

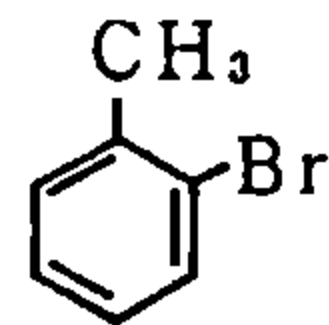
o-Bromotoluene (o-ブロムトルエン)

Experimental Data

Chemical Name: o-Bromotoluene
 Synonym: 1-Bromo-2-methylbenzene
Benzene, 1-bromo-2-methyl-

Molecular weight: 171.04
 Melting point: - 27 °C
 Boiling point: 181.7°C, 58 - 60 °C (10mmHg)
 Flashing point: 78 °C

Chemical Structure



CAS No : 95-46-5
 MITI No:(3)-88
 Source of Substance:Tokyo Kasei Kogyo Co Ltd
 Lot.No. : AX01
 Purity : 98 %
 Vehicle : DMSO

| Con. μg/ plate | Number of Revertants/plate | | | | | | | | | |
|-----------------------|----------------------------|----------|------------------|---------|---------|---------|-------------|---------|---------|---------|
| | Base-substitution | | | | | | Frame-shift | | | |
| | TA100 | | TA1535 | | WP2uvrA | | TA98 | | TA1537 | |
| | S9- | S9+ | S9- | S9+ | S9- | S9+ | S9- | S9+ | S9- | S9+ |
| DMSO | (119) | (124) | (11) | (15) | (25) | (25) | (18) | (24) | (8) | (11) |
| | 127 | 131 | 17 | 13 | 17 | 31 | 17 | 26 | 8 | 6 |
| | 124 | 124 | 14 | 14 | 21 | 26 | 15 | 18 | 11 | 7 |
| 0.0763 | (126) | (128) | (16) | (14) | (19) | (29) | (16) | (22) | (10) | (7) |
| | 136 | 121 | 13 | 11 | 17 | 26 | 13 | 24 | 8 | 10 |
| | 134 | 109 | 15 | 12 | 20 | 23 | 10 | 32 | 3 | 8 |
| 0.305 | (135) | (115) | (14) | (12) | (19) | (25) | (12) | (28) | (6) | (9) |
| | 141 | 124 | 16 | 8 | 16 | 36 | 24 | 16 | 7 | 8 |
| | 131 | 137 | 16 | 11 | 24 | 36 | 11 | 21 | 11 | 7 |
| 1.22 | (136) | (131) | (16) | (10) | (20) | (36) | (18) | (19) | (9) | (8) |
| | 120 | 109 | 13 | 10 | 23 | 24 | 25 | 22 | 6 | 6 |
| | 126 | 124 | 13 | 14 | 24 | 18 | 20 | 22 | 5 | 9 |
| 4.88 | (123) | (117) | (13) | (12) | (24) | (21) | (23) | (22) | (6) | (8) |
| | 117 | 122 | 11 | 17 | 20 | 29 | 20 | 36 | 10 | 17 |
| | 142 | 136 | 14 | 17 | 20 | 21 | 16 | 30 | 8 | 11 |
| 19.5 | (130) | (129) | (13) | (17) | (20) | (25) | (18) | (33) | (9) | (14) |
| | 134 | 134 | 8 | 17 | 18 | 22 | 13 | 32 | 7 | 5 |
| | 151 | 144 | 8 | 22 | 23 | 28 | 14 | 17 | 9 | 6 |
| 78.1 | (143) | (139) | (8) | (20) | (21) | (25) | (14) | (25) | (8) | (6) |
| | 0* | 0* | 0* | 0* | 14* | 18* | 0* | 0* | 0* | 0* |
| | 0* | 0* | 0* | 0* | 18* | 25* | 0* | 0* | 0* | 0* |
| 313 | (0*) | (0*) | (0*) | (0*) | (16*) | (22*) | (0*) | (0*) | (0*) | (0*) |
| 1250 | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) |
| 5000 | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) |
| Judgement | — — — — — | | | | | | | | | |
| Specific Mutagenicity | — — — — — | | | | | | | | | |
| Positive Control | AF2 | 2AA | NaN ₃ | 2AA | AF2 | 2AA | AF2 | 2AA | 9AA | 2AA |
| | (774) | (1307) | (332) | (291) | (245) | (947) | (511) | (355) | (313) | (203) |

