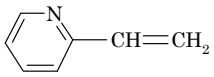
2-Vinylpyridine (2-ﾋﾞﾆﾙﾋﾟﾘｼﾞﾝ)

Chemical Name ; 2-Vinylpyridine
Synoym ; 2-Ethenylpyridine
2-Pyridylethylene

Molecular Weight ; 105.14
Melting Point ; －
Boiling Point ; 158-159℃(decomposition)[CHCD]
Flashing Point ; 50℃ [CHCD]
Molecular Formular; C_7H_7N

Chemical Structure;



CAS No. ; 100-69-6
METI No. ; (5)-716
MHLW No. ; －
Specified Chemical Substances;－

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; FHJ01
Purity ; 97%

Vehicle ; DMSO

Mutagenicity in Bacterial Test; Positive

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvrA*/pKM101		TA98		TA1537	
	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋
DMSO	(101)	(119)	(12)	(10)	(74)	(119)	(15)	(24)	(10)	(15)
	124	126	7	8	86	136	15	33	8	15
	136	115	8	8	82	149	9	24	13	15
1 .22	(130)	(121)	(8)	(8)	(84)	(143)	(12)	(29)	(11)	(15)
	116	130	11	9	112	145	13	15	10	13
	99	131	15	15	111	138	20	30	10	17
4 .88	(108)	(131)	(13)	(12)	(112)	(142)	(17)	(23)	(10)	(15)
	117	112	11	11	116	167	17	23	10	11
	106	129	10	11	117	142	9	18	6	9
19 .5	(112)	(121)	(11)	(11)	(117)	(155)	(13)	(21)	(8)	(10)
	127	134	13	16	92	157	15	31	9	9
	99	108	10	13	100	155	14	18	5	16
78 .1	(113)	(121)	(12)	(15)	(96)	(156)	(15)	(25)	(7)	(13)
	102	124	8	17	126	174	14	23	10	8
	83	123	9	13	151	180	16	22	6	13
313	(93)	(124)	(9)	(15)	(139)	(177)	(15)	(23)	(8)	(11)
	107	179	13	13	158	254	15	14	3	11
	99	124	15	18	131	240	10	22	2	3
1250	(103)	(152)	(14)	(16)	(145)	(247)	(13)	(18)	(3)	(7)
	0 *	0 *	0 *	0 *	0 *	0	0 *	0 *	0 *	0 *
	0 *	0 *	0 *	0 *	0 *	0	0 *	0 *	0 *	7 *
5000	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0)	(0 *)	(0 *)	(0 *)	(4 *)
Judgement	－	－	－	－	－	＋	－	－	－	－
Specific Mutagenicity						102				
Positive Control	AF-2 (722)	2-AA (1223)	NaN_3 (401)	2-AA (228)	AF-2 (1214)	2-AA (975)	AF-2 (440)	2-AA (444)	9-AA (226)	2-AA (198)

* Growth inhibition was observed.

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvrA*/pKM101		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(105)	(121)	(13)	(21)	(75)	(97)	(17)	(23)	(8)	(12)
	102	138	15	30	85	144	17	31	10	15
	124	151	13	22	74	126	16	24	7	10
156	(113)	(145)	(14)	(26)	(80)	(135)	(17)	(28)	(9)	(13)
	111	137	18	34	91	145	18	18	14	14
	102	136	18	17	102	150	15	17	14	11
313	(107)	(137)	(18)	(26)	(97)	(148)	(17)	(18)	(14)	(13)
	100	152	15	21	108	197	20	23	8	11
	117	149	14	20	105	180	15	25	7	9
625	(109)	(151)	(15)	(21)	(107)	(189)	(18)	(24)	(8)	(10)
	115	143	14	29	131	234	11	18	7	7
	100	150	10	36	131	199	14	22	8	3
1250	(108)	(147)	(12)	(33)	(131)	(217)	(13)	(20)	(8)	(5)
	86	146	14	34	155	255	9	21	3	6
	99	141	13	32	170	254	13	17	6	5
2500	(93)	(144)	(14)	(33)	(163)	(255)	(11)	(19)	(5)	(6)
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
5000	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)
Judgement	−	−	−	−	+	+	−	−	−	−
Specific Mutagenicity					35.2	96.0				
Positive Control	AF-2 (703)	2-AA (1321)	NaN_3 (407)	2-AA (245)	AF-2 (1186)	2-AA (760)	AF-2 (443)	2-AA (481)	9-AA (239)	2-AA (156)

* Growth inhibition was observed.

Conc. μg/plate	Number of Revertants/plate	
	Base-substitution	
	TA1535	WP2*uvrA*/pKM101
	S9+	S9−
DMSO	(13)	(65)
	14	68
	15	71
156	(15)	(70)
	10	76
	10	93
313	(10)	(85)
	14	84
	13	104
625	(14)	(94)
	9	116
	15	94
1250	(12)	(105)
	8	136
	14	141
2500	(11)	(139)
	0 *	0 *
	0 *	0 *
5000	(0 *)	(0 *)
Judgement	−	+
Specific Mutagenicity		29.6
Positive Control	2-AA (240)	AF-2 (1255)

* Growth inhibition was observed.