

Chemical Factsheet

Disulfoton

General Information

- Product Names:
 - Bonide** (Bonide Products, Inc)
 - Di-Syston** (Bayer Cropscience)
 - Terraclor Super X** (Chemtura)
- Chemical Class: Organophosphate insecticide
- Uses: Agriculture asparagus, broccoli, Brussels sprouts, cabbage, Chinese cabbage, cauliflower, coffee, lettuce, pepper (bell, chili, and pimento), barley, succulent beans (lima and snap), cotton, peanuts, white/Irish potato, wheat, clover grown for seed, radish grown for seed, commercially grown ornamental flowers/groundcover/herbaceous plants, ornamental shrubs and trees, ornamental woody shrubs and vines (field or nursery stock), and Christmas trees, Residential flowers and ornamentals; Target aphids, beetle (Colorado potato, cottonwood leaf, elm leaf, flea, Mexican bean), billbugs, bugs, borers, fly (Hessian), grasshoppers, leafhoppers, leafminer (birch, holly), mealybugs, midge (sorghum), mite (banks grass, red spider), moth (Nantucket pine tip, pine shoot, pine tip), psyllids (potato), scale (camellia, European elm, rhododendron, soft brown, soft, tea), thrips, webworm (mimosa), wireworm (southern potato), and whiteflies.
- Alternatives: [Organic agriculture](#), [Organic Christmas trees](#), [Organic lawn care](#)
- Beyond Pesticides rating: [Toxic](#)

Health and Environmental Effects

See citations at end of document.

- Cancer: Unlikely (1)
- Endocrine Disruption: Not documented
- Reproductive Effects: Yes (1)
- Neurotoxicity: No (2)
- Kidney/Liver Damage: Yes (1)
- Sensitizer/ Irritant: Yes (2)
- Birth/Developmental: Yes (1)
- Detected in Groundwater: Yes (1, 3)
- Potential Leacher: Yes (4)
- Toxic to Birds: Yes (2)
- Toxic to Fish/Aquatic Organisms: Yes (2, 1)
- Toxic to Bees: Yes (2)

Additional Information

- Regulatory Status:
 - [EPA Reregistration Eligibility Decision \(RED\) signed](#) (7/2006)
- Supporting information:
 - [Daily News Blog entries](#) (Beyond Pesticides)
 - [Exttoxnet Disulfoton Factsheet](#) (Extension Toxicology Network)

- [PAN Pesticides Database:Disulfoton](#) (Pesticide Action Network)
- [Scorecard Disulfoton Factsheet](#) (Environmental Defense Fund)
- [Agency for Toxic Substances & Disease Registry](#)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]
 - [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. Extension Toxicology Network (EXTOXNET) Pesticide Information Profiles. <http://extoxnet.orst.edu/pips/ghindex.html>
2. 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>.
3. U.S. Geological Survey, Pesticides in the Nation's Streams and Ground Water, 1992-2001. <http://water.usgs.gov/nawqa/pnsp/pubs/circ1291/appendix7>.
4. Pesticide Action Network Pesticide Database. http://www.pesticideinfo.org/Search_Chemicals.jsp.

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