**SUPPORTING MATERIALS**

**Occurrence of Fipronil in residential house dust in presence and absence of pets: a hint for a comprehensive toxicological assessment**

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| **Figure 1S.** Chromatograms and High-resolution mass spectra for Fipronil, Sulfone, and Desulfinyl. |

**Table 1S.** Molecular, retention time, accurate mass, mass errors of Fipronil and its products.

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| Compound Molecular formula RT (min) Precursor ion Mass error  Theoretical Experimental (ppm) |
| Fipronil C12H4Cl2F6N4OS 8.16 434.9314 434.9317 0.3  |
| Fipronil-sulfone C12H4Cl2F6N4O2S 8.36 450.9263 450.9267 0.4  |
| Fipronil desulfinyl C12H4Cl2F6N4 8.03 386.9639 386.9648 0.9  |

**Table 2S.** Computed use of Fipronil as veterinary drug per year in cats and dogs.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Population****dogs (N)** | **Treated****%** | **Treated****(N)** | **kg bw****mean** | **Posology****mg/kg per month** | **Treatments****per year****(N)** | **F use****mg per year** |
| 10,717,479 | 62 | 6,612,685 | 17.07 | 6.7 | 8888 | 6,273,586,080 |
| 82 | 8,756,180 | 8,307,163,415 |
| **Population****cats (N)** |  |  |  |  |  |
| 6,967,000 | 62 | 4,298,639 | 4.42 | 6.7 | 1,018,399,163 |
| 82 | 5,692,039 | 1,348,512,344 |

**Table 3S.** Descriptors of total Fipronil presence in house dust in the presence of pets (pets+), accounting for the availability or not (g+/g-) of a private garden in the household. Test statistic = 0.430356; P value = 0.511814.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Count*** | ***Average*** | ***Median*** | ***Standard deviation*** | ***MAD*** | ***Minimum*** | ***Maximum*** | ***Lower quartile*** |
| **pet+ g-** | 22 | 3298.77 | 832.61 | 5756.04 | 772.96 | 15.0 | 22605.9 | 155.91 |
| **pet+ g+** | 38 | 7499.18 | 442.48 | 15672.6 | 424.7 | 15.0 | 67798.6 | 54.48 |
| **Total** | 60 | 6032.37 | 466.7 | 13182.1 | 448.92 | 15.0 | 67798.6 | 75.68 |
|  | ***Upper quartile*** | ***Stnd. skewness*** | ***Stnd. kurtosis*** |
| **pet+ g-** | 3775.49 | 4.92505 | 6.21046 |
| **pet+ g+** | 6090.57 | 6.7734 | 8.26557 |
| **Total** | 4284.5 | 10.0411 | 16.1735 |