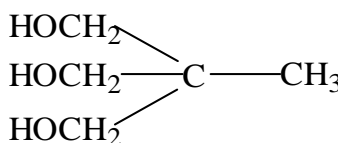


1.1.1-Tris(hydroxymethyl)ethane

(1,1,1-トリス(ヒドロキシメチル)エタン)

Experimental Data-1

(B9818-1/2)

Chemical Name	; 1,1,1-Tris(hydroxymethyl)ethane	
Synonym	; Ethyldynetrimehanol Trimethylolethane 2-メチル-2-ヒドロキシメチル-1,3-プロパンジオール トリメチロールエタン	
Molecular Weight	; 120.15	
Melting Point	; 200-203°C [Aldrich]	
Boiling Point	; 150°C(0.1mmHg)[CHCD]	
Flashing Point	; -	
Molecular Formula	; C <sub>5</sub> H <sub>12</sub> O <sub>3</sub>	
Chemical Structure		
CAS No.	; 77-85-0	
MITI No.	; (2)-243	
ML No.	; -	
Specified Chemical Substances	; -	
Source of Substance	; Tokyo Kasei Kogyo Co., Ltd.	
Lot No.	; FGC01	
Purity	; -	
Vehicle	; Distilled H <sub>2</sub> O	

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
H <sub>2</sub> O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 152 )	( 158 )	( 10 )	( 11 )	( 57 )	( 76 )	( 16 )	( 31 )	( 7 )	( 9 )
0 .610	159	188	8	10	38	69	10	28	5	5
	( 169 )	( 186 )	( 8 )	( 13 )	( 46 )	( 72 )	( 12 )	( 24 )	( 6 )	( 5 )
2 .44	197	185	9	14	59	77	22	32	5	9
	( 183 )	( 199 )	( 8 )	( 12 )	( 57 )	( 74 )	( 20 )	( 29 )	( 5 )	( 8 )
9 .77	164	193	8	15	54	74	16	28	11	8
	( 170 )	( 193 )	( 11 )	( 13 )	( 54 )	( 71 )	( 17 )	( 28 )	( 8 )	( 7 )
39 .1	152	176	6	15	56	74	11	15	5	5
	( 143 )	( 178 )	( 7 )	( 15 )	( 51 )	( 73 )	( 13 )	( 20 )	( 5 )	( 6 )
156	167	163	14	13	43	60	11	36	6	5
	( 153 )	( 178 )	( 12 )	( 12 )	( 50 )	( 67 )	( 17 )	( 34 )	( 7 )	( 5 )
625	179	200	9	7	61	63	15	31	6	7
	( 162 )	( 199 )	( 10 )	( 10 )	( 51 )	( 70 )	( 18 )	( 34 )	( 5 )	( 9 )
2500	150	166	5	8	62	78	16	28	8	8
	( 149 )	( 156 )	( 8 )	( 10 )	( 67 )	( 71 )	( 19 )	( 27 )	( 7 )	( 8 )
10000	121	143	7	7	40	66	16	25	5	6
	( 135 )	( 148 )	( 7 )	( 8 )	( 48 )	( 72 )	( 19 )	( 27 )	( 4 )	( 6 )
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 596 )	2-AA ( 1061 )	NaN <sub>3</sub> ( 435 )	2-AA ( 270 )	AF-2 ( 743 )	2-AA ( 720 )	AF-2 ( 463 )	2-AA ( 467 )	9-AA ( 525 )	2-AA ( 173 )

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Experimental Data-2

(B9818-2/2)

Conc. $\mu$ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
H <sub>2</sub> O	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 163 )	( 167 )	( 10 )	( 8 )	( 42 )	( 65 )	( 16 )	( 23 )	( 6 )	( 8 )
625	149 163 ( 156 )	170 177 ( 174 )	7 6 ( 7 )	10 13 ( 12 )	32 51 ( 42 )	68 71 ( 70 )	14 11 ( 13 )	29 21 ( 25 )	5 5 ( 5 )	6 6 ( 6 )
1250	157 169 ( 163 )	181 214 ( 198 )	9 9 ( 9 )	13 10 ( 12 )	39 37 ( 38 )	82 72 ( 77 )	14 20 ( 17 )	24 18 ( 21 )	3 6 ( 5 )	9 5 ( 7 )
2500	141 151 ( 146 )	181 172 ( 177 )	11 6 ( 9 )	13 15 ( 14 )	37 49 ( 43 )	89 72 ( 81 )	20 13 ( 17 )	16 29 ( 23 )	5 5 ( 5 )	9 6 ( 8 )
5000	135 117 ( 126 )	131 171 ( 151 )	5 3 ( 4 )	6 9 ( 8 )	62 54 ( 58 )	69 82 ( 76 )	18 16 ( 17 )	23 29 ( 26 )	3 3 ( 3 )	7 7 ( 7 )
10000	113 141 ( 127 )	143 165 ( 154 )	11 8 ( 10 )	13 6 ( 10 )	61 36 ( 49 )	62 79 ( 71 )	11 18 ( 15 )	24 21 ( 23 )	5 3 ( 4 )	5 7 ( 6 )
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 ( 588 )	2-AA ( 945 )	NaN <sub>3</sub> ( 391 )	2-AA ( 292 )	AF-2 ( 594 )	2-AA ( 619 )	AF-2 ( 492 )	2-AA ( 428 )	9-AA ( 404 )	2-AA ( 184 )