

# Proposed Groundwater Standards

Wis. Admin. Code NR 140  
Cycle 10



## Thiamethoxam

### How is it used in Wisconsin?

Thiamethoxam is a neonicotinoid insecticide that is used widely in Wisconsin. Thiamethoxam is the active ingredient in a variety of products used in agriculture to kill sucking and chewing insects that feed on roots, leaves, and other plant tissues. Agricultural uses include soil and seed treatments as well as leaf spraying for most row and vegetable crops like corn, soybeans, snap beans, and potatoes. It is also used to control insects in livestock pens, poultry houses, sod farms, golf courses, lawns, household plants, and tree nurseries. It was first registered by the U.S. Environmental Protection Agency in 1999.

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

Thiamethoxam is the active ingredient in more than 50 products registered in Wisconsin, most of which are for agricultural applications. Some common agricultural products include Cruiser<sup>®</sup>, Cruiser Maxx<sup>®</sup>, Endigo<sup>®</sup>, Helix<sup>®</sup>, Platinum<sup>®</sup>, Avicta<sup>®</sup>, and Actara<sup>®</sup>. Some commercial and residential products include Tandem<sup>®</sup> Insecticide, Caravan<sup>™</sup>, Flagship<sup>®</sup>, Bonide<sup>®</sup> Rose Shield<sup>™</sup>, and Raid<sup>®</sup> Ant Gel.

### Who manufactures this substance?

Syngenta is the primary manufacturer of thiamethoxam.

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

There is currently no standard for thiamethoxam in Wisconsin. The Wisconsin Department of Agriculture, Trade and Consumer Protection has tested for it since 2008. Thiamethoxam has been detected in:

- 135 of 1,985 private drinking well samples
- 338 of 965 samples collected from monitoring wells installed near agricultural fields

A standard will help homeowners and state agencies make decisions about ongoing water use and potential public health concerns. Use of this substance means there is a chance for an accidental spill and a potential impact to groundwater.

### What are the proposed standards? <sup>1</sup>

- Enforcement standard: 120 µg/L (micrograms per liter)
- Preventive action limit standard: 12 µg/L

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

No. The highest concentrations of thiamethoxam detected in a private well was 4.09 µg/L, and 8.93 µg/L in a monitoring well.

### 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)

*1 - Proposed ES and PAL standards were revised by the Wisconsin Department of Health Services (see Recommended Public Health Groundwater Quality Standards Scientific Support Documents for Cycle 10 Substances January 2022).*

*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).*

