

# Chemical Factsheet

## Acetochlor

### General Information

- Product Names:
  - Suerstart** (Dow) formulated with [Clopyralid](#)
  - Fultime** (Dow) formulated with [Atrazine](#)
  - Keystone** (Dow) formulated with [Atrazine](#)
  - Volley** (Tenkoz)
  - Cadence** (Loveland)
  - Harness** (Monsanto) formulated with [Atrazine](#)
  - Tophand** (Monsanto)
  - Tremor** (United Suppliers)
  - Surpass** (Dow)
  - Breakfree** (Dupont)
- Chemical Class: Chloroacetanilide herbicide
- Uses: Preemergent weed control on field corn and popcorn.
- Alternatives: [Organic agriculture](#)
- Beyond Pesticides rating: [Toxic](#)

### Health and Environmental Effects

*See citations at end of document.*

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

### Additional Information

- Regulatory Status:
  - [EPA Registration Documents](#)
  - [Drinking Water Treatability Database](#)
- Supporting information:
  - [Exttoxnet pesticide Factsheet](#) (Extension Toxicology Network)
  - [CDC Biomonitoring Summary](#)
  - PAN Pesticides Database: [Acetochlor](#) (Pesticide Action Network)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]

- [Autism: Transient in utero hypothyroxinemia related to maternal flavonoid ingestion during pregnancy and to other environmental antithyroid agents](#). Román, G, C. 2007. Journal of the Neurological Sciences; 262(1-2), pp 15-26
- [A cocktail of contaminants: how mixtures of pesticides at low concentrations affect aquatic communities](#). Relyea R. A. (2009). A cocktail of contaminants: how mixtures of pesticides at low concentrations affect aquatic communities. *Oecologia*, 159(2), 363–376. <https://doi.org/10.1007/s00442-008-1213-9>
- [Exposure to pesticides is correlated with gut microbiota alterations in a farmland raptor](#). Bariod, L. et al. (2025) Exposure to pesticides is correlated with gut microbiota alterations in a farmland raptor, *Environment International*. Available at: <https://www.sciencedirect.com/science/article/pii/S0160412025001874>.
- [Occurrence of Current-Use Pesticides in Paired Indoor Dust, Drinking Water, and Urine Samples from the United States: Risk Prioritization and Health Implications](#). Xie, Y., Li, J., Salamova, A., & Zheng, G. (2025). Occurrence of Current-Use Pesticides in Paired Indoor Dust, Drinking Water, and Urine Samples from the United States: Risk Prioritization and Health Implications. *Environmental science & technology*, 59(25), 12507–12519. <https://doi.org/10.1021/acs.est.5c00961>
- [Reduced birth weight in relation to pesticide mixtures detected in cord blood of full-term infants](#). Wickerham, Erin L et al. “Reduced birth weight in relation to pesticide mixtures detected in cord blood of full-term infants.” *Environment international* vol. 47 (2012): 80-5. doi:10.1016/j.envint.2012.06.007
- [Association between pesticide exposure and colorectal cancer risk and incidence: A systematic review](#). Matich, E. K., Laryea, J. A., Seely, K. A., Stahr, S., Su, L. J., & Hsu, P. C. (2021). Association between pesticide exposure and colorectal cancer risk and incidence: A systematic review. *Ecotoxicology and environmental safety*, 219, 112327. <https://doi.org/10.1016/j.ecoenv.2021.112327>
- [Pesticide Prioritization by Potential Biological Effects in Tributaries of the Laurentian Great Lakes](#). Oliver, S.K., Corsi, S.R., Baldwin, A.K., Nott, M.A., Ankley, G.T., Blackwell, B.R., Villeneuve, D.L., Hladik, M.L., Kolpin, D.W., Loken, L., DeCicco, L.A., Meyer, M.T. and Loftin, K.A. (2023), Pesticide Prioritization by Potential Biological Effects in Tributaries of the Laurentian Great Lakes. *Environ Toxicol Chem*, 42: 367-384. <https://doi.org/10.1002/etc.5522>
- [Metabolome disruption of pregnant rats and their offspring resulting from repeated exposure to a pesticide mixture representative of environmental contamination in Brittany](#). Bonvallet N, Canlet C, Blas-Y-Estrada F, Gautier R, Tremblay-Franco M, Chevolleau S, et al. (2018) Metabolome disruption of pregnant rats and their offspring resulting from repeated exposure to a pesticide mixture representative of environmental contamination in Brittany. *PLoS ONE* 13(6): e0198448. <https://doi.org/10.1371/journal.pone.0198448>

## Gateway Health and Environmental Effects Citations

1. US EPA, Office of Prevention, Pesticides and Toxic Substances, Reregistration Eligibility Decisions (REDs), Interim REDs (iREDs) and RED Factsheets. <https://archive.epa.gov/pesticides/reregistration/web/html/status.html>.
2. 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//p65chemicalslistsingletable2021.pdf>
3. Colborn, T., D. Dumanoski, and J.P. Myers. 1996. *Our Stolen Future: Are We Threatening Our*

Fertility, Intelligence, and Survival? New York: Dutton. <http://ourstolenfuture.org/Basics/chemlist.htm>

4. 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).

Factsheet generated on April 30, 2026