

# Proposed Groundwater Standards

Wis. Admin. Code NR 140  
Cycle 10



## Imidacloprid

### How is it used in Wisconsin?

Imidacloprid is a neonicotinoid insecticide that is used widely in Wisconsin. It is the active ingredient in a large number of insecticide products used to control soil insect pests, insects that feed on plant tissues, structures, and pets. Its largest volume of use is in agriculture products as seed treatments and spraying leaves for corn, soybeans, beans, potatoes, small grains, vegetables, fruit crops, and more. It is also used in non-agriculture products in pet and companion animal collars and sprays, in products for residential trees and ornamentals, and in products used in and around homes for ants, roaches and other household pests. It was registered by the U.S. Environmental Protection Agency in 1994.

### What are some products that contain this substance?

Some common products that use imidacloprid include Admire® (soil and leaf pests), Advantage® (flea control pet collars and sprays), Gaucho® (seed treatment), Imicide (ornamental tree pests), Merit® (for commercial nurseries and lawn and landscape pest control), and Premise® (for termites and structural pests). There are many other products registered for other uses<sup>1</sup>.

### Who manufactures this substance?

The primary manufacturer is Bayer CropScience, but it is also manufactured by others.

### Why has this substance been recommended for establishment of groundwater standards?

There is currently no standard for imidacloprid in Wisconsin. The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has tested for it since 2006. As of November 2021, imidacloprid was detected in:

- 160 of 1,981 private wells
- 331 of 951 samples collected from monitoring wells installed near agricultural fields

A standard will help homeowners and state agencies make decisions about future water use and potential public health concerns.

### What are the proposed standards?

- Enforcement standard: 0.2 µg/L (micrograms per liter)
- Preventive action limit standard: 0.02 µg/L

### Has this substance been detected above the proposed groundwater standards?

Yes. Since 2006, for private wells it has been detected in 90 samples above the proposed enforcement standard and in 153 samples above the proposed preventive action limit. The highest concentration of imidacloprid detected in a private well sample by DATCP was 2.19 µg/L. Of the 331 monitoring well samples, it has been detected at concentrations of 0.0106–6.7 µg/L.

### Where can I find more information?

- Information about this and other neonicotinoid insecticides:  
<https://datcp.wi.gov/Documents/NeonicotinoidReport.pdf>
- Health-based standards:  
<https://www.dhs.wisconsin.gov/water/gws.htm>
- NR 140 rule process:  
<https://dnr.wi.gov/topic/Groundwater/NR140.html>

### Who do I contact for questions?

DATCP Groundwater Specialist  
(608) 224-4503  
[datcpgw@wisconsin.gov](mailto:datcpgw@wisconsin.gov)

*This fact sheet provides general information for this pesticide ingredient. A groundwater quality standard has been proposed for this substance in accordance with state law (Wis. Stat. § 160).*

<sup>1</sup> Almost 400 products are registered for use in Wisconsin, with about half in household and half in non-household categories.

