

Experiment Number: A28566
Test Type: Genetic Toxicology - Micronucleus
Route: Inhalation
Species/Strain: Mouse/B6C3F1

G04: In Vivo Micronucleus Summary Data

Test Compound: Isoprene
CAS Number: 78-79-5

Date Report Requested: 09/20/2018
Time Report Requested: 07:54:30

| | |
|-----------------------------|---------------|
| NTP Study Number: | A28566 |
| Study Duration: | 13 Weeks |
| Study Methodology: | Slide Scoring |
| Male Study Result: | Positive |
| Female Study Result: | Positive |

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Tissue: Blood; Sex: Male; Number of Treatments: 65; Time interval between final treatment and cell sampling: 24 h

| MN NCE/1000 | | | |
|------------------------------|----------|-------------------|----------------|
| Dose (ppm) | N | Mean ± SEM | p-Value |
| Vehicle Control ¹ | 10 | 1.27 ± 0.06 | |
| 70.0 | 10 | 1.34 ± 0.07 | 0.3819 |
| 220.0 | 10 | 2.44 ± 0.23 | < 0.001 * |
| 700.0 | 10 | 4.67 ± 0.21 | < 0.001 * |
| 2200.0 | 10 | 5.34 ± 0.64 | < 0.001 * |
| 7000.0 | 10 | 6.42 ± 0.24 | < 0.001 * |
| Trend p-Value | | < 0.001 * | |

Trial Summary: Positive

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Tissue: Blood; Sex: Female; Number of Treatments: 65; Time interval between final treatment and cell sampling: 24 h

| Dose (ppm) | N | MN PCE/1000 | p-Value | % PCE |
|------------------------------|----|--------------|-----------|-------------|
| | | Mean ± SEM | | Mean ± SEM |
| Vehicle Control ¹ | 10 | 2.45 ± 0.45 | | 2.72 ± 0.12 |
| 438.0 | 10 | 12.60 ± 1.58 | < 0.001 * | 2.36 ± 0.11 |
| 875.0 | 10 | 14.24 ± 1.63 | < 0.001 * | 2.68 ± 0.64 |
| 1750.0 | 10 | 10.39 ± 0.83 | < 0.001 * | 1.94 ± 0.17 |
| 3500.0 | 10 | 13.65 ± 0.75 | < 0.001 * | 1.60 ± 0.10 |
| 7000.0 | 10 | 18.29 ± 1.69 | < 0.001 * | 1.24 ± 0.07 |
| Trend p-Value | | < 0.001 * | | |

Trial Summary: Positive

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Tissue: Bone marrow; Sex: Male; Number of Treatments: 10; Time interval between final treatment and cell sampling: 17 h

| MN NCE/1000 | | | |
|------------------------------|----------|-------------------|----------------|
| Dose (ppm) | N | Mean ± SEM | p-Value |
| Vehicle Control ¹ | 10 | 1.77 ± 0.18 | |
| 70.0 | 10 | 1.83 ± 0.17 | 0.3861 |
| 220.0 | 10 | 1.97 ± 0.10 | 0.1710 |
| 700.0 | 10 | 6.23 ± 0.28 | < 0.001 * |
| 2200.0 | 10 | 7.18 ± 0.17 | < 0.001 * |
| 7000.0 | 10 | 10.02 ± 0.42 | < 0.001 * |
| Trend p-Value | | < 0.001 * | |

Trial Summary: Positive

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LEGEND

MN = micronucleated, PCE = polychromatic erythrocyte, NCE = normochromatic erythrocyte

CAS Number = Chemical Abstracts Service registry number

N = Number of subjects

Values given as Mean or Mean \pm Standard Error Mean

Results were tabulated as the mean of the pooled results from all animals within a treatment group, plus or minus the standard error of the mean

Pairwise comparison to the concurrent control, dosed groups significant at $p = 0.025/\text{number of treatment groups}$; positive control value is significant at $p = 0.05$

Cochran-Armitage trend test, significant at $p = 0.025$

* Statistically significant pairwise or trend test

1: Vehicle Control: Air

**** END OF REPORT ****