

Chemical Factsheet

Carfentrazone-ethyl

General Information

- Product Names:
 - Cyclone** (Syngenta)
 - Aim** (FMC)
 - Stingray Aquatic** (FMC)
- Chemical Class: Aryl Triazolinone herbicide
- Uses: Agriculture, turf
- Alternatives: [Organic agriculture](#), [Organic lawn care](#)
- Beyond Pesticides rating: [Toxic](#)

Health and Environmental Effects

See citations at end of document.

- Cancer: Possible (1, 2)
- Endocrine Disruption: Insufficiently Studied
- Reproductive Effects: Possible (3)
- Neurotoxicity: Not Likely
- Kidney/Liver Damage: Probable (1, 4)
- Sensitizer/ Irritant: Eye Irritant (3)
- Birth/Developmental: Possible (3)
- Detected in Groundwater: Possible (2)
- Potential Leacher: Slightly (3)
- Toxic to Birds: Yes (1)
- Toxic to Fish/Aquatic Organisms: Yes (5)
- Toxic to Bees: Possible (1)

Additional Information

- Regulatory Status:
 - [EPA Factsheet](#) (1998)
- Supporting information:
 - [PAN Pesticides Database](#) (Pesticide Action Network)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]
 - [Ecotoxicity of herbicide carfentrazone-ethyl towards earthworm Eisenia fetida in soil](#). Li, M., Ma, X., Wang, Y., Saleem, M., Yang, Y., & Zhang, Q. (2022). Ecotoxicity of herbicide carfentrazone-ethyl towards earthworm Eisenia fetida in soil. Comparative biochemistry and physiology. Toxicology & pharmacology : CBP, 253, 109250. <https://doi.org/10.1016/j.cbpc.2021.109250>

Gateway Health and Environmental Effects Citations

1. The University of Hertfordshire. 2021. PPDB: Pesticide Properties DataBase - Carfentrazone-ethyl. <https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/123.htm>

2. European Food Safety Authority (EFSA), 2016. Peer review of the pesticide risk assessment of the active substance carfentrazone-ethyl. *EFSA Journal*, 14(8), p.e04569.

<https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa>.

3. Thurston County Health Department. 2014. Olympia, Washington. Thurston County Review Summary: Carfentrazone-ethyl.

https://www.co.thurston.wa.us/health/ehipm/pdf_aqua/aquatic%20actives/carfentrazone-ethyl.pdf

4. FMC Corporation. 2014. MATERIAL SAFETY DATA SHEET: Anthem Flex Herbicide.

https://s3-us-west-1.amazonaws.com/www.agrian.com/pdfs/Anthem_Flex_MSDS.pdf

5. U.S. EPA, Office of Prevention, Pesticides and Toxic Substances, New Active Ingredients Factsheets:

<http://web.archive.org/web/20120107215849/http://www.epa.gov/opprd001/factsheets/index.htm>

Factsheet generated on July 9, 2026