

2-Propenoic acid, homopolymer, sodium salt

(2-プロペン酸 ホモポリマー ナトリウム塩)

Experimental Data-1

(B9621-1/3)

Chemical Name	: <u>2-Propenoic acid, homopolymer, sodium salt</u>
Synonym	: <u>Sodium acrylate polymer</u> ポリアクリル酸ソーダ
Molecular Weight	: -
Melting Point	: -
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: -
Chemical Structure	$\left[\begin{array}{c} \text{CH}_2 - \text{CH} \\ \\ \text{COONa} \end{array} \right]_n$ <p>(degree of polymerization 2,700~7,500)</p>
CAS No.	: 9003-04-7
MITI No.	: (6)-901
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Wako Jyunyaku Kogyo Co., Ltd.
Lot No.	: LEQ5820
Purity	: -
Vehicle	: H ₂ O

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		TA98		TA1537	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(166)	(196)	(9)	(10)	(24)	(24)	(16)	(25)	(7)	(13)
4 .88	193	200	9	6	21	17	13	26	5	10
	197	192	8	7	22	22	16	23	10	9
	(195)	(196)	(9)	(7)	(22)	(20)	(15)	(25)	(8)	(10)
19 .5	159	178	7	6	30	28	15	13	3	5
	185	213	8	8	33	31	21	25	11	8
	(172)	(196)	(8)	(7)	(32)	(30)	(18)	(19)	(7)	(7)
78 .1	201	150	9	10	24	24	17	21	6	9
	187	174	5	13	10	18	17	30	6	7
	(194)	(162)	(7)	(12)	(17)	(21)	(17)	(26)	(6)	(8)
313	165	198	11	8	24	22	16	24	7	6
	214	218	7	6	23	23	22	22	7	5
	(190)	(208)	(9)	(7)	(24)	(23)	(19)	(23)	(7)	(6)
1250	193	198	9	11	24	23	16	22	6	6
	174	213	8	8	21	24	14	18	8	10
	(184)	(206)	(9)	(10)	(23)	(24)	(15)	(20)	(7)	(8)
5000	190	198	5	7	25	22	15	18	5	5
	184	195	14	9	18	25	16	23	6	7
	(187)	(197)	(10)	(8)	(22)	(24)	(16)	(21)	(6)	(6)
10000	180	197	8 *	7	34	25	15 *	23	6 *	13
	179	174	5 *	13	22	29	6 *	21	3 *	9
	(180)	(186)	(7 *)	(10)	(28)	(27)	(11 *)	(22)	(5 *)	(11)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (639)	2-AA (1325)	NaN ₃ (316)	2-AA (270)	AF-2 (205)	2-AA (1335)	AF-2 (486)	2-AA (421)	9-AA (793)	2-AA (147)

* Growth inhibition was observed.

Experimental Data-2

(B9621-2/3)

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 $uvrA$		TA98		TA1537	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(171)	(164)	(9)	(9)	(22)	(29)	(17)	(24)	(7)	(10)
313			6 10 (8)				20 14 (17)		3 7 (5)	
625	180 192 (186)	188 176 (182)	9 7 (8)	9 8 (9)	15 16 (16)	28 30 (29)	17 17 (17)	21 28 (25)	6 9 (8)	5 8 (7)
1250	184 183 (184)	191 166 (179)	8 7 (8)	15 8 (12)	17 25 (21)	17 23 (20)	11 9 (10)	28 20 (24)	8 11 (10)	11 7 (9)
2500	141 176 (159)	177 191 (184)	7 6 (7)	8 13 (11)	22 21 (22)	32 25 (29)	15 11 (13)	22 32 (27)	6 2 (4)	6 7 (7)
5000	166 190 (178)	184 149 (167)	6 10 (8)	15 13 (14)	21 18 (20)	23 26 (25)	15 17 (16)	21 26 (24)	11 11 (11)	3 8 (6)
10000	163 195 (179)	171 183 (177)	13 * 6 * (10 *)	11 8 (10)	23 22 (23)	21 16 (19)	15 * 13 * (14 *)	28 23 (26)	2 * 11 * (7 *)	7 5 (6)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (600)	2-AA (1353)	NaN ₃ (293)	2-AA (264)	AF-2 (217)	2-AA (1362)	AF-2 (537)	2-AA (482)	9-AA (827)	2-AA (179)

Experimental Data-3

Conc. μ g/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2 ^{uvrA} /pKM101	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+
	(268)	(352)	(317)	(325)	(37)	(84)
	250	317	293	303	45	64
	228	352	337	353	54	85
9 .77	(239)	(335)	(315)	(328)	(50)	(75)
	226	342	306	354	54	71
	262	328	325	334	43	79
39 .1	(244)	(335)	(316)	(344)	(49)	(75)
	278	330	293	372	36	89
	252	348	318	359	62	78
156	(265)	(339)	(306)	(366)	(49)	(84)
	252	335	341	325	41	71
	235	361	313	358	38	55
625	(244)	(348)	(327)	(342)	(40)	(63)
	243	329	303	335	38	64
	253	324	331	332	44	82
2500	(248)	(327)	(317)	(334)	(41)	(73)
	259 *	306	341	350	41	85
	234 *	355	342	287	49	64
10000	(247 *)	(331)	(342)	(319)	(45)	(75)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM (645)	2-AA (1241)	PA (1431)	2-AA (1362)	AF-2 (934)	2-AA (1022)

Experimental Data-4

(B9621-3/3)

Conc. μ g/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2 ^{uvrA} /pKM101	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+
	(211)	(264)	(287)	(267)	(46)	(67)
	169					
	192					
313	(181)					
	201	258	276	275	59	82
	204	294	297	243	44	96
625	(203)	(276)	(287)	(259)	(52)	(89)
	186	243	276	266	52	77
	206	287	254	275	55	68
1250	(196)	(265)	(265)	(271)	(54)	(73)
	188	269	274	278	47	71
	150	233	263	284	48	71
2500	(169)	(251)	(269)	(281)	(48)	(71)
	200	278	291	260	48	87
	169	238	309	254	40	72
5000	(185)	(258)	(300)	(257)	(44)	(80)
	197 *	295	267	291	67	71
	177 *	247	294	256	39	64
10000	(187 *)	(271)	(281)	(274)	(53)	(68)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM (606)	2-AA (1298)	PA (2188)	2-AA (1434)	AF-2 (1211)	2-AA (877)