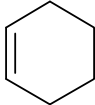


Cyclohexene (シクロヘキセン)

Chemical Name	: <u>Cyclohexene</u>
Synonym	: <u>1,2,3,4-Tetrahydrobenzene</u>
Molecular Weight	: 82.15
Melting Point	: -104 °C[CHCD]
Boiling Point	: 83 °C[CHCD]
Flashing Point	: -12.2°C[Aldrich]
Molecular Formula	: C ₆ H ₁₀
Chemical Structure:	
CAS No.	: 110-83-8
METI No.	: (3)-2234
MHLW No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FGG01
Purity	: 98%
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		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
		(99)	(102)	(12)	(9)	(81)	(115)	(17)	(24)	(7)
1 .22	123 77 (100)	100 108 (104)	9 14 (12)	3 10 (7)	68 77 (73)	85 85 (85)	15 16 (16)	23 20 (22)	10 2 (6)	10 6 (8)
4 .88	91 97 (94)	119 93 (106)	18 10 (14)	7 6 (7)	89 59 (74)	120 126 (123)	23 15 (19)	24 23 (24)	5 8 (7)	6 8 (7)
19 .5	97 97 (97)	112 105 (109)	2 11 (7)	8 6 (7)	75 71 (73)	99 91 (95)	11 14 (13)	29 24 (27)	6 6 (6)	9 13 (11)
78 .1	92 93 (93)	113 67 (90)	7 11 (9)	5 9 (7)	86 61 (74)	85 117 (101)	14 18 (16)	22 29 (26)	6 3 (5)	10 9 (10)
313	97 117 (107)	105 107 (106)	9 6 (8)	6 13 (10)	79 59 (69)	93 122 (108)	20 15 (18)	20 30 (25)	5 2 (4)	8 3 (6)
1250	86 * 87 * (87 *)	81 * 72 * (77 *)	13 * 3 * (8 *)	8 * 6 * (7 *)	87 71 (79)	92 94 (93)	10 * 14 * (12 *)	16 * 21 * (19 *)	7 * 3 * (5 *)	7 * 5 * (6 *)
5000	81 * 89 * (85 *)	62 * 70 * (66 *)	9 * 7 * (8 *)	5 * 5 * (5 *)	36 * 53 * (45 *)	66 * 29 * (48 *)	10 * 0 * (5 *)	16 * 9 * (13 *)	6 * 5 * (6 *)	10 * 8 * (9 *)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (677)	2-AA (1089)	NaN ₃ (431)	2-AA (214)	AF-2 (1697)	2-AA (750)	AF-2 (413)	2-AA (388)	9-AA (230)	2-AA (154)

* Growth inhibition was observed.

Experimental Data-2

Conc. μ g/plate	Number of Revertants/plate			
	Base-substitution			Frame-shift
	TA1535	WP2uvrA/pKM101		TA1537
DMSO	S9+	S9-	S9+	S9-
	(14)	(65)	(92)	(9)
1 .22	14	70	64	6
	(11)	(66)	(64)	(10)
4 .88	14	76	100	8
	(16)	(77)	(102)	(8)
19 .5	10	87	122	5
	(12)	(81)	(124)	(6)
78 .1	8	71	109	5
	(8)	(71)	(115)	(6)
313	13	77	121	6
	(12)	(72)	(143)	(4)
1250	2 *	85	117	10 *
	(6 *)	(86)	(120)	(9 *)
5000	3 *	23 *	37 *	3 *
	(3 *)	(30 *)	(41 *)	(2 *)
Judgement	—	—	—	—
Specific Mutagenicity				
Positive Control	2-AA (226)	AF-2 (962)	2-AA (763)	9-AA (241)

* Growth inhibition was observed.

Experimental Data-3

(B0007-2/2)

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(117)	(120)	(9)	(12)	(62)	(100)	(16)	(24)	(9)	(12)
19 .5	117	105	6	5			18	21	3	6
	(108)	(116)	(8)	(8)	()	()	(19)	(23)	(6)	(8)
39 .1	113	117	11	6			14	21	7	5
	(101)	(121)	(10)	(8)	()	()	(19)	(25)	(8)	(6)
78 .1	100	102	13	15	43	79	15	24	5	9
	(106)	(110)	(11)	(13)	(51)	(78)	(18)	(25)	(6)	(6)
156	91	128	8	9	83	121	20	32	3	10
	(98)	(114)	(8)	(7)	(77)	(107)	(17)	(27)	(3)	(9)
313	123	111	11	8	74	86	22	23	10	6
	(111)	(117)	(11)	(10)	(71)	(88)	(16)	(25)	(8)	(6)
625	84	119	10	8	64	78	15	31	6	7
	(95)	(106)	(9)	(11)	(72)	(88)	(15)	(24)	(6)	(8)
1250	70 *	77 *	6 *	5 *	72	99	9 *	23 *	7 *	9 *
	(71 *)	(82 *)	(6 *)	(7 *)	(74)	(81)	(10 *)	(23 *)	(5 *)	(10 *)
2500	49 *	98 *			56 *	86 *				
	()	()	()	()	(53 *)	(92 *)	()	()	()	()
5000	24 *	41 *			29 *	40 *				
	()	()	()	()	(27 *)	(41 *)	()	()	()	()
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 (674)	2-AA (921)	NaN ₃ (396)	2-AA (225)	AF-2 (1283)	2-AA (686)	AF-2 (440)	2-AA (402)	NaN ₃ (316)	2-AA (157)

* Growth inhibition was observed.