Chemical Factsheet

Pentachlorophenol

General Information

- Product Names:
  Penta 5 Sure-Treat Wood Preserver (KMG-Bernuth)
  Dura-Treet 40 Wood Preserve (KMG-Bernuth)
  Pentacon (KMG-Bernuth)
- Chemical Class: Chlorophenol compound
- Uses: Restricted use heavy duty wood preservative (fungicide, bactericide, herbicide, molluscicide, algaecide and insecticide) targets carpenter ants, mold, powderpost beetles, termites, wood rot/decaying fungus, wood rot/decaying organisms, wood stain fungus.
- Alternatives: Wood preservative
- Beyond Pesticides rating: Toxic

Health and Environmental Effects

See citations at end of document.

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

Additional Information

- Regulatory Status:
  - EPA Reregistration Eligibility Decision (RED) signed (9/2008)
  - Beyond Pesticides' Revised Risk Assessment comments (6/2008)
- Supporting information:
  - Wood Preservatives Campaign (Beyond Pesticides)
  - Poison Poles (Beyond Pesticides, 1999)
  - Pole Pollution (Beyond Pesticides, 1997)
  - NCAP Pentachlorophenol Factsheet (Northwest Coalition for Alternatives to Pesticides)
  - Extoxnet Pentachlorophenol Factsheet (Extension Toxicology Network)
  - PAN Pesticides Database:Pentachlorophenol (Pesticide Action Network)
  - Scorecard Pentachlorophenol Factsheet (The Pollution Information Site)
  - Pentachlorophenol Factsheet (Washington Toxics Coalition)
- Studies [compiled from the Pesticide-Induced Diseases Database]

- Identifying childhood pesticide exposure trajectories and critical window associated with behavioral problems at 10 years of age: Findings from SMBCS. Ding, J. et al. (2024) Identifying childhood pesticide exposure trajectories and critical window associated with behavioral problems at 10 years of age: Findings from SMBCS, Environment International. Available at: https://www.sciencedirect.com/science/article/pii/S0160412024006652.
- 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.

Gateway Health and Environmental Effects Citations

1. EPA weight-of-evidence category, "Group B2 – Probable Human Carcinogen." US EPA, 2005. Office of Pesticide Programs. List of Chemicals Evaluated for Carcinogenic Potential. May 10, 2005. http://www.epa.gov/pesticides/carlist/

2. Illinois EPA, Endocrine Disruptors Strategy, February 1997. https://nepis.epa.gov/Exe/ZyNET.exe/910140ZK.txt

3. Feldman, J. and T. Shistar. 1997. Poison Poles: A Report About their toxic trail and the safer alternatives. National Coalition Against the Misuse of Pesticides. https://www.beyondpesticides.org/programs/wood-preservatives/publications/poison-poles.

4. Mineau, P., A. Baril, B.T. Collins , J. Duffe, G. Joerman, R. Luttik. 2001. Reference values for comparing the acute toxicity of pesticides to birds. Reviews of Environmental Contamination and Toxicology 170:13-74. http://web.archive.org/web/20081006213641/http://www.abcbirds.org/abcprograms/policy/pesticides/aims/aims/toxicitytable.cfm

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