

# Chemical Factsheet

## Fenvalerate

### General Information

- Fact Sheet: [Fenvalerate.pdf](#)
- Product Names:
  - Ortho Roach, Ant and Spider Killer** (Monsanto), formulated with Petroleum distillates
  - Champion SprayOn Indoor Insect Fogger Formula 4** (Chase Products), formulated with N-Octyl bicycloheptene dicarboximide, [Tetramethrin](#)
  - Outdoor Ornamental Spray** (Whitmere Micro-Gen Research Labs), formulated with [Piperonyl Butoxide](#), [Tetramethrin](#)
  - Insect House Spray** (Scotts Company)
  - Cinch Bug Control** (Scotts Company)
- Chemical Class: Synthetic pyrethroid insecticide
- Beyond Pesticides rating: [Toxic](#)

### Health and Environmental Effects

*See citations at end of document.*

- Cancer: Not documented
- Endocrine Disruption: Yes (1)
- Reproductive Effects: Not documented
- Neurotoxicity: Yes (2)
- Kidney/Liver Damage: Yes (2)
- Sensitizer/ Irritant: Yes (3)
- Birth/Developmental: Not documented
- Detected in Groundwater: Not documented
- Potential Leacher: Not documented
- Toxic to Birds: Not documented
- Toxic to Fish/Aquatic Organisms: Yes (4)
- Toxic to Bees: Yes (4)

### Residential Uses as Found in the ManageSafe™ Database

- [Bed Bugs](#)

### Additional Information

- Regulatory Status:
  - All registrations voluntarily [cancelled](#) (effective 7/2008)
  - import tolerances remain
- Supporting information:
  - [Asthma, Children and Pesticides](#) (Beyond Pesticides)
  - [PAN Pesticides Database:Fenvalerate](#) (Pesticide Action Network)
  - [Scorecard Fenvalerate Factsheet](#) (Environmental Defense Fund)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]

[Health Effects of Pesticides Used for Mosquito Control](#) Citizens Campaign for the Environment (CCE) and Citizens Environmental Research Institute (CERI) 2002.

- [An endocrine-disrupting chemical, fenvalerate, induces cell cycle progression and collagen type I expression in human uterine leiomyoma and myometrial cells.](#) Gao X, Yu L, Castro L, Moore AB, et al. 2010. *Toxicol Lett.* 196(3):133-41
- [Pesticide contamination of bird species from Doñana National Park \(southwestern Spain\): Temporal trends \(1999-2021\) and reproductive impacts.](#) Peris, A., Baos, R., Martínez, A., Sergio, F., Hiraldo, F. and Eljarrat, E., Available at SSRN 4312955.
- [Behavioral and endocrine changes induced by perinatal fenvalerate exposure in female rats.](#) Moniz, A. C., Cruz-Casallas, P. E., Salzgeber, S. A., Varoli, F. M., Spinosa, H. S., & Bernardi, M. M. (2005). Behavioral and endocrine changes induced by perinatal fenvalerate exposure in female rats. *Neurotoxicology and teratology*, 27(4), 609-614. <https://doi.org/10.1016/j.ntt.2005.05.005>
- [In utero and lactational exposure to fenvalerate disrupts reproductive function in female rats.](#) Guerra, M. T., de Toledo, F. C., & Kempinas, W.deG. (2011). In utero and lactational exposure to fenvalerate disrupts reproductive function in female rats. *Reproductive toxicology (Elmsford, N.Y.)*, 32(3), 298-303. <https://doi.org/10.1016/j.reprotox.2011.08.002>
- [Adverse Effects of Pesticides on the Ovary: Evidence from Epidemiological and Toxicological Studies.](#) Wang, L., Ma, X. and Liu, J. (2025) Adverse Effects of Pesticides on the Ovary: Evidence from Epidemiological and Toxicological Studies, *Environment & Health*. Available at: <https://pubs.acs.org/doi/full/10.1021/envhealth.4c00243>.
- [Occurrence of pyrethroids in the atmosphere of urban areas of Southeastern Brazil: Inhalation exposure and health risk assessment.](#) Guida, Y., Pozo, K., Carvalho, G. O., Capella, R., Targino, A. C., Torres, J. P. M., & Meire, R. O. (2021). Occurrence of pyrethroids in the atmosphere of urban areas of Southeastern Brazil: Inhalation exposure and health risk assessment. *Environmental pollution (Barking, Essex : 1987)*, 290, 118020. <https://doi.org/10.1016/j.envpol.2021.118020>
- [Pyrethroids cypermethrin, deltamethrin and fenvalerate have different effects on in vitro maturation of pig oocytes at different stages of growth.](#) Petr, Jaroslav & Chmelíková, Eva & Žalmanová, Tereza & Tumova, Lenka & Kheilova, Katerina & Kučerová-Chrpová, V & Jílek, F. (2012). Pyrethroids cypermethrin, deltamethrin and fenvalerate have different effects on in vitro maturation of pig oocytes at different stages of growth. *Animal : an international journal of animal bioscience*. 7. 1-9. 10.1017/S1751731112001140.

## Gateway Health and Environmental Effects Citations

1. European Commission. Endocrine Disruptors: Study on Gathering Information on 435 Substances with Insufficient Data. Final Report. EU DG Environment: B4-3040/2001/325850/MAR/C2. BKH Consulting Engineers: M0355037. November 2002.

[http://ec.europa.eu/environment/chemicals/endocrine/pdf/bkh\\_report.pdf#page=76](http://ec.europa.eu/environment/chemicals/endocrine/pdf/bkh_report.pdf#page=76).

2. US EPA, 2000. Table 1: Toxicity Data by Category for Chemicals Listed under EPCRA Section 313. Toxic Release Inventory (TRI) Program.

[https://www.epa.gov/sites/production/files/documents/hazard\\_categories.pdf](https://www.epa.gov/sites/production/files/documents/hazard_categories.pdf)

3. Extension Toxicology Network (EXTOXNET) Pesticide Information Profiles.

<http://extoxnet.orst.edu/pips/ghindex.html>

4. Beyond Pesticides ChemWatch Factsheets. (Cited under factsheets on [Beyond Pesticides Gateway](#);

see top of individual chemical page)

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