Chemical Factsheet

Tribufos

General Information

- Product Names:
  Ax Tribufos 6 (Axion Ag Products, LLC)
  Tribufos 6 (Redeagle International LLC)
  Dft 6 Ec Cotton Defoliant (Loveland Products, Inc.)
  Folex 6 Ec (Amvac Chemical Corporation)
  Def 6 Emulsifiable Defoliant (Amvac Chemical Corporation)
  Def Technical Defoliant (Amvac Chemical Corporation)
  Tribufos Technical (Redeagle International LLC)
- Chemical Class: Organophosphate
- Uses: Used as a pre-harvest defoliant for cotton plants to remove leaves.
- Alternatives: Organic Agriculture
- Beyond Pesticides rating: Toxic

Health and Environmental Effects

See citations at end of document.

- Cancer: Yes (**1**)
- Endocrine Disruption: Not documented
- Reproductive Effects: Not documented
- Neurotoxicity: Not documented
- Kidney/Liver Damage: Not documented
- Sensitizer/ Irritant: Yes (**1**)
- 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: Not documented

Additional Information

- Regulatory Status:
  - EPA Tribufos
  - Toxicological Profile for S,S,S-Tributyl Phosphorotrithioate (Tribufos) March 2020 (Agency for Toxic Substances and Disease Registry)
  - EPA Reaches Agreements on Early Mitigation Measures for Three More Organophosphate Pesticides (May 25, 2023)
- Supporting information:
  - PubChem Hazardous Substances Database (National Library of Medicine)
- 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
- Proximity to residential and workplace pesticides application and the risk of progression of Parkinson's diseases in Central California. Li, S. et al. (2022) Proximity to residential and workplace pesticides application and the risk of progression of parkinson's diseases in Central California, Science of The Total Environment. Available at: https://www.sciencedirect.com/science/article/pii/S0048969722079542.
- Residential proximity to agricultural pesticide exposures during preconception and pregnancy and associations with Apgar scores in the Az-PEAR study (2006–2020). Yang, A. et al. (2026) Residential proximity to agricultural pesticide exposures during preconception and pregnancy and associations with Apgar scores in the Az-PEAR study (2006–2020), Journal of Exposure Science & Environmental Epidemiology. Available at: https://www.nature.com/articles/s41370-026-00849-8.
- Preconception and first trimester exposure to pesticides and associations with stillbirth. Furlong, M. A., Paul, K. C., Parra, K. L., Fournier, A. J., Ellsworth, P. C., Cockburn, M. G., Arellano, A. F., Bedrick, E. J., Beamer, P. I., & Ritz, B. (2025). Preconception and first trimester exposure to pesticides and associations with stillbirth. American journal of epidemiology, 194(1), 44–55. https://doi.org/10.1093/aje/kwae198
- The USA lags behind other agricultural nations in banning harmful pesticides. Donley, N. The USA lags behind other agricultural nations in banning harmful pesticides. Environ Health 18, 44 (2019). https://doi.org/10.1186/s12940-019-0488-0

Gateway Health and Environmental Effects Citations

1. National Library of Medicine. PubChem Hazardous Substances Database. PubChem (nih.gov)

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