Experimental Data

| Con. μ g/ plate | Number of Revertants/plate | | | | | | | | | |
|---------------------------|----------------------------|----------|------------------|---------|---------|---------|-------------|---------|---------|---------|
| | Base-substitution | | | | | | Frame-shift | | | |
| | TA100 | | TA1535 | | WP2uvrA | | TA98 | | TA1537 | |
| | S9- | S9+ | S9- | S9+ | S9- | S9+ | S9- | S9+ | S9- | S9+ |
| DMSO | (107) | (108) | (15) | (13) | (25) | (36) | (14) | (21) | (9) | (10) |
| | 96 | 120 | 7 | 8 | 18 | 31 | 16 | 17 | 5 | 10 |
| | 112 | 128 | 8 | 16 | 28 | 38 | 8 | 21 | 9 | 11 |
| 4.88 | (104) | (124) | (8) | (12) | (23) | (35) | (12) | (19) | (7) | (11) |
| | 93 | 106 | 9 | 16 | 30 | 30 | 9 | 22 | 15 | 9 |
| | 122 | 102 | 8 | 17 | 29 | 37 | 11 | 17 | 5 | 11 |
| 9.77 | (108) | (104) | (9) | (17) | (30) | (34) | (10) | (20) | (10) | (10) |
| | 104 | 114 | 11 | 17 | 25 | 33 | 7 | 29 | 9 | 20 |
| | 107 | 108 | 15 | 11 | 38 | 45 | 9 | 22 | 6 | 10 |
| 19.5 | (106) | (111) | (13) | (14) | (32) | (39) | (8) | (26) | (8) | (15) |
| | 109 | 96 | 8 | 5 | 32 | 40 | 8 | 22 | 8 | 10 |
| | 107 | 101 | 13 | 15 | 41 | 41 | 11 | 33 | 6 | 11 |
| 39.1 | (108) | (99) | (11) | (10) | (37) | (41) | (10) | (28) | (7) | (11) |
| | 114 | 102 | 6* | 20 | 37 | 38 | 10* | 17 | 13* | 17 |
| | 113 | 120 | 11* | 14 | 32 | 39 | 15* | 23 | 9* | 20 |
| 78.1 | (114) | (111) | (9*) | (17) | (35) | (39) | (13*) | (20) | (11*) | (19) |
| | 115* | 96* | 2* | 9* | 24* | 30 | 6* | 26* | 0* | 7* |
| | 70* | 102* | 0* | 3* | 33* | 18 | 8* | 16* | 0* | 6* |
| 156 | (93*) | (99*) | (1*) | (6*) | (29*) | (24) | (7*) | (21*) | (0*) | (7*) |
| | 83* | 55* | 0* | 0* | 17* | 8* | 0* | 14* | 0* | 0* |
| | 0* | 83* | 0* | 0* | 20* | 18* | 0* | 0* | 0* | 0* |
| 313 | (42*) | (69*) | (0*) | (0*) | (19*) | (13*) | (0*) | (7*) | (0*) | (0*) |
| Judgement | — | — | — | — | — | — | — | — | — | — |
| Specific Mutagenicity | | | | | | | | | | |
| Positive | AF2 | 2AA | NaN ₃ | 2AA | AF2 | 2AA | AF2 | 2AA | 9AA | 2AA |
| Control | (770) | (1328) | (367) | (330) | (256) | (774) | (479) | (347) | (316) | (265) |

