Chemical Name ; Octadecylamine

Synonym ; 1-Octadecanamine
Stearylamine

Molecular Weight ; 269.51
Melting Point ; 49-52℃ [CHCD]
Boiling Point ; 183-183.1℃(5mmHg)[CHCD]
Flashing Point ; >110℃ [Aldrich]
Molecular Formula ; $C_{18}H_{39}N$
Chemical Structure $CH_3(CH_2)_{17}NH_2$

CAS No. ; 124-30-1
MITI No. ; (2)-133
ML No. ; −
Specified Chemical Substances ; −

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; GD02
Purity ; 86.0%

Vehicle ; DMSO

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvr*A/pKM101		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(114)	(123)	(9)	(11)	(52)	(91)	(19)	(31)	(8)	(14)
	139	134	7	8	43	78	15	31	7	11
	131	128	8	8	59	77	23	30	11	14
1 .22	(135)	(131)	(8)	(8)	(51)	(78)	(19)	(31)	(9)	(13)
	131	146	11	10	61	90	17	28	9	16
	94	128	8	8	46	82	21	38	5	18
4 .88	(113)	(137)	(10)	(9)	(54)	(86)	(19)	(33)	(7)	(17)
	106	120	6	11	48	79	25	25	3 *	24
	113	120	6	16	51	76	26	33	11 *	18
19 .5	(110)	(120)	(6)	(14)	(50)	(78)	(26)	(29)	(7 *)	(21)
	97 *	121	10	8	53	98	18 *	33	9 *	6
	109 *	149	9	9	47	79	16 *	29	3 *	14
78 .1	(103 *)	(135)	(10)	(9)	(50)	(89)	(17 *)	(31)	(6 *)	(10)
	0 *	141	6 *	14	36 *	91	0 *	26	0 *	9
	0 *	152	4 *	12	37 *	87	0 *	27	0 *	11
313 †	(0 *)	(147)	(5 *)	(13)	(37 *)	(89)	(0 *)	(27)	(0 *)	(10)
	0 *	103	0 *	11	0 *	86	0 *	13 *	0 *	8 *
	0 *	96	0 *	6	0 *	70	0 *	28 *	0 *	9 *
1250 †	(0 *)	(100)	(0 *)	(9)	(0 *)	(78)	(0 *)	(21 *)	(0 *)	(9 *)
	0 *	0 *	0 *	0 *	0 *	82	0 *	0 *	0 *	0 *
	0 *	0 *	0 *	0 *	0 *	72	0 *	0 *	0 *	0 *
5000 †	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(77)	(0 *)	(0 *)	(0 *)	(0 *)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (710)	2-AA (1432)	NaN_3 (385)	2-AA (316)	AF-2 (1383)	2-AA (1131)	AF-2 (538)	2-AA (471)	9-AA (694)	2-AA (245)

* Growth inhibition was observed.
† Test chemical was precipitated with and without S9mix.

Experimental Data-2

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvr*A/pKM101		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(120)	(132)	(9)	(11)	(39)	(61)	(17)	(28)	(10)	(12)
0 .305									8 9 (9)	
0 .610									5 10 (8)	
1 .22	124 142 (133)						21 15 (18)		6 10 (8)	
2 .44	128 136 (132)						20 22 (21)		6 13 (10)	
4 .88	124 115 (120)		10 11 (11)		34 39 (37)		25 21 (23)		9 7 (8)	
9 .77	108 119 (114)		6 7 (7)		39 39 (39)		20 18 (19)		11 10 (11)	
19 .5	127 120 (124)		7 6 (7)		48 31 (40)		20 25 (23)	29 30 (30)	6 5 (6)	14 10 (12)
39 .1	111 129 (120)	133 142 (138)	10 7 (9)	10 7 (9)	48 36 (42)	66 86 (76)	24 15 (20)	20 30 (25)	13 * 9 * (11 *)	11 11 (11)
78 .1	122 * 114 * (118 *)	155 131 (143)	6 6 (6)	8 6 (7)	23 55 (39)	62 90 (76)	9 * 20 * (15 *)	23 29 (26)		14 10 (12)
156	0 * 0 * (0 *)	152 145 (149)	8 * 7 * (8 *)	11 10 (11)	38 * 33 * (36 *)	78 69 (74)	14 * 11 * (13 *)	32 24 (28)		11 9 (10)
313 †		158 160 (159)	9 * 6 * (8 *)	13 10 (12)	40 * 33 * (37 *)	68 61 (65)		21 20 (21)		13 7 (10)
625 †		125 143 (134)	0 * 0 * (0	11 13 (12)	0 * 0 * (0 *)	83 67 (75)		27 * 23 * (25 *)		10 * 16 * (13 *)
1250 †		95 103 (99)		11 9 (10)		57 69 (63)		14 * 12 * (13 *)		10 * 9 * (10 *)
2500 †		59 * 94 * (77 *)		11 * 7 * (9 *)		51 58 (55)		0 * 0 * (0 *)		0 * 0 * (0 *)
5000 †		0 * 0 * (0 *)		0 * 0 * (0 *)		50 * 38 * (44 *)				
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (606)	2-AA (1332)	NaN_3 (399)	2-AA (286)	AF-2 (1344)	2-AA (986)	AF-2 (437)	2-AA (459)	9-AA (509)	2-AA (183)

Experimental Data-3 (B9709-2/2)

Conc. μg/plate	Number of Revertants/plate			
	Base-substitution			Frame-shift
	TA100		TA98	TA1537
	S9−		S9−	S9−
DMSO	(161)		(16)	(7)
0 .610				10 7 (9)
1 .22	116 120 (118)		10 11 (11)	6 8 (7)
2 .44	133 129 (131)		23 16 (20)	9 8 (9)
4 .88	131 131 (131)		14 17 (16)	5 8 (7)
9 .77	130 115 (123)		20 16 (18)	8 11 (10)
19 .5	107 134 (121)		16 25 (21)	9 10 (10)
39 .1	119 116 (118)		18 10 (14)	5 * 7 * (6 *)
78 .1	108 * 98 * (103 *)		15 * 10 * (13 *)	7 * 6 * (7 *)
156	87 * 74 * (81 *)		10 * 9 * (10 *)	
Judgement	−		−	−
Specific Mutagenicity				
Positive Control	AF-2 (656)		AF-2 (327)	9-AA (323)