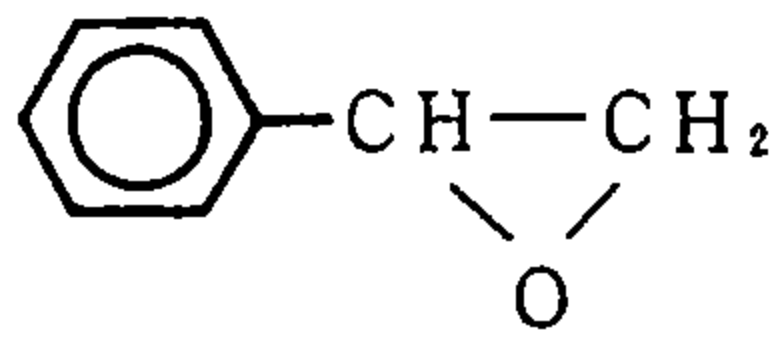


Styrene oxide (スチレンオキシド)

Experimental Data

Chemical Name:	Styrene oxide
Synonym	1,2-Epoxy-1-phenylethane Phenyloxirane Oxirane, phenyl-
Molecular weight:	120.15
Melting point:	-37 °C
Boiling point:	194 °C
Flashing point:	79 °C
Chemical Structure	
CAS No :	96-09-3
MITI No:	(3)-1033
Source of Substance:	Tokyo Kasei Kogyo Co. Ltd
Lot. No. :	AX01
Purity:	95 %
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	(168)	(178)	(26)	(16)	(41)	(25)	(15)	(21)	(7)	(12)
	191	184	16	10	33	18	18	24	8	13
	149	193	20	14	29	21	15	24	16	10
0.0763	(170)	(189)	(18)	(12)	(31)	(20)	(17)	(24)	(12)	(12)
	206	176	24	16	28	25	18	13	10	7
	227	177	13	26	25	15	13	13	6	5
0.305	(217)	(177)	(19)	(21)	(27)	(20)	(16)	(13)	(8)	(6)
	230	169	22	11	39	25	17	15	3	5
	205	177	9	16	31	29	14	11	6	10
1.22	(218)	(173)	(16)	(14)	(35)	(27)	(16)	(13)	(5)	(8)
	201	151	16	16	33	36	21	14	11	14
	197	174	23	18	32	28	20	21	6	7
4.88	(199)	(163)	(20)	(17)	(33)	(32)	(21)	(18)	(9)	(11)
	247	170	18	17	33	28	18	16	6	6
	250	188	20	15	36	41	16	22	10	16
19.5	(249)	(179)	(20)	(16)	(35)	(35)	(17)	(19)	(8)	(11)
	416	245	40	29	48	34	18	20	14	9
	430	268	31	30	60	41	24	24	8	7
78.1	(423)	(257)	(36)	(30)	(54)	(38)	(21)	(22)	(11)	(8)
	1104	616	72	54	122	85	39	24	16	9
	1056	671	68	34	89	101	30	28	17	3
313	(1080)	(644)	(70)	(44)	(106)	(93)	(35)	(26)	(17)	(6)
	0*	361*	0*	0*	188	284	0*	17*	0*	15*
	0*	418*	0*	0*	263	309	10*	22*	0*	9*
1250	(0*)	(390*)	(0*)	(0*)	(226)	(297)	(5*)	(20*)	(0*)	(12*)
	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	3270	1490	141	89.5	208	218	63.9		31.9	
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(1427)	(1124)	(338)	(225)	(269)	(1509)	(454)	(333)	(313)	(189)

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	(169)	(148)	(9)	(15)	(17)	(23)	(14)	(20)	(8)	(4)
	155	137								
	193	144								
9.77	(174)	(141)								
	213	176	16	5			17	29	10	12
	208	174	22	16			11	22	14	2
19.5	(211)	(175)	(19)	(11)			(14)	(26)	(12)	(7)
	276	185	24	20	28	21	25	25	6	2
	260	190	21	11	27	17	21	23	6	3
39.1	(268)	(188)	(23)	(16)	(28)	(19)	(23)	(24)	(6)	(3)
	457	274	28	26	36	24	24	22	8	7
	349	250	33	24	23	21	24	20	2	11
78.1	(403)	(262)	(31)	(25)	(30)	(23)	(24)	(21)	(5)	(9)
	702	-	37	18	47	49	23	28	8	2
	731	311	55	22	39	31	21	21	12	7
156	(717)	(311)	(46)	(20)	(43)	(40)	(22)	(25)	(10)	(5)
	1205	650	76	47	67	47	28	15	8	2
	928	645	57	40	71	88	33	20	16	5
313	(1067)	(648)	(67)	(44)	(69)	(68)	(31)	(18)	(12)	(4)
			96	51	121	148	52	32	21	7
			79	71	140	150	44	28	12	8
625			(88)	(61)	(131)	(149)	(48)	(30)	(17)	(8)
					148	281	0*	0*	0*	6*
					170	255	0*	0*	0*	10*
1250					(159)	(268)	(0*)	(0*)	(0*)	(8*)
Judgement	+	+	+	+	+	+	+	-	+	-
Specific mutagenicity	3510	1600	513	92.7	182	202	54.4		14.4	
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(1158)	(1120)	(299)	(235)	(427)	(855)	(389)	(367)	(167)	(175)