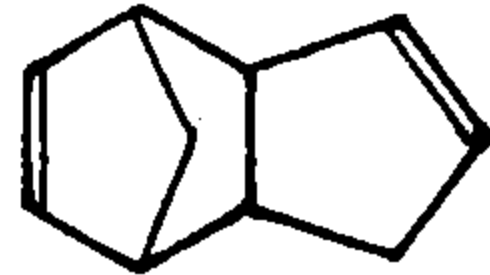


Dicyclopentadiene (ジシクロペンタジエン)

Experimental Data

<b>Chemical Name:</b>	Dicyclopentadiene
<b>Synonym</b>	Tricyclo [5.2.1.0 <sup>2,7</sup> ] deca-3,8-diene Cyclopentadiene dimer 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro-
<b>Molecular weight:</b>	132.19
<b>Melting point:</b>	-1°C
<b>Boiling point:</b>	170°C
<b>Flashing point:</b>	26°C
<b>Chemical Structure</b>	
<b>CAS No :</b>	77-73-6
<b>MITI No:</b>	(4)-634
<b>Source of Substance:</b>	Tokyo Kasei Kogyo Co., Ltd.
<b>Lot.No. :</b>	FAZ01
<b>Purity:</b>	99%
<b>Vehicle:</b>	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+
DMSO	(154)	(158)	(10)	(13)	(21)	(27)	(25)	(18)	( 7)	( 9)
	156		11		22		28		5	
	155		14		28		21		7	
0.39	(156)		(13)		(25)		(25)		( 6)	
	180		13		26		24		5	
	139		9		20		25		5	
0.78	(160)		(11)		(23)		(25)		( 5)	
	176	142	10	14	29	34	24	23	8	5
	133	157	10	13	24	33	23	23	6	11
1.56	(155)	(150)	(10)	(14)	(27)	(34)	(24)	(23)	( 7)	( 8)
	136	181	8	11	31	29	30	20	7	3
	145	167	9	11	21	30	22	20	13	6
3.13	(141)	(174)	( 9)	(11)	(26)	(30)	(26)	(20)	(10)	( 5)
	117	144	7	10	21	30	21	23	8	5
	159	173	9	7	20	25	24	21	3	3
6.25	(138)	(159)	( 8)	( 9)	(21)	(28)	(23)	(22)	( 6)	( 4)
	126	144	13	8	33	28	20	21	5*	6
	127	158	11	11	29	20	22	18	0*	1
12.5	(127)	(151)	(12)	(10)	(31)	(24)	(21)	(20)	( 3)*	( 4)
	122	149	11*	16	11	21	22	22	5*	7
	108	121	15*	10	21	30	26	16	5*	5
25	(115)	(135)	(13)*	(13)	(16)	(26)	(24)	(19)	( 5)*	( 6)
	72*	115	10*	9	9*	28	11*	21	1*	5
	74*	135	7*	11	18*	25	14*	18	3*	7
50	(73)*	(125)	( 9)*	(10)	(14)*	(27)	(13)*	(20)	( 2)*	( 6)

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Mutagenicity  
in Bacterial Test: Negative

IARC Evaluation: not yet cited

Experimental Data

Con. $\mu$ 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+
	60*	71*	5*	14*	9*	31	8*	17*	3*	3*
	52*	102*	5*	7*	17*	20	7*	16*	1*	2*
<u>100</u>	<u>(56)*</u>	<u>(87)*</u>	<u>( 5)*</u>	<u>(11)*</u>	<u>(13)*</u>	<u>(26)</u>	<u>( 8)*</u>	<u>(17)*</u>	<u>( 2)*</u>	<u>( 3)*</u>
		87*		3*		16*		15*		2*
		67*		8*		14*		15*		1*
<u>200</u>		<u>(77)*</u>		<u>( 6)*</u>		<u>(15)*</u>		<u>(15)*</u>		<u>( 2)*</u>
		63*		6*		21*		6*		0*
		67*		0*		23*		16*		0*
<u>400</u>		<u>(65)*</u>		<u>( 3)</u>		<u>(22)</u>		<u>(11)*</u>		<u>( 0)*</u>
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive	AF2	2AA	NaN <sub>3</sub>	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
Control	(627)	(709)	(249)	(168)	(189)	(1086)	(419)	(390)	(722)	(140)

Experimental Data

Con. $\mu$ 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+
<u>DMSO</u>	(160)	(159)	(13)	(19)	(29)	(33)	(40)	(46)	(14)	(17)
									10	
									9	
<u>0.39</u>									(10)	
			9		25				10	
			15		31				11	
<u>0.78</u>			(12)		(28)				(11)	
	164		11		21		32		9	
	165		10		16		41		14	
<u>1.56</u>	(165)		(11)		(19)		(37)		(12)	
	155	158	10	18	30		33	40	8	16
	167	153	15	20	24		38	37	11	15
<u>3.13</u>	(161)	(156)	(13)	(19)	(27)		(36)	(39)	(10)	(16)
	164	171	10	14	30	36	34	51	11	10
	153	173	15	17	18	37	33	28	14	11
<u>6.25</u>	(159)	(172)	(13)	(16)	(24)	(37)	(34)	(40)	(13)	(11)
	156	171	13	17	26	36	45	30	13	11
	157	159	10	11	16*	37	47	37	11	16
<u>12.5</u>	(157)	(165)	(12)	(14)	(21)*	(37)	(46)	(34)	(12)	(14)
	117*	160	11*	13	15*	40	43	38	9*	9
	128*	162	14*	16	15*	32	43	44	10*	17
<u>25</u>	(123)*	(161)	(13)*	(15)	(15)*	(36)	(43)	(41)	(10)*	(13)
	90*	128	15*	10	16*	29	28*	38		15
	101*	126	11*	23	10*	26	23*	49		15
<u>50</u>	(96)*	(127)	(13)*	(17)	(13)*	(28)	(26)*	(44)		(15)

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Experimental Data

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+
	74*	78*		15*		25	18*	41*		13*
	62*	84*		14*		31	21*	36*		10*
<u>100</u>	<u>(68)*</u>	<u>(81)*</u>		<u>(15)*</u>		<u>(28)</u>	<u>(20)*</u>	<u>(39)*</u>		<u>(12)*</u>
		89*		18*		16*		26*		7*
		89*		7*		20*		36*		11*
<u>200</u>		<u>(89)*</u>		<u>(13)*</u>		<u>(18)*</u>		<u>(31)*</u>		<u>(9)*</u>
						24*				
						17*				
<u>400</u>						<u>(21)*</u>				
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive	AF2	2AA	NaN <sub>3</sub>	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
Control	(666)	(695)	(463)	(261)	(168)	(1064)	(470)	(466)	(854)	(156)