

# Proposed Groundwater Standards

Wis. Admin. Code NR 140  
Cycle 10



## Sulfentrazone

### How is it used in Wisconsin?

Sulfentrazone is an herbicide active ingredient used to control broadleaf weeds, grasses, and sedges. Products that contain sulfentrazone are commonly used in agriculture on soybeans. Common residential and commercial uses include sprays for use on home lawns, turf, rights-of-ways, and fence rows. Sulfentrazone controls weeds by a process of membrane disruption commonly referred to as PPO inhibition. This process takes place when the roots of a treated plant take up the herbicide and then die after emerging from the treated soil into sunlight. Sulfentrazone was first registered with the U.S. Environmental Protection Agency (EPA) in 1997.

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

Sulfentrazone is the active ingredient in almost 100 products sold in Wisconsin. Common agricultural products are sold under the Authority® trade name. Sulfentrazone can also be found in residential-use products sold under the Spectracide, Scotts®, Gordon's, and Ortho® brands.

### Who manufactures this substance?

FMC Corporation was the original manufacturer of sulfentrazone. Companies that also carry sulfentrazone products include Dow AgroSciences, Helm Agro US, and the Scotts Company.

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

EPA reports that sulfentrazone has chemical characteristics that make it likely to leach into groundwater in conditions of coarse grained soils overlying shallow groundwater. A 1995 EPA report showed that in North Carolina, sulfentrazone used on sandy and sandy loam soils resulted in impacts to groundwater ranging from 5 to 50 µg/L (micrograms per liter). Use of this substance means there is a chance for an accidental spill, and the high mobility of sulfentrazone could potentially impact groundwater. A standard will help homeowners and state agencies make

decisions about ongoing water use and potential public health concerns.

### What are the proposed standards?

- Enforcement standard: 1,000 µg/L
- Preventive action limit standard: 100 µg/L

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

No. The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) began testing for sulfentrazone in 2015. It was detected in a few monitoring well samples and one private well sample in 2018. The highest concentration detected was 0.29 µg/L.

### Where can I find more information?

- This and other pesticides:  
[https://datcp.wi.gov/Pages/Programs\\_Services/GroundwaterStdsPesticides.aspx](https://datcp.wi.gov/Pages/Programs_Services/GroundwaterStdsPesticides.aspx)
- 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).*

