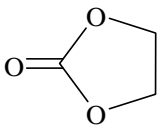


Chemical Name	; <u>Ethylene carbonate</u>	
	; <u>1,3-Dioxolan-2-one</u>	
	; <u>2-Oxo-1,3-dioxolan</u>	
	; <u>Carbonic acid, cyclic ethylene ester</u>	
	; <u>1,3-ジオキソラン-2-オン</u>	
Molecular Weight	; 88.06	
Melting Point	; 35-37°C [Aldrich]	
Boiling Point	; 243-244°C(740mmHg)[Aldrich]	
Flashing Point	; 160°C [Aldrich]	
Molecular Formula	; C ₃ H ₄ O ₃	
Chemical Structure		
CAS No.	; 96-49-1	
MITI No.	; (5)-525, (7)-737	
ML No.	; -	
Specified Chemical Substances	; -	
Source of Substance	; Tokyo Kasei Kogyo Co., Ltd.	
Lot No.	; GF01	
Purity	; >99%	
Vehicle	; Distilled H ₂ O	

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(147)	(149)	(8)	(10)	(67)	(76)	(18)	(28)	(5)	(10)
1 .22	184	176	8	6	49	104	24	33	7	10
	(173)	(163)	(9)	(9)	(52)	(99)	(26)	(31)	(5)	(9)
4 .88	156	174	6	7	59	81	10	31	8	6
	(162)	(164)	(7)	(8)	(60)	(78)	(15)	(25)	(7)	(10)
19 .5	138	170	6	9	79	77	17	20	3	9
	(143)	(166)	(7)	(10)	(75)	(85)	(17)	(22)	(5)	(10)
78 .1	156	171	14	7	74	94	26	33	5	10
	(153)	(172)	(11)	(7)	(75)	(92)	(20)	(32)	(4)	(10)
313	137	156	8	10	68	79	18	28	7	13
	(148)	(167)	(7)	(12)	(68)	(82)	(21)	(29)	(7)	(10)
1250	134	139	5	10	61	105	25	36	7	8
	(139)	(163)	(8)	(12)	(60)	(98)	(21)	(39)	(9)	(9)
5000	163	167	9	8	63	77	20	29	5	10
	(159)	(173)	(10)	(9)	(66)	(88)	(19)	(31)	(6)	(9)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (666)	2-AA (1206)	NaN ₃ (443)	2-AA (274)	AF-2 (847)	2-AA (739)	AF-2 (502)	2-AA (443)	9-AA (495)	2-AA (184)

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Experimental Data-2

(B9805-2/2)

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(167)	(133)	(7)	(10)	(66)	(84)	(15)	(21)	(8)	(8)
	153	145	8	5	37	102	23	22	6	10
313	(148)	(147)	(8)	(6)	(48)	(94)	(19)	(20)	(4)	(9)
	143	148	9	9	69	90	20	26	6	10
625	(145)	(145)	(10)	(10)	(69)	(90)	(17)	(22)	(6)	(8)
	149	153	10	10	63	90	11	20	3	8
1250	(146)	(149)	(9)	(9)	(59)	(95)	(16)	(21)	(5)	(6)
	138	156	8	10	64	101	22	24	5	7
2500	(149)	(153)	(8)	(12)	(72)	(102)	(20)	(21)	(4)	(8)
	134	143	9	3	66	105	14	21	7	5
5000	(135)	(143)	(8)	(6)	(63)	(93)	(14)	(25)	(6)	(6)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 (640)	2-AA (1089)	NaN ₃ (408)	2-AA (271)	AF-2 (896)	2-AA (827)	AF-2 (522)	2-AA (471)	9-AA (512)	2-AA (197)