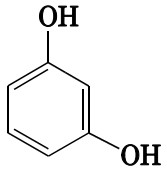
Chemical Name;Resorcinol
Synonym ;m-Dihydroxybenzene
1,3-Benzenediol
1,3-Dihydroxybenzene
Resorcin
m-ジヒドロキシベンゼン
1,3-ベンゼンジオール
1,3-ジヒドロキシベンゼン
レゾルシン

Molecular Weight ; 110.11
Melting Point ; 111 ℃ [CHCD]
110 - 112 ℃ [Aldrich]
109 - 111 ℃ [Merck]
Boiling Point ; 280 ℃ [CHCD;Merck]
178 ℃(16mmHg) [Aldrich]
Flashing Point ; — ℃
Molecular Formula; $C_6H_6O_2$

Chemical Structure



CAS No. ; 108-46-3
MITI No. ; (3)-543
ML No. ; —
Specified Chemical Substances; —

Source of Substance; Tokyo Kasei Kogyo Co.,Ltd.
Lot No. ; GC01
Purity ; ≧ 99.5 %

Vehicle ; Distilled H_2O

Mutagenicity in Bacterial Test ; **Negative**

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvrA*		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
H_2O	(132)	(134)	(9)	(11)	(29)	(41)	(14)	(24)	(5)	(9)
	134	126	6	11	33	34	13	17	3	11
	130	149	3	9	33	43	8	23	5	5
0.0763	(132)	(138)	(5)	(10)	(33)	(39)	(11)	(20)	(4)	(8)
	134	128	7	8	41	39	17	18	6	5
	111	131	9	7	43	41	23	31	8	7
0.305	(123)	(130)	(8)	(8)	(42)	(40)	(20)	(25)	(7)	(6)
	124	121	10	9	30	41	10	16	1	9
	107	151	5	10	38	29	14	21	7	10
1.22	(116)	(136)	(8)	(10)	(34)	(35)	(12)	(19)	(4)	(10)
	115	128	7	11	33	25	16	24	6	5
	129	137	5	5	41	44	14	18	3	8
4.88	(122)	(133)	(6)	(8)	(37)	(35)	(15)	(21)	(5)	(7)
	112	108	7	14	33	47	9	25	1	6
	134	120	8	9	36	36	10	13	7	9
19.5	(123)	(114)	(8)	(12)	(35)	(42)	(10)	(19)	(4)	(8)
	124	149	3	16	28	43	13	25	3	10
	111	120	7	8	41	45	13	31	8	3
78.1	(118)	(135)	(5)	(12)	(35)	(44)	(13)	(28)	(6)	(7)
	115	163	3	3	34	44	9	21	9	9
	128	163	7	13	23	38	18	26	5	8
313	(122)	(163)	(5)	(8)	(29)	(41)	(14)	(24)	(7)	(9)
	116	122	9	9	23	23	9	23	3	8
	114	141	11	14	48	36	13	15	1	10
1250	(115)	(132)	(10)	(12)	(36)	(30)	(11)	(19)	(2)	(9)
	106*	117	6*	9	31*	37	16*	18	7*	8
	70*	102	8*	6	23*	34	11*	21	7*	9
5000	(88*)	(110)	(7*)	(8)	(27*)	(36)	(14*)	(20)	(7*)	(9)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 (671)	2-AA (1290)	NaN_3 (381)	2-AA (261)	AF-2 (276)	2-AA (1012)	AF-2 (396)	2-AA (320)	9-AA (531)	2-AA (132)

