

Consumer Factsheet on: ATRAZINE

[List of Contaminants](#)

As part of the Drinking Water and Health pages, this fact sheet is part of a larger publication:
National Primary Drinking Water Regulations

This is a factsheet about a chemical that may be found in some public or private drinking water supplies. It may cause health problems if found in amounts greater than the health standard set by the United States Environmental Protection Agency (EPA).

What is Atrazine and how is it used?

Atrazine is a white, crystalline solid organic compound. It is a widely used herbicide for control of broadleaf and grassy weeds. Atrazine was estimated to be the most heavily used herbicide in the United States in 1987/89, with its most extensive use for corn and soybeans in Illinois, Indiana, Iowa, Kansas, Missouri, Nebraska, Ohio, Texas, and Wisconsin. Effective in 1993, its uses were greatly restricted.

The list of trade names given below may help you find out whether you are using this chemical at home or work.

Trade Names and Synonyms:

Aatrex
Actinite PK
Akticon
Argezin
Atazinax
Atranex
Atrataf
Atred
Candex
Cekuzina-T
Chromozin
Crisatrina
Cyazin
Fenamin
Fenatrol
Gesaprim
Griffex
Hungazin
Inakor
Pitezin
Primatol
Radazin
Strazine
Vectal
Weedex A
Wonuk
Zeapos
Zeazine

Why is Atrazine being Regulated?

In 1974, Congress passed the Safe Drinking Water Act. This law requires EPA to determine safe levels of chemicals in drinking water which do or may cause health problems. These non-enforceable levels, based solely on possible health risks and exposure, are called Maximum Contaminant Level Goals.

The MCLG for atrazine has been set at 3 parts per billion (ppb) because EPA believes this level of protection would not cause any of the health effects described below.

Based on this MCLG, EPA has set an enforceable standard called a Maximum Contaminant Level (MCL). MCLs are set as close to the MCLGs as possible, considering the ability of public water systems to detect and remove contaminants using suitable treatment technologies.

The MCL has been set at 3 ppb because EPA believes, given present technology and resources, this is the lowest level to which water systems can reasonably be required to remove this contaminant should it occur in drinking water.

These drinking water standards and the regulations for ensuring these standards are met, are called National Primary Drinking Water Regulations. All public water supplies must abide by these regulations.

What are the Health Effects?

Short-term: EPA has found atrazine to potentially cause the following health effects when people are exposed to it at levels above the MCL for relatively short periods of time: congestion of heart, lungs and kidneys; low blood pressure; muscle spasms; weight loss; damage to adrenal glands.

Long-term: Atrazine has the potential to cause the following effects from a lifetime exposure at levels above the MCL: weight loss, cardiovascular damage, retinal and some muscle degeneration; cancer.

How much Atrazine is produced and released to the environment?

Atrazine may be released to the environment in wastewater from manufacturing facilities and through its use as a herbicide. Atrazine was the second most frequently detected pesticide in EPA's National Survey of Pesticides in Drinking Water Wells. EPA's Pesticides in Ground Water Database indicates numerous detections of atrazine at concentrations above the MCL in ground water in several States, including Delaware, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska and New York.

What happens to Atrazine when it is released to the environment?

Microbial activity and other chemicals may breakdown atrazine in soil and water, particularly in alkaline conditions. Sunlight and evaporation do not reduce its presence. It may bind to some soils, but generally tends to leach to ground water.

Atrazine is not likely to be taken up in the tissues of plants or animals.

How will Atrazine be Detected in and Removed from My Drinking Water?

The regulation for atrazine became effective in 1992. Between 1993 and 1995, EPA required your water supplier to collect water samples every 3 months for one year and analyze them to find out if atrazine is

present above 1 ppb. If it is present above this level the system must continue to monitor this contaminant.

If contaminant levels are found to be consistently above the MCL, your water supplier must take steps to reduce the amount of atrazine so that it is consistently below that level. The following treatment methods have been approved by EPA for removing atrazine: Granular activated charcoal.

How will I know if Atrazine is in my drinking water?

If the levels of atrazine exceed the MCL, 3 ppb, the system must notify the public via newspapers, radio, TV and other means. Additional actions, such as providing alternative drinking water supplies, may be required to prevent serious risks to public health.

Drinking Water Standards:

Mclg: 3 ppb

Mcl: 3 ppb

Learn more about your drinking water!

EPA strongly encourages people to learn more about their drinking water, and to support local efforts to protect and upgrade the supply of safe drinking water. Your water bill or telephone book's government listings are a good starting point.

Your local water supplier can give you a list of the chemicals they test for in your water, as well as how your water is treated.

Your state Department of Health/Environment is also a valuable source of information.

For help in locating these agencies or for information on drinking water in general, call: EPA's Safe Drinking Water Hotline: (800) 426-4791.

For additional information on the uses and releases of chemicals in your state, contact the: Community Right-to-Know Hotline: (800) 424-9346