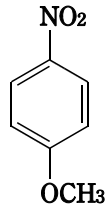
*p*-Methoxynitrobenzene
【*p*-メトキシニトロベンゼン】

Chemical Name; *p*-Methoxynitrobenzene
Synonym ; 1-Methoxy-4-nitrobenzene
*p*-Nitroanisole
4-Nitroanisole
1-メトキシ-4-ニトロベンゼン
p-ニトロアニソール
4-ニトロアニソール

Molecular Weight ; 153.14
Melting Point ; 54 ℃ [CHCD]
Boiling Point ; 274 ℃ [CHCD]
Flashing Point ; — ℃
Molecular Formula; $C_7H_7NO_3$

**Chemical Structure**




CAS No. ; 100-17-4
MITI No. ; (3)-787
ML No. ; —
Specified Chemical Substances; —

Source of Substance; Wako Junyaku Kogyo Co.,Ltd.
Lot No. ; APQ5637
Purity ; 99.9 %

Vehicle ; DMSO

Judgement for
Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation ; not yet cited

Exprimental Data without Metabolic Activation

| Treatment | | | | Cell with Structural Chromosome Aberration (%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Substance | Time (h) | Concentration (mg/ml) | No. of Metaphase | Polyploid (%) | Judgement | Gap | Chromatid CTB | Chromatid CTE | Chromosome CSB | Chromosome CSE | Total −G | Total +G | Judgement |
| DMSO | 24 | | 200 | 0.0 | − | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | − |
| | 48 | | 200 | 0.5 | − | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | − |
| Test Chemical | 24 | 0.1 | 200 | 2.0 | − | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.5 | − |
| | | 0.2 | 200 | 4.0 | − | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | − |
| | | 0.4 * | 200 | 1.0 | − | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.5 | − |
| | | 0.6 * | | | | No observation for metaphase | | | | | | | |
| | | 0.8 * | | | | No observation for metaphase | | | | | | | |
| | 48 | 0.1 | 200 | 0.0 | − | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | − |
| | | 0.2 | 200 | 3.0 | − | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | − |
| | | 0.4 * | 200 | 3.5 | − | 0.0 | 0.5 | 1.0 | 0.0 | 0.0 | 1.5 | 1.5 | − |
| | | 0.6 * | | | | No observation for metaphase | | | | | | | |
| | | 0.8 * | | | | No observation for metaphase | | | | | | | |
| Positive Control [MMC] | 24 | 0.00004 | 200 | 0.0 | − | 0.5 | 7.5 | 36.5 | 0.0 | 0.0 | 39.0 | 39.0 | + |
| | 48 | 0.00004 | 200 | 2.0 | − | 2.5 | 13.0 | 67.0 | 0.0 | 0.0 | 69.5 | 69.5 | + |

* Test chemical was precipitated.

Exprimental Data with Metabolic Activation

| Treatment | | | No. of Metaphase | Polyploid (%) | Judge-ment | Cell with Structural Chromosome Aberration (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Chromatid | | Chromosome | | Total | | |
| Substance | S9 mix | Concent-ration (mg/ml) | | | | Gap | CTB | CTE | CSB | CSE | −G | +G | Judge-ment |
| DMSO | − | | 200 | 1.0 | − | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | − |
| | + | | 200 | 0.0 | − | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 1.0 | 1.0 | − |
| Test Chemical | − | 0.1 | 200 | 1.5 | − | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 1.0 | 1.0 | − |
| | | 0.2 | 200 | 2.0 | − | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | − |
| | | 0.4 * | 200 | 1.5 | − | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | − |
| | | 0.8 * | 200 | 4.0 | − | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 1.5 | 1.5 | − |
| | | 1.2 * | 200 | 3.0 | − | 0.0 | 0.5 | 1.0 | 0.0 | 0.0 | 1.5 | 1.5 | − |
| | + | 0.1 | 200 | 5.0 | ± | 0.0 | 0.5 | 2.0 | 0.0 | 0.0 | 2.5 | 2.5 | − |
| | | 0.2 | 200 | 14.0 | + | 0.0 | 1.0 | 4.0 | 0.0 | 0.0 | 4.5 | 4.5 | − |
| | | 0.4 * | 200 | 5.0 | ± | 1.0 | 1.0 | 9.0 | 0.0 | 0.0 | 9.5 | 10.5 | + |
| | | 0.8 * | 200 | 2.5 | − | 1.0 | 2.0 | 9.5 | 0.0 | 0.0 | 11.0 | 11.5 | + |
| | | 1.2 * | 188 | 0.5 | − | 0.0 | 1.6 | 6.4 | 0.0 | 0.0 | 8.0 | 8.0 | ± |
| Positive Control [B(a)P] | − | 0.01 | 200 | 0.5 | − | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 1.0 | 1.0 | − |
| | + | 0.01 | 200 | 0.5 | − | 1.5 | 5.0 | 34.5 | 0.0 | 0.5 | 37.0 | 37.0 | + |

* Test chemical was precipitated.