)	(20)	(7)	(4)
	136	170	7	6	18	23	26	21	8	5
	143	157	9	9	18	24	17	24	8	7
156	(140)	(164)	(8)	(8)	(18)	(24)	(22)	(23)	(8)	(6)
	72*	165	6*	11	14	26	11*	23	0*	2
	71*	183	8*	8	13	28	13*	23	0*	3
313	(72*)	(174)	(7*)	(10)	(14)	(27)	(12*)	(23)	(0*)	(3)
	62*	160	7*	12	10*	18	0*	25	0*	3
	40*	145	0*	9	18*	33	0*	27	0*	5
625	(51*)	(153)	(4*)	(11)	(14*)	(26)	(0*)	(26)	(0*)	(4)
		157		10	22*	20		23		3
		150		5	18*	22		26		5
1250		(154)		(8)	(20*)	(21)		(25)		(4)
		129		2*		31		16		2
		126		7*		21		23		7
2500		(128)		(5*)		(26)		(20)		(5)
		116*		5*		21*		18*		6*
		117*		8*		20*		26*		2*
5000		(117*)		(7*)		(21*)		(22*)		(4*)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity	-	-	-	-	-	-	-	-	-	-
Positive Control	AF2 (702)	2AA (793)	NaN ₃ (246)	2AA (156)	AF2 (149)	2AA 20 (1285)	AF2 (334)	2AA (325)	9AA (267)	2AA (125)