

4-(2-Chloro-4-nitrophenylazo)-N-(2-cyanoethyl)-N-phenethylaniline

4-(2-クロ-4-ニトロフェニルアゾ)-N-(2-シアノエチル)-N-フェネチルアニリン

Experimental Data

|                      |   |  |
|----------------------|---|--|
| Chemical Name:       | <u>4-(2-Chloro-4-nitrophenyl-<br/>azo)-N-(2-cyanoethyl)-N-<br/>phenethylaniline</u> |  |
| Synonym              |   |  |
| Molecular weight:    | 433.5   |  |
| Melting point:       | 132 °C  |  |
| Boiling point:       | °C  |  |
| Chemical Structure   |   |  |
| CAS No.:             | —   |  |
| Source of Substance: | Tokyo Kasei Kogyo<br>Co., Ltd.  |  |
| Lot. No.:            | —   |  |
| Purity:              | —   |  |
| Vehicle:             | 1% CMC  |  |

| Treated time (Hr)             | Concentration (mg/ml) | No. of Meta- phase           | Poly-ploid (%) | Judge | Cell with Structural Chromosome Aberration (%) |     |      |     |     |      | Total | Judge |
|-------------------------------|-----------------------|------------------------------|----------------|-------|--|-----|------|-----|-----|------|-------|-------|
|                               |                       |                              |                |       | Gap  | CTB | CTE  | CSB | CSE | -G   | +G    |       |
| C M C 24                      | 200                   | 0                            | —              | 0     | 0  | 0.5 | 0    | 0   | 0.5 | 0.5  | 0.5   | —     |
| 48                            | 200                   | 0.5                          | —              | 0.5   | 0  | 0.5 | 0    | 0   | 0.5 | 1.0  | 1.0   | —     |
| <b>Test Chemical</b>          |                       |                              |                |       |  |     |      |     |     |      |       |       |
| 24                            | 0.5                   | 200                          | 0.5            | —     | 1.0  | 0   | 0    | 0   | 0   | 0    | 1.0   | —     |
|                               | 1.0                   | 200                          | 0              | —     | 1.0  | 0   | 0    | 0   | 0.5 | 0.5  | 1.5   | —     |
|                               | 2.0                   | 200                          | 0.5            | —     | 1.5  | 2.5 | 1.5  | 0   | 0   | 4.0  | 5.5   | ±     |
|                               | 3.0                   | 156                          | 0              | —     | 3.8  | 4.3 | 0    | 0   | 0   | 5.2  | 8.5   | ±     |
|                               | 4.0                   | No observation for metaphase |                |       |  |     |      |     |     |      |       | —     |
| 48                            | 0.5                   | 200                          | 0              | —     | 1.5  | 0   | 0    | 0   | 0   | 0    | 1.5   | —     |
|                               | 1.0                   | 200                          | 0              | —     | 1.5  | 1.0 | 0    | 0   | 0   | 1.0  | 2.5   | —     |
|                               | 2.0                   | 200                          | 0              | —     | 4.5  | 3.0 | 2.0  | 0.5 | 0   | 5.5  | 9.5   | ±     |
|                               | 3.0                   | 131                          | 0              | —     | 7.8  | 8.4 | 1.5  | 0   | 0   | 9.9  | 17.1  | +     |
|                               | 4.0                   | No observation for metaphase |                |       |  |     |      |     |     |      |       | —     |
| <b>Positive Control (MMC)</b> |                       |                              |                |       |  |     |      |     |     |      |       |       |
| 24                            | 0.0001                | 200                          | 0              | —     | 3.5  | 5.5 | 24.0 | 0   | 0   | 29.0 | 31.0  | +     |
| 48                            | 0.0001                | 200                          | 0.5            | —     | 3.0  | 8.0 | 41.5 | 0   | 1.0 | 48.5 | 50.0  | +     |

IARC Evaluation : not yet cited

Experimental Data

| S 9<br>with or<br>without | Concen-<br>tration<br>(mg/ml) | No. of<br>Meta-<br>phase | Poly-<br>ploid (%) | Judge | Cell with Structural Chromosome Aberration (%) |     |      |      |     |      | Total |       |   |
|---------------------------|-------------------------------|--------------------------|--------------------|-------|--|-----|------|------|-----|------|-------|-------|---|
|                           |                               |                          |                    |       | Gap  | CTB | CTE  | CSB  | CSE | -G   | +G    | Judge |   |
| CMC                       | —                             | 200                      | 0.5                | —     | 0  | 0   | 0    | 0    | 0   | 0    | 0     | —     |   |
|                           | +                             | 200                      | 0.5                | —     | 0  | 0   | 0    | 0    | 0   | 0    | 0     | —     |   |
| <b>Test Chemical</b>      |                               |                          |                    |       |  |     |      |      |     |      |       |       |   |
| —                         | 1.0                           | 200                      | 0                  | —     | 0.5  | 0   | 0    | 0    | 0   | 0    | 0.5   | —     |   |
|                           | 2.0                           | 200                      | 0.5                | —     | 0.5  | 0   | 0    | 0    | 0   | 0    | 0.5   | —     |   |
|                           | 4.0                           | 200                      | 1.0                | —     | 3.0  | 3.0 | 13.5 | 0    | 0   | 14.5 | 16.0  | +     |   |
|                           | 8.0                           |                          |                    |       | No observation for metaphase                   |     |      |      |     |      |       |       |   |
|                           |                               |                          |                    |       |  |     |      |      |     |      |       |       |   |
| +                         | 1.0                           | 200                      | 0                  | —     | 1.0  | 0   | 0.5  | 0    | 0   | 0.5  | 1.5   | —     |   |
|                           | 2.0                           | 200                      | 0.5                | —     | 1.0  | 0   | 0    | 0    | 0   | 0    | 1.0   | —     |   |
|                           | 4.0                           | 200                      | 0                  | —     | 2.5  | 0   | 1.5  | 0    | 0   | 1.5  | 3.5   | —     |   |
|                           | 8.0                           | 200                      | 0.5                | —     | 1.5  | 2.0 | 5.0  | 0    | 0   | 7.0  | 8.5   | ±     |   |
|                           | 16.0                          |                          |                    |       | No observation for metaphase                   |     |      |      |     |      |       |       |   |
| <b>Positive Control</b>   |                               |                          |                    |       |  |     |      |      |     |      |       |       |   |
| (B(a)P)                   | —                             | 0.016                    | 200                | 0.5   | —  | 1.0 | 0.5  | 0    | 0   | 0    | 0.5   | 1.5   | — |
|                           | +                             | 0.016                    | 200                | 0     | —  | 3.0 | 5.5  | 43.0 | 0   | 0    | 45.0  | 46.0  | + |