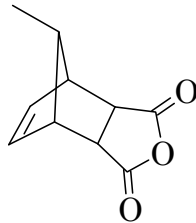


7-Methylbicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic anhydride  
(7-メチルビシクロ[2.2.1]ヘプタ-5-エン-2,3-ジカルボン酸無水物)

Chemical Name	; 7-Methylbicyclo[2.2.1]hepta-5-ene-2,3-dicarboxylic anhydride
Synonym	; Methyl-5-norbornene-2,3-dicarboxylic anhydride 1,2,3,6-Tetrahydromethyl-3,6-methanophthalic anhydride メチル-5-ノルボルネン-2,3-ジカルボン酸無水物 メチル-3,6-エンド'メチレンテトラヒドロ無水フタル酸
Molecular Weight	; 178.19
Melting Point	; -
Boiling Point	; -
Flashing Point	; >110°C[Aldrich]
Molecular Formular	; C <sub>10</sub> H <sub>10</sub> O <sub>3</sub>
Chemical Structure;	
CAS No.	; 25134-21-8
MITI No.	; (4)-298
ML No.	; -
Specified Chemical Substances;	-
Source of Substance;	Tokyo Kasei Kogyo Co., Ltd.
Lot No.	; GE01
Purity	; 95.8%
Vehicle	; DMSO

Conc. µg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 96 )	( 107 )	( 10 )	( 12 )	( 77 )	( 113 )	( 17 )	( 22 )	( 8 )	( 14 )
1 .22	111 100 ( 106 )	94 96 ( 95 )	10 6 ( 8 )	7 11 ( 9 )	49 81 ( 65 )	109 107 ( 108 )	8 15 ( 12 )	24 30 ( 27 )	13 10 ( 12 )	13 8 ( 11 )
4 .88	97 122 ( 110 )	108 130 ( 119 )	8 7 ( 8 )	9 3 ( 6 )	87 83 ( 85 )	114 108 ( 111 )	14 15 ( 15 )	20 26 ( 23 )	14 13 ( 14 )	8 10 ( 9 )
19 .5	96 70 ( 83 )	96 99 ( 98 )	7 6 ( 7 )	15 7 ( 11 )	78 98 ( 88 )	111 129 ( 120 )	16 22 ( 19 )	22 22 ( 22 )	7 5 ( 6 )	15 13 ( 14 )
78 .1	92 84 ( 88 )	83 101 ( 92 )	2 13 ( 8 )	11 9 ( 10 )	62 74 ( 68 )	112 136 ( 124 )	10 10 ( 10 )	18 17 ( 18 )	7 5 ( 6 )	10 14 ( 12 )
313	74 76 ( 75 )	90 97 ( 94 )	10 7 ( 9 )	6 13 ( 10 )	67 92 ( 80 )	82 69 ( 76 )	7 9 ( 8 )	24 17 ( 21 )	8 8 ( 8 )	2 7 ( 5 )
1250	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )
5000	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 604 )	2-AA ( 1158 )	NaN <sub>3</sub> ( 365 )	2-AA ( 279 )	AF-2 ( 1233 )	2-AA ( 825 )	AF-2 ( 533 )	2-AA ( 428 )	9-AA ( 452 )	2-AA ( 230 )

Mutagenicity in Bacterial Test; Negative

\* Growth inhibition was observed.

IARC Evaluation ; Not yet cited

Experimental Data-2

(B0307-2/2)

Conc. µg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9- ( 106 )	S9+ ( 114 )	S9- ( 9 )	S9+ ( 9 )	S9- ( 66 )	S9+ ( 91 )	S9- ( 16 )	S9+ ( 22 )	S9- ( 6 )	S9+ ( 11 )
0 .610	( )	( )	( )	( )	( )	( )	( )	( )	10 6 ( 8 )	( )
1 .22	( )	( )	( )	( )	( )	( )	( )	( )	9 9 ( 9 )	( )
2 .44	( )	( )	( )	( )	( )	( )	( )	( )	8 7 ( 8 )	( )
4 .88	( )	( )	( )	( )	( )	( )	( )	( )	14 8 ( 11 )	( )
9 .77	( )	( )	( )	( )	( )	( )	( )	( )	14 8 ( 11 )	( )
19 .5	( )	( )	( )	( )	( )	( )	( )	( )	6 7 ( 7 )	( )
39 .1	98 77 ( 88 )	104 90 ( 97 )	8 7 ( 8 )	13 6 ( 10 )	23 66 ( 45 )	91 99 ( 95 )	8 14 ( 11 )	20 23 ( 22 )	7 11 ( 9 )	9 13 ( 11 )
78 .1	100 81 ( 91 )	116 112 ( 114 )	6 6 ( 6 )	11 5 ( 8 )	69 56 ( 63 )	96 101 ( 99 )	17 16 ( 17 )	22 25 ( 24 )	5 13 ( 9 )	10 6 ( 8 )
156	111 79 ( 95 )	116 114 ( 115 )	6 6 ( 6 )	10 9 ( 10 )	62 70 ( 66 )	79 97 ( 88 )	14 17 ( 16 )	26 17 ( 22 )	5 5 ( 5 )	11 7 ( 9 )
313	83 91 ( 87 )	114 92 ( 103 )	7 11 ( 9 )	7 6 ( 7 )	64 75 ( 70 )	87 74 ( 81 )	6 20 ( 13 )	17 11 ( 14 )	9 6 ( 8 )	9 8 ( 9 )
625	70 75 ( 73 )	111 105 ( 108 )	5 3 ( 4 )	8 7 ( 8 )	62 62 ( 62 )	74 98 ( 86 )	8 9 ( 9 )	20 18 ( 19 )	6* 2* ( 4* )	5 10 ( 8 )
1250	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )	0* 0* ( 0* )
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 ( 760 )	2-AA ( 1461 )	NaN <sub>3</sub> ( 342 )	2-AA ( 281 )	AF-2 ( 1044 )	2-AA ( 996 )	AF-2 ( 533 )	2-AA ( 466 )	9-AA ( 396 )	2-AA ( 235 )

\* Growth inhibition was observed.