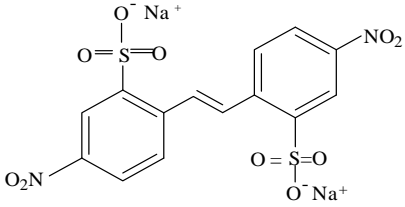


Disodium 4,4'-dinitrostilbene-2,2'-disulfonate
 (4,4'-ジニトロスチルベン-2,2'-ジンスルホン酸二ナトリウム塩)

Experimental Data-1

(B9810-1/2)

Chemical Name	: <u>Disodium 4,4'-dinitrostilbene-2,2'-disulfonate</u>
Synonym	: <u>4,4'-Dinitrostilbene-2,2'-disulfonic acid, disodium salt</u> <u>2,2'-(1,2-Ethenedivl)bis[5-nitrobenzenesulfonic acid] disodium salt</u>
Molecular Weight	: 474.32
Melting Point	: -
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: C ₁₄ H ₁₀ N ₂ O ₁₀ S ₂ ·2Na
Chemical Structure	
CAS No.	: 3709-43-1
MITI No.	: (4)-956
ML No.	: 7-(4)-177
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FBY01
Purity	: -
Vehicle	: DMSO

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 _{uvrA} /pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(168)	(171)	(12)	(16)	(63)	(81)	(15)	(25)	(7)	(12)
0 .610	176 163 (170)	177 181 (179)	15 15 (15)	21 23 (22)	54 54 (54)	82 79 (81)	18 16 (17)	14 31 (23)	5 7 (6)	6 8 (7)
2 .44	150 186 (168)	176 174 (175)	18 11 (15)	20 18 (19)	39 64 (52)	75 75 (75)	15 13 (14)	22 29 (26)	3 2 (3)	6 7 (7)
9 .77	150 190 (170)	173 191 (182)	23 17 (20)	22 17 (20)	60 36 (48)	68 61 (65)	9 15 (12)	36 29 (33)	3 6 (5)	7 10 (9)
39 .1	177 160 (169)	233 198 (216)	20 22 (21)	16 14 (15)	52 61 (57)	79 84 (82)	22 13 (18)	24 31 (28)	6 2 (4)	5 6 (6)
156	164 157 (161)	207 242 (225)	15 15 (15)	21 16 (19)	49 28 (39)	79 66 (73)	15 16 (16)	24 22 (23)	5 3 (4)	13 9 (11)
625	162 138 (150)	250 232 (241)	15 18 (17)	18 20 (19)	46 52 (49)	76 81 (79)	14 15 (15)	29 24 (27)	6 5 (6)	8 9 (9)
2500	146 169 (158)	205 239 (222)	23 14 (19)	21 13 (17)	44 47 (46)	72 71 (72)	16 11 (14)	20 23 (22)	5 3 (4)	2 6 (4)
10000	165 183 (174)	205 177 (191)	16 16 (16)	11 16 (14)	43 52 (48)	75 79 (77)	23 15 (19)	20 16 (18)	3 7 (5)	13 5 (9)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (816)	2-AA (1541)	NaN ₃ (503)	2-AA (280)	AF-2 (1420)	2-AA (1006)	AF-2 (488)	2-AA (492)	9-AA (454)	2-AA (217)

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Experimental Data-2

(B9810-2/2)

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+
	(152)	(164)	(10)	(14)	(57)	(81)	(17)	(26)	(6)	(9)
156	167	228	9	11	41	72	10	26	2	10
	183	241	8	15	46	86	15	28	7	13
	(175)	(235)	(9)	(13)	(44)	(79)	(13)	(27)	(5)	(12)
313	181	242	15	13	48	70	15	29	5	6
	166	260	8	13	55	83	15	46	5	7
	(174)	(251)	(12)	(13)	(52)	(77)	(15)	(38)	(5)	(7)
625	170	238	11	8	64	64	11	28	2	8
	157	238	10	17	57	87	20	17	7	3
	(164)	(238)	(11)	(13)	(61)	(76)	(16)	(23)	(5)	(6)
1250	180	265	6	16	66	68	16	24	1	7
	212	218	5	16	52	82	15	18	5	6
	(196)	(242)	(6)	(16)	(59)	(75)	(16)	(21)	(3)	(7)
2500	193	223	14	9	61	93	17	22	5	5
	213	229	3	17	71	81	13	18	6	14
	(203)	(226)	(9)	(13)	(66)	(87)	(15)	(20)	(6)	(10)
5000	153	227	9	16	53	89	20	29	1	6
	187	200	5	10	57	78	9	14	7	6
	(170)	(214)	(7)	(13)	(55)	(84)	(15)	(22)	(4)	(6)
10000	174	201	14	7	52	69	13	22	3	9
	176	193	7	9	51	67	9	17	5	7
	(175)	(197)	(11)	(8)	(52)	(68)	(11)	(20)	(4)	(8)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (592)	2-AA (1363)	NaN ₃ (408)	2-AA (266)	AF-2 (877)	2-AA (897)	AF-2 (452)	2-AA (473)	9-AA (369)	2-AA (219)