

Chemical Factsheet

Azoxystrobin

General Information

- Product Names:
 - Abound** (Syngenta)
 - Amistar** (Syngenta)
 - Dynasty** (Syngenta)
 - Heritage** (Syngenta)
 - Quadris** (Syngenta)
 - Protégé** (Bayer)
 - Sporgard** (Lanxess)
 - Quilt** (Syngenta) formulated with [Propiconazole](#)
 - Uniform** (Syngenta) formulated with [Metalaxyl](#)
- Chemical Class: beta-methoxyacrylate fungicide/antimicrobial; systemic
- Uses: Various agriculture and non-agricultural uses: fruits, vegetables, nuts, feed crops, turf, ornamentals, residential sites; additive treatment for paint, plastic, rubber, paper (textiles and adhesives); commercial/industrial sites.
- Alternatives: [Organic agriculture](#), [Organic lawn care](#)
- Beyond Pesticides rating: [Toxic](#)

Health and Environmental Effects

See citations at end of document.

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

Additional Information

- Regulatory Status:
 - [EPA Regulatory Documents](#)
- Supporting information:
 - [Exttoxnet Pesticide Factsheet](#) (Extension Toxicology Network)
 - [PAN Pesticides Database](#): (Pesticide Action Network)
- Studies [compiled from the [Pesticide-Induced Diseases Database](#)]
 - [Occurrence of Azoxystrobin, Propiconazole, and Selected Other Fungicides in US Streams.](#)

[2005–2006](#). [Battaglin, W, Sandstrom, M et al. 2010. Water Air Soil Pollution. 218 (1-4):307-322]

- [Occurrence, fate and effects of azoxystrobin in aquatic ecosystems: A review](#). [Rodrigues, ET, Lopes, I et al. 2013. Environment International 53:18–28]
- [Direct pesticide exposure of insects in nature conservation areas in Germany](#). Brühl, C.A., Bakanov, N., Köthe, S., Eichler, L., Sorg, M., Hörren, T., Mühlethaler, R., Meinel, G. and Lehmann, G.U. Scientific reports, 11(1), pp.1-10.
- [Bees under interactive stressors: the novel insecticides flupyradifurone and sulfoxaflor along with the fungicide azoxystrobin disrupt the gut microbiota of honey bees and increase opportunistic bacterial pathogens](#). Al Naggar, Y., Singavarapu, B., Paxton, R.J. and Wubet, T., 2022. Science of The Total Environment, 849, p.157941.
- [Single and combined exposure to ‘bee safe’ pesticides alter behaviour and offspring production in a ground-nesting solitary bee \(*Xenoglossa pruinosa*\)](#). Rondeau, S. and Raine, N. (2024) Single and combined exposure to ‘bee safe’ pesticides alter behaviour and offspring production in a ground-nesting solitary bee (*Xenoglossa pruinosa*), Proceedings of the Royal Society Biological Sciences. Available at: <https://royalsocietypublishing.org/doi/10.1098/rspb.2023.2939>.
- [Exposure to pesticides, persistent and non – persistent pollutants in French 3.5-year-old children: Findings from comprehensive hair analysis in the ELFE national birth cohort](#). Macheka, L. et al. (2024) Exposure to pesticides, persistent and non – persistent pollutants in French 3.5-year-old children: Findings from comprehensive hair analysis in the ELFE national birth cohort, Environment International. Available at: <https://www.sciencedirect.com/science/article/pii/S0160412024004677>.
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- [Pesticides and prostate cancer incidence and mortality: An environment-wide association study](#). Soerensen, S. et al. (2024) Pesticides and prostate cancer incidence and mortality: An environment-wide association study, Cancer. Available at: <https://acsjournals.onlinelibrary.wiley.com/doi/10.1002/cncr.35572>.
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- [Assessing the Presence of Current-Use Pesticides in Mid-Elevation Sierra Nevada Streams Using Passive Samplers, California, 2018–19](#). De Parsia, M.D., Orlando, J.L., and Hladik, M.L., 2023, Assessing the presence of current-use pesticides in mid-elevation Sierra Nevada streams using passive samplers, California, 2018–19: U.S. Geological Survey Scientific Investigations Report 2022–5129, 31 p., <https://doi.org/10.3133/sir20225129>.
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- [Different effects of polyethylene microplastics on bioaccumulation of three fungicides in](#)

- [maize \(*Zea mays* L.\)](#). Qiu, S., Shen, H., Song, J. et al. Different effects of polyethylene microplastics on bioaccumulation of three fungicides in maize (*Zea mays* L.). *Crop Health* 2, 7 (2024). <https://doi.org/10.1007/s44297-024-00028-x>
- [The influence of polyethylene microplastics on pesticide residue and degradation in the aquatic environment](#). Wang, F., Gao, J., Zhai, W., Liu, D., Zhou, Z., & Wang, P. (2020). The influence of polyethylene microplastics on pesticide residue and degradation in the aquatic environment. *Journal of hazardous materials*, 394, 122517. <https://doi.org/10.1016/j.jhazmat.2020.122517>
 - [Intensive vegetable production under plastic mulch: A field study on soil plastic and pesticide residues and their effects on the soil microbiome](#). Beriot, N., Zornoza, R., Lwanga, E. H., Zomer, P., van Schothorst, B., Ozbolat, O., Lloret, E., Ortega, R., Miralles, I., Harkes, P., van Steenbrugge, J., & Geissen, V. (2023). Intensive vegetable production under plastic mulch: A field study on soil plastic and pesticide residues and their effects on the soil microbiome. *The Science of the total environment*, 900, 165179. <https://doi.org/10.1016/j.scitotenv.2023.165179>
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 - [Occurrence of Current-Use Pesticides in Paired Indoor Dust, Drinking Water, and Urine](#)

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Gateway Health and Environmental Effects Citations

1. 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>.

2. U.S. EPA, Office of Prevention, Pesticides and Toxic Substances, New Active Ingredients Factsheets:

<http://web.archive.org/web/20120107215849/http://www.epa.gov/opprd001/factsheets/index.htm>

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