

Chlorodifluoromethane (クロロジフルオロメタン)

Experimental Data

| | |
|----------------------|--------------------------|
| Chemical Name: | Chlorodifluoromethane |
| Synonym | Flon 22 |
| | Methane, chlorodifluoro- |
| Molecular weight: | 86.5 |
| Melting point: | -146°C |
| Boiling point: | -40.8°C |
| Chemical Structure | |
| | $C\ell HCF_2$ |
| CAS No : | 75-45-6 |
| MITI No : | (2)-93 |
| Source of Substance: | Daikin Kogyo Co., Ltd. |
| Lot. No. : | |
| Purity: | |
| Vehicle: | Air |

Judgement for
Chromosomal Aberration in CHL: Negative

IARC Evaluation : not yet cited

| | Treated Time (Hr) | Concentration (%) | No. of Meta-phase | Poly-ploid (%) | Judge | Cell with Structural Chromosome Aberration (%) | | | | | | | |
|-----------------------------------|-------------------|-------------------|-------------------|----------------|-------|--|-----|-----|-----|-----|-------|------|-------|
| | | | | | | Gap | CTB | CTE | CSB | CSE | Total | | Judge |
| | | | | | | | | | | | -G | +G | |
| Air | 24 | | 100 | 1.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| | 48 | | 100 | 0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| Test Chemical | | | | | | | | | | | | | |
| | 24 | 40 | 100 | 2.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| | | 60 | 100 | 0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| | | 80 | 100 | 2.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| | | 100 | 100 | 0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| | 48 | 40 | 100 | 0 | — | 0 | 1.0 | 0 | 0 | 0 | 1.0 | 1.0 | — |
| | | 60 | 100 | 0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — |
| | | 80 | 100 | 0 | — | 0 | 0 | 2.0 | 0 | 0 | 2.0 | 2.0 | — |
| | | 100 | 100 | 1.0 | — | 1.0 | 0 | 0 | 0 | 0 | 0 | 1.0 | — |
| Positive Control (Methylchloride) | | | | | | | | | | | | | |
| | 24 | 2.0 | 100 | 0 | — | 2.0 | 2.0 | 8.0 | 1.0 | 0 | 11.0 | 12.0 | + |
| | 48 | 1.5 | 100 | 1.0 | — | 5.0 | 8.0 | 0 | 0 | 1.0 | 18.0 | 20.0 | + |

Experimental Data

| S 9 with or without | Concent- ration (%) | No. of Meta- phase | Poly- ploid (%) | Judge | Cell with Structural Chromosome Aberration (%) | | | | | | | | Judge |
|---------------------------|---------------------------|--------------------------|-----------------------|-------|---|------|------|-----|-----|-------|------|---|-------|
| | | | | | Gap | CTB | CTE | CSB | CSE | Total | | | |
| | | | | | | | | | | -G | +G | | |
| Air | - | 200 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| | + | 200 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Test Chemical | | | | | | | | | | | | | |
| - | 40 | 200 | 0.5 | - | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | 1.0 | - | |
| | 60 | 200 | 0.5 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | |
| | 80 | 200 | 0.5 | - | 0 | 0 | 0 | 0 | 0.5 | 0.5 | 0.5 | - | |
| | 100 | 200 | 3.0 | - | 0 | 0 | 1.5 | 0 | 0 | 1.5 | 1.5 | - | |
| + | 40 | 200 | 2.0 | - | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.5 | - | |
| | 60 | 200 | 3.0 | - | 0 | 0 | 0.5 | 0 | 0 | 0.5 | 0.5 | - | |
| | 80 | 200 | 2.0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | |
| | 100 | 200 | 1.0 | - | 0 | 0 | 0.5 | 0 | 0 | 0.5 | 0.5 | - | |
| Positive Control | | | | | | | | | | | | | |
| (Methyl chloride) | | | | | | | | | | | | | |
| - | 4.0 | 200 | 1.5 | - | 2.5 | 17.5 | 57.0 | 0.5 | 0.5 | 58.5 | 60.0 | + | |
| (Vinyl chloride) | | | | | | | | | | | | | |
| + | 2.5 | 200 | 0.5 | - | 1.5 | 5.0 | 17.0 | 0 | 0 | 19.0 | 20.0 | + | |