



## ACETOCHLOR

### What is acetochlor?

Acetochlor is a common herbicide in the United States. Pesticides that contain acetochlor include insecticides and herbicides. Common trade names for acetochlor products include Harness<sup>®</sup>, Keystone<sup>®</sup>, SureStart<sup>®</sup>, TripleFlex, Confidence<sup>®</sup>, Surpass<sup>®</sup>, Volley<sup>®</sup>, and Warrant<sup>®</sup>.\*

### Where can acetochlor be found and how is it used?

Acetochlor can be found at low levels in surface water and groundwater in farming areas. It is used as a pesticide to control grasses, some broadleaf weeds, and yellow nutsedge. It is also used on crops ranging from corn to sugarcane.

### How can people be exposed to acetochlor?

Most people are not likely to be exposed to dangerous levels of acetochlor. As of 2018, the United States Environmental Protection Agency has established tolerances for residues of acetochlor in on alfalfa and related animal commodities. People who work where it is made, handled, mixed, or used are most at risk for exposure.

You could be exposed to acetochlor through:

- **Breathing** pesticides that contain acetochlor. Inhaling acetochlor can occur if it is put on dry soil, or if it is inhaled on a windy day.
- **Drinking** acetochlor. Do not drink, eat, or smoke while applying products containing acetochlor.
- **Touching** acetochlor when handling it.
- **Eye Contact** if dust containing acetochlor gets in the eyes. This might occur on a windy day near where acetochlor was used.

### How does acetochlor work and how can it affect my health?

Acetochlor has been named a probable cancer-causing substance and a strong skin irritant. In studies where animals were exposed to acetochlor, negative effects were seen in the nervous system, liver, thyroid, kidney, testes, nose, lungs, and blood. Other tests showed that acetochlor causes changes to the DNA of cells.

Studies of high doses of acetochlor showed that it can cause problems with reproduction and development in animals, specifically lower weights of the parent and offspring. Birth defects were not found. Studies of long-term exposures of three months to one year showed that high doses of acetochlor caused harmful effects to laboratory animals. These effects include lower body weight, harmful effects to testes, and blood chemistry effects.

**Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222**  
**DPH 24/7 Contact Number: 1-888-295-5156**

## How is acetochlor poisoning treated?

There is no treatment just for exposure to acetochlor. A doctor will treat the symptoms.

## What should I do if exposed to acetochlor?

- **If you touch acetochlor**, wash your skin with soap and water. Wash clothing before you wear it again.
- **If acetochlor gets in your eyes**, rinse your eyes with warm water for 20 minutes. Get medical help.

## What factors limit use or exposure to acetochlor?

Follow all protective measures if you work with a product containing acetochlor. Such measures include wearing a long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear plus socks, and protective eyewear. When cleaning equipment, mixing, or loading, wear a chemical-resistant apron. Farmers applying acetochlor to their crops should follow all safety measures to prevent the chemical from drifting in the wind.

## Is there a medical test to show whether I've been exposed to acetochlor?

Tests can show if acetochlor is in your body.

## Technical information for acetochlor

CAS Number: 34256-82-1

Chemical Formula: C<sub>14</sub>H<sub>20</sub>ClNO<sub>2</sub>

**Carcinogenicity (EPA):** Acetochlor is classified as “likely” to be carcinogenic and is considered to be a nonlinear carcinogen (i.e., there is a threshold level of exposure below which there is no cancer risk).

**MCL (Drinking Water):** There is no MCL established. The EPA does require monitoring of acetochlor levels in groundwater as a condition of registration of the pesticide. The Acetochlor Registration Partnership is required to provide assistance to owners of rural domestic drinking water wells in which herbicides containing acetochlor are detected and verified at levels above 1 part per billion (ppb).

**OSHA Standards:** No OSHA standard has been established.

**NIOSH Standards:** No NIOSH standard has been established.

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## Resources

American Conference of Governmental Industrial Hygienists (ACGIH). 2003. *Guide to Occupational Exposure Values*. Cincinnati, OH.

NIOSH *Pocket Guide to Chemical Hazards*. 2003. Atlanta, GA: U.S. Department of Health and Human Services. <https://www.cdc.gov/niosh/npg/>

Federal Register, Acetochlor; Pesticide Tolerances, A Rule by the Environmental Protection Agency on 06/22/2018.  
<https://www.federalregister.gov/documents/2018/06/22/2018-13459/acetochlor-pesticide-tolerances>

Minnesota Department of Agriculture. 2023. Acetochlor Herbicide.  
<https://www.mda.state.mn.us/acetochlor>

\* No endorsement is implied and no discrimination is intended in the referencing of commercial products or trade names.