

Chemical Factsheet

2,4-D

General Information

- Fact Sheet: [2-4-D.pdf](#)
- Product Names:
 - Crossbow** (Dow), formulated with [Triclopyr](#), Petroleum distillates
 - GlyMIX MT** (Dow), formulated with [Glyphosate](#)
 - Grazon P+D** (Dow)
 - Pathway** (Dow)
 - Aqua-Kleen** (Nufarm America)
 - Barrage** (Helena Chemical)
 - Malerbane** (Aventis)
 - Weedone** (Nufarm America)
 - Weedtrine- II** (Nufarm America)
- Chemical Class: Phenoxy herbicide
- Uses: Registered for field, fruit, and vegetable crops, turf, lawns, rights-of-way, aquatic sites, forestry applications, post-emergence broadleaf weeds, plant growth regulator in citrus
- Alternatives: [Organic agriculture](#), [Organic Lawn care](#)
- Beyond Pesticides rating: [Toxic](#)

Health and Environmental Effects

See citations at end of document.

- Cancer: Yes (1)
- Endocrine Disruption: Yes (2, 3)
- Reproductive Effects: Yes (4)
- Neurotoxicity: Yes (5)
- Kidney/Liver Damage: Yes (5)
- Sensitizer/ Irritant: Yes (1)
- Birth/Developmental: Yes (1)
- Detected in Groundwater: Yes (1)
- Potential Leacher: Yes (5)
- Toxic to Birds: Yes (1)
- Toxic to Fish/Aquatic Organisms: Yes (6)
- Toxic to Bees: Yes (1)

Residential Uses as Found in the ManageSafe™ Database

- [Dandelions](#)
- [Clover](#)
- [Ground Ivy](#)
- [Plantains](#)
- [Japanese Knotweed](#)

Additional Information

- Regulatory Status:
 - [EPA's 2,4-D Background and Updates](#)
 - [Beyond Pesticides' comments on Preliminary Ecological Risk Assessment for Registration review](#) (7/2017)
 - [EPA Registration Review](#) (2017)
 - [Beyond Pesticides' comments on registration of Enlist Duo](#) (12/2016)
 - [Registration of Enlist Duo](#) (2014)
 - [EPA Reregistration Eligibility Document \(RED\) signed](#) (6/2005)
 - [Beyond Pesticides' RED comments](#) (8/2004)
- Supporting information:
 - [Daily News Blog entries](#) (Beyond Pesticides)
 - [Asthma, Children and Pesticides](#) (Beyond Pesticides)
 - [Children & Lawn Chemicals Don't Mix](#) (Beyond Pesticides)
 - [The Safer Choice](#) (Beyond Pesticides)
 - [NCAP 2,4-D Factsheet](#) (Northwest Coalition for Alternatives to Pesticides)
 - [PAN Pesticides Database: 2,4-D](#) (Pesticide Action Network)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]
 - [IARC Monographs evaluate DDT, lindane, and 2,4-D.](#) (2015)
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 - [Agricultural herbicide use and a risk of lymphoma and soft-tissue sarcoma.](#) Hoar, S., et al. 1986. *Journal of the American Medical Association* 259(9): 1141-1147
 - [Biomonitoring data for 2,4-dichlorophenoxyacetic acid in the United States and Canada:](#)

- [interpretation in a public health risk assessment context using Biomonitoring Equivalents](#). Aylward LL et al. 2010. Environ Health Perspect. 118(2):177-81
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 - [Cancer and pesticides: an overview and some results of the Italian multicenter case-control study on hematolymphopoietic malignancies](#). Miligi, L., et al. 2006. Ann N Y Acad Sci 1076:366-377
 - [Developmental Toxicity of a Commercial Herbicide Mixture in Mice: I. Effects on Embryo Implantation and Litter Size](#). Cavieres, M., et al. 2002. Environ Health Perspect 110:1081-1085
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5. Beyond Pesticides ChemWatch Factsheets. (Cited under factsheets on [Beyond Pesticides Gateway](#); see top of individual chemical page)
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