Chemical Factsheet

Mancozeb

General Information

- Product Names:
  Ridomil (Syngenta) forumulated with Metalaxyl-M
  Maxim (Syngenta) fomulated with Fludioxonil
  Acrobat (BASF) formulated with Dimethomorph
  Stature (BASF) formulated with Dimethomorph
  Grain Guard (Chemtura)
  Moncoat (Gowan) formulated with Flutolanil
  Gavel (Gowan) formulated with Zoxamide
  Dithane (Dow)
  Penncozeb (United Phosphorus)
- Chemical Class: ethylene bisdithiocarbamate (EBDC) fungicide
- Uses: Fungicide used in agriculture, professional turf management, and horticulture, on a wide variety of food/feed crops, including tree fruits, vegetable crops, field crops and grapes, ornamental plants, and sod farms. Other uses include greenhouse grown flowers and ornamentals, and seed and seed piece treatment.
- Alternatives: Organic agriculture
- Beyond Pesticides rating: Toxic

Health and Environmental Effects

See citations at end of document.

- Cancer: Yes (**1**)
- Endocrine Disruption: Yes (**2**, **3**)
- Reproductive Effects: Not documented
- Neurotoxicity: Not documented
- Kidney/Liver Damage: Not documented
- Sensitizer/ Irritant: Yes (**4**)
- Birth/Developmental: Yes (**4**)
- Detected in Groundwater: Not documented
- Potential Leacher: Not documented
- Toxic to Birds: Not documented
- Toxic to Fish/Aquatic Organisms: Yes (**5**)
- Toxic to Bees: Yes (**6**)

Residential Uses as Found in the ManageSafe™ Database

- Mold

Additional Information

- Regulatory Status:
  - Beyond Pesticides' Comments (October 2024)

    - EPA Reregistration Eligibility Decision (RED) signed (9/2005)
    - EPA Factsheet (9/2005)
- Supporting information:
    - Extoxnet Mancozeb Factsheet (Extension Toxicology Network)
    - PAN Pesticides Database - Mancozeb (Pesticide Action Network)
- Studies [compiled from the Pesticide-Induced Diseases Database]
    - Top 15 Farmworker Poison
    - Adverse effects on sexual development in rat offspring after low dose exposure to a mixture of endocrine-disrupting pesticides.. Hass U, Boberg J, Christiansen S, Jacobsen PR, et al. 2012. Reprod Toxicol.34(2):261-74
    - 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
    - Pesticides expenditures by farming type and incidence of Parkinson disease in farmers: A French nationwide study. Perrin, L., Spinosi, J., Chaperon, L., Kab, S., Moisan, F. and Ebaz, A. Environmental Research, 197, p.111161.
    - Haematological and biochemical toxicity in freshwater fish Clarias gariepinus and Oreochromis niloticus following pulse exposure to atrazine, mancozeb, chlorpyrifos, lambda-cyhalothrin, and their combination. Kanu, K.C., Okoboshi, A.C. and Otitoloju, A.A., 2023. Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology, 270, p.109643.
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    - Exposure to multiple pesticides and neurobehavioral outcomes among smallholder farmers in Uganda. Samuel Fuhrimann, Andrea Farnham, Philipp Staudacher, Aggrey Atuhaire, Tiziana Manfioletti, Charles B. Niwagaba, Sarah Namirembe, Jonathan Mugweri, Mirko S. Winkler, Lutzen Portengen, Hans Kromhout, Ana M. Mora, Exposure to multiple pesticides and neurobehavioral outcomes among smallholder farmers in Uganda, Environment International, Volume 152, 2021, 106477, ISSN 0160-4120, https://doi.org/10.1016/j.envint.2021.106477.
    - Impact of Endocrine Disrupting Pesticide Use on Obesity: A Systematic Review. Pérez-

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Gateway Health and Environmental Effects Citations

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