Chemical Factsheet

Methyl parathion

General Information

- Product Names:
  Cheminova Methyl prarthion Technical (Cheminova)
- Chemical Class: Organophosphate insecticide
- Uses: Control of many types of pests, including mites, thrips, weevils, aphids, and leafhoppers on terrestrial food and feed crops: Alfalfa, almonds, barley, dried beans, cabbage, corn, cotton, grass forage/fodder/hay, hops, lentils, oats, onion, pastures, dried peas, pecans, rangeland, rape seed (canola), rice, rye, soybeans, sugar beets, sunflower, sweet potatoes, walnuts, wheat, white potatoes, and yams.
- Alternatives: Organic agriculture
- 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: Yes (**1**)
- Kidney/Liver Damage: Not documented
- Sensitizer/ Irritant: Not documented
- Birth/Developmental: Not documented
- Detected in Groundwater: Not documented
- Potential Leacher: Not documented
- Toxic to Birds: Yes (**2**)
- Toxic to Fish/Aquatic Organisms: Yes (**2**)
- Toxic to Bees: Yes (**2**)

Additional Information

- Regulatory Status:
  - EPA Reregistration Eligibility Decision (RED) signed (7/2006)
- Supporting information:
  - Extoxnet Methyl parathion Factsheet (Extension Toxicology Network)
  - PAN Pesticide Database (Pesticde Action Network)
- Studies [compiled from the Pesticide-Induced Diseases Database]
  - Pesticides and prostate cancer incidence and mortality: An environment-wide association study. Soerensen, S. et al. (2024) Pesticides and prostate cancer incidence and mortality: An environment-wide association study, Cancer. Available at: https://acsjournals.onlinelibrary.wiley.com/doi/10.1002/cncr.35572.
  - Pesticide-Induced Inflammation at a Glance. Lopes-Ferreira, M. et al. (2023) 'Pesticide-induced inflammation at a glance', Toxics, 11(11), p. 896. doi:10.3390/toxics11110896.
  - 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.

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