

# Chemical Factsheet

## Fluvalinate

### General Information

- Fact Sheet: [Fluvalinate.pdf](#)
- Product Names:
  - Imidacloprid + Tau-Fluvalinate + Tebuconazole RTU** (Bayer), formulated with 1H-1,2,4-Triazole-1-ethanol, .alpha.-(2-(4-chlorophenyl)ethyl), [Imidacloprid](#)
  - Mavrik Aquaflo Insecticide** (Sandoz Agro)
  - Fluvalinate 80% Concentrate** (Sandoz Agro)
  - Zoecon RF-318 Apistan** (Wellmark Int.)
  - Tau-Fluvalinate Technical** (Wellmark Int.)
- Chemical Class: Synthetic pyrethroid insecticide
- Uses: Non-food agriculture, ornamentals
- Alternatives: [Organic agriculture](#), [Organic lawn care](#)
- Beyond Pesticides rating: [Toxic](#)

### Health and Environmental Effects

*See citations at end of document.*

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

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

- [Bagworms](#)
- [Thrips](#)

### Additional Information

- Regulatory Status:
  - [EPA Reregistration Eligibility Decision \(RED\) signed](#) (9/2005)
- Supporting information:
  - [Daily News Blog entries](#) (Beyond Pesticides)
  - [Asthma, Children and Pesticides](#) (Beyond Pesticides)
  - [Children & Lawn Chemicals Don't Mix](#) (Beyond Pesticides)

- [The Safer Choice](#) (Beyond Pesticides)
- [Extoxnet Fluvalinate Factsheet](#) (Extension Toxicology Network)
- [PAN Pesticides Database:Fluvalinate](#) (Pesticide Action Network)
- [Scorecard Fluvalinate Factsheet](#) (Environmental Defense Fund)
- [FAN Fluvalinate Factsheet](#) (Flouride Action Network)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]
  - [The molecular determinants of pesticide sensitivity in bee pollinators](#). Bass, C. et al (2024) The molecular determinants of pesticide sensitivity in bee pollinators, Science of The Total Environment. Available at: <https://www.sciencedirect.com/science/article/pii/S0048969724003097>.
  - [Lethal, sublethal, and combined effects of pesticides on bees: A meta-analysis and new risk assessment tools](#). Tosi, S., Sfeir, C., Carneseccchi, E., vanEngelsdorp, D., & Chauzat, M. P. (2022). Lethal, sublethal, and combined effects of pesticides on bees: A meta-analysis and new risk assessment tools. The Science of the total environment, 844, 156857. <https://doi.org/10.1016/j.scitotenv.2022.156857>
  - [Honey bee \(Apis mellifera\) gut microbiota promotes host endogenous detoxification capability via regulation of P450 gene expression in the digestive tract](#). Wu, Y., Zheng, Y., Chen, Y., Wang, S., Chen, Y., Hu, F., & Zheng, H. (2020). Honey bee (Apis mellifera) gut microbiota promotes host endogenous detoxification capability via regulation of P450 gene expression in the digestive tract. Microbial biotechnology, 13(4), 1201–1212. <https://doi.org/10.1111/1751-7915.13579>
  - [Chronic oral lethal and sub-lethal toxicities of different binary mixtures of pesticides and contaminants in bees \(Apis mellifera, Osmia bicornis and Bombus terrestris\)](#). Spurgeon, David & Hesketh, Helen & Lahive, Elma & Svendsen, Claus & Baas, Jan & Robinson, Alex & Horton, Alice & Heard, Matthew. (2016). Chronic oral lethal and sub-lethal toxicities of different binary mixtures of pesticides and contaminants in bees (Apis mellifera, Osmia bicornis and Bombus terrestris). EFSA Supporting Publications. 13. 10.2903/sp.efsa.2016.EN-1076.

## Gateway Health and Environmental Effects Citations

1. 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)
2. Extension Toxicology Network (EXTOXNET) Pesticide Information Profiles. <http://extoxnet.orst.edu/pips/ghindex.html>
3. California Environmental Protection Agency. Proposition 65: Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. Office of Environmental Health Hazard Assessment. February 25, 2022. <https://oehha.ca.gov/media/downloads/proposition-65//p65chemicalslistsinglelisttable2021p.pdf>
4. Yueh, MF et al. 2014. [The commonly used antimicrobial additive triclosan is a liver tumor promoter](#). PNAS doi: 10.1073/pnas.1419119111. *Triclosan promotes liver cancer cell development and proliferation in mice through pathways common to humans.*