Chemical Factsheet

Trichlorfon

General Information

- Product Names:
  Dylox (Bayer Environmental Science)
  New Sod Webworm Control (United Industries)
  Dipterex (Bayer Environmental Science)
  Prentox (Prentiss)
  Proxol (Agrevo USA)
- Chemical Class: Organophosphate insecticide
- Uses: Golf course turf, home lawns, non-food contact areas of food and meat processing plants, ornamental shrubs and plants, and ornamental and bait fish ponds to control insects such as lepidopteran larvae (caterpillars), white grubs, mole crickets, cattle lice, sod webworms, leaf miners, stink bugs, flies, ants, cockroaches, earwigs, crickets, diving beetle, water scavenger beetle, water boatman backswimmer, water scorpions, giant water bugs and pillbugs
- Alternatives: Organic golf course managment, Organic lawn
- Beyond Pesticides rating: Toxic

Health and Environmental Effects

See citations at end of document.

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

Residential Uses as Found in the ManageSafe™ Database

- Grubs
- Chinch Bugs

Additional Information

- Regulatory Status:
  - EPA Reregistration Eligibility Decision (RED) signed (7/2006)
  - Beyond Pesticides' Organophosphate cumulative risk comments.
- Supporting information:

    - Asthma, Children and Pesticides (Beyond Pesticides)
    - Extoxnet Trichlorfon Factsheet (Extension Toxicology Network)
    - PAN Pesticides Database:Trichlorfon (Pesticide Action Network)
    - Scorecard Trichlorfon Factsheet (The Pollution Information Site)
- Studies [compiled from the Pesticide-Induced Diseases Database]
    - Incident Diabetes and Pesticide Exposure among Licensed Pesticide Applicators: Agricultural Health Study, 1993–2003. Montgomery, M.P., et al. *American Journal of Epidemiology*, 2009.
    - Incident Diabetes and Pesticide Exposure among Licensed Pesticide Applicators: Agricultural Health Study, 1993–2003. Montgomery et al. American Journal of Epidemiology 2008 167(10):1235-1246
    - Incident diabetes and pesticide exposure among licensed pesticide applicators: Agricultural Health Study, 1993-2003. Montgomery, M. P., Kamel, F., Saldana, T. M., Alavanja, M. C., & Sandler, D. P. (2008). Incident diabetes and pesticide exposure among licensed pesticide applicators: Agricultural Health Study, 1993-2003. American journal of epidemiology, 167(10), 1235–1246. https://doi.org/10.1093/aje/kwn028
    - Temporal trends of agricultural organophosphate pesticide use in California and proximity to pregnant people in 2021. Rotkin-Ellman, M., Carpenter, C., Richardson, M.J. et al. Temporal trends of agricultural organophosphate pesticide use in California and proximity to pregnant people in 2021. BMC Public Health 25, 3121 (2025). https://doi.org/10.1186/s12889-025-23939-y

Gateway Health and Environmental Effects Citations

1. EPA weight-of-evidence category, "Likely to be carcinogenic to humans (high dose); Not likely to be carcinogenic to humans (low doses)." US EPA, 2005. Office of Pesticide Programs. List of Chemicals Evaluated for Carcinogenic Potential. May 10, 2005. http://www.epa.gov/pesticides/carlist/

2. Extension Toxicology Network (EXTOXNET) Pesticide Information Profiles. http://extoxnet.orst.edu/pips/ghindex.html

3. US EPA, 2006. Hazard Assessment of the Organophosphates. Hazard ID Committee Report. http://www.epa.gov/oppsrrd1/cumulative/2006-op/op_cra_main.pdf

4. 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.

Factsheet generated on February 1, 2026