

Chemical Name	: <u>2-Ethoxyethyl acetate</u>
Synonym	: <u>Acetic acid 2-ethoxy ethyl ester</u> <u>Ethanol, 2-ethoxy-, acetate</u> <u>エチルグリコールアセタート</u>
Molecular Weight	: 132.16
Melting Point	: -61°C[Aldrich]
Boiling Point	: 156°C[Aldrich]
Flashing Point	: 57°C[Aldrich]
Molecular Formula	: C ₆ H ₁₂ O ₃
Chemical Structure	 <chem>CH3COOCH2CH2OCH2CH3</chem>
CAS No.	: 111-15-9
MITI No.	: (2)-740
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FGC01
Purity	: 99.9%
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		WP2 _{uvrA}		TA98		TA1537	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(146)	(162)	(10)	(12)	(21)	(20)	(18)	(23)	(4)	(8)
1 .22	165	151	9	17	8	14	21	26	3	3
	157 (161)	171 (161)	11 (10)	9 (13)	17 (13)	28 (21)	18 (20)	24 (25)	2 (3)	6 (5)
4 .88	152	141	6	8	21	22	25	21	1	7
	148 (150)	176 (159)	2 (4)	8 (8)	17 (19)	14 (18)	25 (25)	30 (26)	1 (1)	3 (5)
19 .5	137	151	15	7	18	17	20	32	2	9
	136 (137)	172 (162)	11 (13)	8 (8)	20 (19)	21 (19)	23 (22)	24 (28)	6 (4)	9 (9)
78 .1	166	120	10	3	17	17	20	26	5	3
	136 (151)	142 (131)	6 (8)	13 (8)	17 (17)	29 (23)	21 (21)	17 (22)	9 (7)	7 (5)
313	144	158	8	5	16	23	10	25	5	3
	139 (142)	153 (156)	15 (12)	7 (6)	22 (19)	20 (22)	16 (13)	33 (29)	5 (5)	8 (6)
1250	153	167	17	10	14	24	15	15	2	3
	143 (148)	160 (164)	11 (14)	11 (11)	24 (19)	26 (25)	22 (19)	24 (20)	6 (4)	7 (5)
5000	149	149	6	7	21	15	16	25	5	8
	151 (150)	169 (159)	17 (12)	11 (9)	18 (20)	18 (17)	15 (16)	26 (26)	6 (6)	5 (7)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (640)	2-AA (1125)	NaN ₃ (276)	2-AA (268)	AF-2 (257)	2-AA (1024)	AF-2 (506)	2-AA (468)	9-AA (741)	2-AA (178)

Experimental Data-2

(B9613-2/3)

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+
	(157)	(157)	(8)	(10)	(21)	(21)	(17)	(27)	(7)	(11)
	156	171	8	9	17	30	23	33	7	11
313	151 (154)	194 (183)	13 (11)	10 (10)	34 (26)	28 (29)	20 (22)	29 (31)	8 (8)	3 (7)
	181	183	9	10	23	21	14	23	3	11
625	181 (181)	187 (185)	8 (9)	7 (9)	15 (19)	31 (26)	20 (17)	18 (21)	8 (6)	11 (11)
	180	204	5	13	26	22	17	25	8	13
1250	146 (163)	174 (189)	8 (7)	13 (13)	21 (24)	22 (22)	22 (20)	31 (28)	5 (7)	6 (10)
	173	163	8	10	24	20	22	29	2	9
2500	151 (162)	162 (163)	11 (10)	6 (8)	25 (25)	25 (23)	23 (23)	24 (27)	7 (5)	11 (10)
	178	152	5	5	21	22	13	39	5	5
5000	169 (174)	171 (162)	8 (7)	15 (10)	23 (22)	20 (21)	20 (17)	22 (31)	8 (7)	8 (7)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (686)	2-AA (1188)	NaN ₃ (333)	2-AA (218)	AF-2 (248)	2-AA (1111)	AF-2 (547)	2-AA (379)	9-AA (706)	2-AA (161)

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+
	(295)	(345)	(327)	(304)	(46)	(67)
4 .88	299 290 (295)	362 349 (356)	365 346 (356)	274 306 (290)	55 44 (50)	60 74 (67)
19 .5	276 273 (275)	359 366 (363)	353 346 (350)	338 265 (302)	52 57 (55)	69 64 (67)
78 .1	288 307 (298)	359 349 (354)	325 313 (319)	344 307 (326)	51 41 (46)	66 57 (62)
313	279 281 (280)	378 383 (381)	379 313 (346)	290 299 (295)	57 60 (59)	67 49 (58)
1250	287 295 (291)	334 387 (361)	371 329 (350)	292 318 (305)	59 69 (64)	67 60 (64)
5000	292 * 246 * (269 *)	312 371 (342)	332 * 342 * (337 *)	291 278 (285)	40 53 (47)	62 48 (55)
Judgement	-	-	-	-	-	-
Specific Mutagenicity						
Positive Control	BLM (746)	2-AA (1093)	PA (1528)	2-AA (1327)	AF-2 (1683)	2-AA (866)

Experimental Data-4

(B9613-3/3)

Conc. μ g/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2 $uvrA/pKM101$	
H ₂ O	S9-	S9+	S9-	S9+	S9-	S9+
	(276)	(321)	(302)	(290)	(57)	(75)
156	307 253 (280)		279 310 (295)			
313	316 262 (289)	319 307 (313)	284 334 (309)	325 323 (324)	66 46 (56)	79 86 (83)
625	297 290 (294)	354 343 (349)	306 305 (306)	344 331 (338)	37 53 (45)	78 85 (82)
1250	281 281 (281)	335 328 (332)	294 288 (291)	326 336 (331)	54 48 (51)	79 101 (90)
2500	291 260 (276)	361 344 (353)	328 297 (313)	314 309 (312)	66 52 (59)	81 92 (87)
5000	260 * 281 * (271 *)	312 341 (327)	301 * 311 * (306 *)	303 330 (317)	46 59 (53)	89 61 (75)
Judgement	-	-	-	-	-	-
Specific Mutagenicity						
Positive Control	BLM (719)	2-AA (933)	PA (1499)	2-AA (1432)	AF-2 (1484)	2-AA (942)

* Growth inhibition was observed.