| | | Experimental Data | | | | | |
|---------------------------|----------------------------|-------------------|----------|----------|----------------|----------|--|
| Con. μ g/ plate | Number of Revertants/plate | | | | | | |
| | Base-substitution | | | | | | |
| | TA102 | | TA104 | | WP2uvrA/pKM101 | | |
| | S9- | S9+ | S9- | S9+ | S9- | S9+ | |
| DMSO | (263) | (335) | (282) | (351) | (173) | (253) | |
| | 262 | 309 | 293 | 367 | 164 | 242 | |
| | 301 | 306 | 299 | 382 | 141 | 235 | |
| 0.0763 | (282) | (308) | (296) | (375) | (153) | (239) | |
| | 214 | 329 | 291 | 378 | 187 | 242 | |
| | 236 | 330 | 269 | 370 | 149 | 235 | |
| 0.305 | (225) | (330) | (280) | (374) | (168) | (239) | |
| | 271 | 307 | 338 | 350 | 164 | 223 | |
| | 268 | 309 | 288 | 322 | 158 | 213 | |
| 1.22 | (270) | (308) | (313) | (336) | (161) | (218) | |
| | 271 | 301 | 284 | 360 | 159 | 274 | |
| | 266 | 334 | 280 | 350 | 144 | 225 | |
| 4.88 | (269) | (318) | (282) | (355) | (152) | (250) | |
| | 269 | 322 | 297 | 346 | 170 | 256 | |
| | 288 | 320 | 307 | 352 | 150 | 218 | |
| 19.5 | (279) | (321) | (302) | (349) | (160) | (237) | |
| | 238 | 275 | 314 | 331 | 157 | 232 | |
| | 256 | 324 | 294 | 340 | 129 | 234 | |
| 78.1 | (247) | (300) | (304) | (336) | (143) | (233) | |
| | 149* | 176* | 219* | 228* | 90* | 123* | |
| | 152* | 177* | 247* | 211* | 82* | 112* | |
| 313 | (151*) | (177*) | (233*) | (220*) | (86*) | (118*) | |
| 1250 | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | |
| 5000 | (0*) | (0*) | (0*) | (0*) | (0*) | (0*) | |
| Judgement | - | - | - | - | - | - | |
| Specific Mutagenicity | | | | | | | |
| Positive | BLM | 2AA | PA | 2AA | AF2 | 2AA | |
| Control | (840) | (2136) | (1688) | (932) | (2922) | (1162) | |

| | | Experimental Data | | | | | |
|---------------------------|----------------------------|-------------------|----------|----------|----------------|----------|--|
| Con. μ g/ plate | Number of Revertants/plate | | | | | | |
| | Base-substitution | | | | | | |
| | TA102 | | TA104 | | WP2uvrA/pKM101 | | |
| | S9- | S9+ | S9- | S9+ | S9- | S9+ | |
| <u>DMSO</u> | (192) | (210) | (263) | (310) | (156) | (223) | |
| | 150 | 233 | 225 | 334 | 159 | 256 | |
| | 120 | 222 | 234 | 276 | 170 | 235 | |
| <u>4.88</u> | (135) | (228) | (230) | (305) | (165) | (246) | |
| | 135 | 213 | 242 | 290 | 156 | 225 | |
| | 143 | 228 | 247 | 262 | 157 | 227 | |
| <u>9.77</u> | (139) | (221) | (245) | (276) | (157) | (226) | |
| | 163 | 216 | 260 | 265 | 160 | 238 | |
| | 146 | 214 | 263 | 279 | 165 | 226 | |
| <u>19.5</u> | (155) | (215) | (262) | (272) | (163) | (232) | |
| | 150 | 202 | 233 | 254 | 171 | 242 | |
| | 207 | 221 | 242 | 291 | 187 | 222 | |
| <u>39.1</u> | (179) | (212) | (238) | (273) | (179) | (232) | |
| | 200 | 250 | 275 | 269 | 131 | 215 | |
| | 183 | 221 | 266 | 261 | 136 | 239 | |
| <u>78.1</u> | (192) | (236) | (271) | (265) | (134) | (227) | |
| | 89* | 185* | 222* | 263* | 74* | 155* | |
| | 66* | 187* | 190* | 254* | 93* | 155* | |
| <u>156</u> | (78*) | (186*) | (206*) | (259*) | (84*) | (155*) | |
| | 55* | 139* | 193* | 212* | 75* | 102* | |
| | 109* | 148* | 171* | 232* | 78* | 98* | |
| <u>313</u> | (82*) | (144*) | (182*) | (222*) | (77*) | (100*) | |
| Judgement | - | - | - | - | - | - | |
| Specific Mutagenicity | | | | | | | |
| Positive Control | BLM | 2AA | PA | 2AA | AF2 | 2AA | |
| | (521) | (804) | (959) | (802) | (1766) | (1063) | |