Thiencarbazone-methyl

How is it used in Wisconsin?
Thiencarbazone-methyl is an herbicide active ingredient that controls grass and broadleaf weeds. Thiencarbazone-methyl is a low-use-rate herbicide, with use limited to just 0.040 lbs per acre as a maximum seasonal use rate on corn, turf, and ornamentals. It is readily absorbed by both roots and leaves of susceptible weeds, but not apparent until several days after treatment. Symptoms that are present after treatment include chlorotic, crinkled, stunted, and distorted leaves, dead tissue, and gradual death. Thiencarbazone-methyl is used in agricultural settings on corn and wheat; residential uses include turf and ornamentals; and non-residential uses include rights-of-ways and pipeline facilities. It was first registered for use with the U.S. Environmental Protection Agency (EPA) in 2008.

What are some products that contain this substance?
Thiencarbazone-methyl is the active ingredient in seven products sold in Wisconsin. Most of these products have agricultural uses, but some have commercial and residential uses as well. The three most common products used in agriculture include Capreno, Corvus, and Huskie Complete herbicides. Tribute Total herbicide is an example of a product that may be used in residential and commercial applications.

Who manufactures this substance?
Bayer AG is the manufacturer of thiencarbazone-methyl.

Why has this substance been recommended for establishment of groundwater standards?
Based on its chemical characteristics, EPA requires that all labels for products containing thiencarbazone-methyl include surface water and groundwater advisory statements. This statement is required for substances that are highly soluble and prone to leaching. If not used properly, thiencarbazone-methyl can migrate to groundwater. Areas with permeable soils and shallow groundwater are susceptible to groundwater contamination. It can also reach surface water via runoff if not used properly. Use of this substance means there is a chance for an accidental spill, and the high mobility of thiencarbazone-methyl could potentially impact groundwater. A groundwater 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: 10,000 µg/L (micrograms per liter)
- Preventive action limit standard: 2,000 µg/L

Has this substance been detected above the proposed groundwater standards?
No. In 2015 the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) began testing for thiencarbazone-methyl. DATCP has not detected it in any private well samples, but it has been detected at field edge monitoring wells at low concentrations (below 0.067 µg/L).

Where can I find more information?
- This and other pesticides: 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

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).