

Proposed Groundwater Standards

Wis. Admin. Code NR 140
Cycle 11



Fomesafen

How is it used in Wisconsin?

Fomesafen is a Group 14 protoporphyrinogen oxidase (PPO) inhibitor, also known as a cell membrane disruptor, herbicide primarily used to control grass and broadleaf weeds in soybeans and cotton. Fomesafen works in a plant by inhibiting the oxidase enzyme to block production of chlorophyll. It was first registered by the U.S. Environmental Protection Agency in 1987.

What are some products that contain this substance?

Fomesafen is registered in Wisconsin for use in 38 products. Some common products that use fomesafen include Reflex, Flexstar, Prefix, and Warrant Ultra.

Who manufactures this substance?

The primary manufacturer is Syngenta, but it is also manufactured by FMC, Loveland, Helena, Sharda, Drexel, Winfield, Albaugh, Monsanto, ADAMA, NuFarm, RedEagle International, Willowood, Atticus, and Tigris.

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

There is currently no standard for fomesafen in Wisconsin. The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has tested for it since 2015. As of November 2021 fomesafen was detected in:

- 22 of 1,469 private well samples, and
- 13 out of 658 field edge monitoring well samples.

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: 25 µg/L (micrograms per liter)
- Preventive action limit standard: 5 µg/L

Has this substance been detected above the proposed groundwater standards?

No. Since 2015 it has not been detected above the proposed enforcement standard or preventive action limit in any samples collected by DATCP. The highest concentration of fomesafen detected in a private well sample collected by DATCP was 4.14 µg/L. It was detected at concentrations between 0.0769 and 4.3 µg/L in 13 field edge monitoring well samples collected by DATCP.

Where can I find more information?

- 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

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).