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvrA*		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
H_2O	(146)	(146)	(11)	(15)	(27)	(30)	(12)	(22)	(6)	(9)
	136		5		24		10		7	
	130		2		24		8		6	
78.1	(133)		(4)		(24)		(9)		(7)	
	157		5		22		10		2	
	130		6		22		18		2	
156	(144)		(6)		(22)		(14)		(2)	
	136	169	10	6	22	33	6	14	3	5
	136	195	10	13	24	30	5	18	3	3
313	(136)	(182)	(10)	(10)	(23)	(32)	(6)	(16)	(3)	(4)
	128	164	5	13	22	23	7	20	7	5
	123	170	2	13	15	29	13	23	5	3
625	(126)	(167)	(4)	(13)	(19)	(26)	(10)	(22)	(6)	(4)
	142	181	14	14	21	20	13	30	6	7
	119	163	7	5	23	30	11	28	6	2
1250	(131)	(172)	(11)	(10)	(22)	(25)	(12)	(29)	(6)	(5)
	141	159	3	6	25	20	14	21	3	7
	119	180	3	7	18	21	7	21	8	5
2500	(130)	(170)	(3)	(7)	(22)	(21)	(11)	(21)	(6)	(6)
	101*	137	7*	3	16*	17	16*	17	6*	11
	124*	164	8*	9	21*	24	9*	14	7*	6
5000	(113*)	(151)	(8*)	(6)	(19*)	(21)	(13*)	(16)	(7*)	(9)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (885)	2-AA (1451)	NaN_3 (369)	2-AA (308)	AF-2 (312)	2-AA (1231)	AF-2 (432)	2-AA (415)	9-AA (468)	2-AA (212)

Experimental Data - 3

Conc. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2*uvrA*/pKM101	
	S9−	S9+	S9−	S9+	S9−	S9+
H_2O	(239)	(331)	(300)	(333)	(43)	(64)
	215	317	322	371	46	74
	243	343	300	383	52	93
1.22	(229)	(330)	(311)	(377)	(49)	(84)
	241	269	320	362	67	76
	230	353	332	385	60	96
4.88	(236)	(311)	(326)	(374)	(64)	(86)
	227	297	328	360	64	78
	250	380	303	384	53	83
19.5	(239)	(339)	(316)	(372)	(59)	(81)
	212	301	285	366	45	70
	234	340	318	359	54	82
78.1	(223)	(321)	(302)	(363)	(50)	(76)
	202	383	352	407	61	91
	227	362	322	404	57	85
313	(215)	(373)	(337)	(406)	(59)	(88)
	211	400	352	328	54	79
	216	429	307	372	45	67
1250	(214)	(415)	(330)	(350)	(50)	(73)
	216	408	261	389	45	83
	243	382	261	378	33	57
5000	(230)	(395)	(261)	(384)	(39)	(70)
Judgement	−	−	−	−	−	−
Specific Mutagenicity						
Positive Control	BLM (882)	2-AA (2485)	PA (1761)	2-AA (1223)	AF-2 (1310)	2-AA (1071)

Experimental Data - 4

Conc. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2*uvrA*/pKM101	
	S9−	S9+	S9−	S9+	S9−	S9+
H_2O	(234)	(306)	(315)	(335)	(38)	(58)
	245	383	330	410	44	60
	242	385	329	377	49	77
313	(244)	(384)	(330)	(394)	(47)	(69)
	267	352	288	368	46	47
	245	391	274	368	31	71
625	(256)	(372)	(281)	(368)	(39)	(59)
	241	388	317	425	40	60
	243	401	291	385	29	60
1250	(242)	(395)	(304)	(405)	(35)	(60)
	246	400	311	335	30	49
	263	406	300	401	31	54
2500	(255)	(403)	(306)	(368)	(31)	(52)
	156*	338	262*	331	29	34
	178*	338	258*	307	23	43
5000	(167*)	(338)	(260*)	(319)	(26)	(39)
Judgement	−	−	−	−	−	−
Specific Mutagenicity						
Positive Control	BLM (750)	2-AA (4371)	PA (1468)	2-AA (1212)	AF-2 (1473)	2-AA (1001)

Experimental Data - 5

Conc. μg/plate	Number of Revertants/plate Base-substitution TA102 S9−	S9+
H_2O	(247)	(338)
	265	
	246	
156	(256)	
	260	354
	262	378
313	(261)	(366)
	226	394
	267	404
625	(247)	(399)
	233	405
	269	401
1250	(251)	(403)
	265	407
	263	380
2500	(264)	(394)
	240	299
	200	322
5000	(220)	(311)
Judgement	−	−
Specific Mutagenicity		
Positive Control	BLM (655)	2-AA (1165)