

Chemical Factsheet

Profenofos

General Information

- Product Names:
CURACRON 8E INSECTICIDE-MITICIDE
- Chemical Class: Organophosphate insecticide/miticide
- Uses: Restricted use only on cotton crops to control the tobacco budworm, cotton bollworm, armyworm, cotton aphid, whiteflies, spider mites, plant bugs, and fleahoppers.
- Alternatives: Organic Agriculture
- Beyond Pesticides rating: [Toxic](#)

Health and Environmental Effects

See citations at end of document.

- Cancer: Not documented
- Endocrine Disruption: Suggestive (1)
- Reproductive Effects: Not documented
- Neurotoxicity: Yes (2)
- 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 factsheet Registration Eligibility Document \(2006\)](#)
- Supporting information:
 - [Occurrence of Cotton Pesticides in Surface Water of The Mississippi Embayment](#)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]
 - [Immune response of Brazilian farmers exposed to multiple pesticides](#). Jacobsen-Pereira, C.H. et al. (2020) 'Immune response of Brazilian farmers exposed to multiple pesticides', *Ecotoxicology and Environmental Safety*, 202, p. 110912. doi:10.1016/j.ecoenv.2020.110912.
 - [Case fatality of agricultural pesticides after self-poisoning in Sri Lanka: a prospective cohort study](#). Buckley, N. A., Fahim, M., Raubenheimer, J., Gawarammana, I. B., Eddleston, M., Roberts, M. S., & Dawson, A. H. (2021). Case fatality of agricultural pesticides after self-poisoning in Sri Lanka: a prospective cohort study. *The Lancet. Global health*, 9(6), e854–e862. [https://doi.org/10.1016/S2214-109X\(21\)00086-3](https://doi.org/10.1016/S2214-109X(21)00086-3)
 - [Insecticide Mixtures Could Enhance the Toxicity of Insecticides in a Resistant Dairy](#)

[Population of Musca domestica L.](#) Khan HAA, Akram W, Shad SA, Lee JJ (2013) Insecticide Mixtures Could Enhance the Toxicity of Insecticides in a Resistant Dairy Population of Musca domestica L. PLOS ONE 8(4): e60929.
<https://doi.org/10.1371/journal.pone.0060929>

Gateway Health and Environmental Effects Citations

1. Sultana, Z., Khan, M.M., Mostakim, G.M., Moniruzzaman, M., Rahman, M.K., Shahjahan, M. and Islam, M.S., 2021. Studying the effects of profenofos, an endocrine disruptor, on organogenesis of zebrafish. *Environmental Science and Pollution Research*, pp.1-9.
<https://pubmed.ncbi.nlm.nih.gov/33405136/>
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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