



# National Primary Drinking Water Regulations

## Simazine

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).

### DRINKING WATER STANDARDS:

MCLG: 4 PPB

MCL: 4 PPB

### WHAT IS SIMAZINE AND HOW IS IT USED?

Simazine is an organic white solid, used as a pre-emergence herbicide used for control of broad-leaved and grassy weeds on a variety of deep-rooted crops such as artichokes, asparagus, berry crops, broad beans, citrus, etc., and on non-crop areas such as farm ponds and fish hatcheries. Its major use is on corn where it is often combined with AAtrex. Other herbicides with which simazine is combined include: paraquat, on apples, peaches; Roundup or Oust for noncrop use; Surflan on Christmas trees; Dual on corn and ornamentals.

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

### WHY IS SIMAZINE 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 simazine has been set at 4 parts per billion (ppb) because EPA believes this level of protection would not cause any of the potential health problems 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 also been set at 4 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.

**Short-term:** EPA has found simazine to potentially cause the following health effects when people are exposed to it at levels

### TRADE NAMES AND SYNONYMS:

AKTINIT  
BATAZINA  
BITEMOL  
CAT(HERBICIDE)  
CDT  
CEKUZINA-S  
GEIGY 27,692  
GESATOP  
HERBAZIN  
HERBEX  
HUNGAZIN  
PREMAZINE  
PRIMATOL S  
PRICEP  
PRINTOP  
RADOCON  
SIMADEX  
TAFAZINE  
ZEAPUR

### WHAT ARE THE HEALTH EFFECTS?

above the MCL for relatively short periods of time: weight loss, changes in blood.

**Long-term:** Simazine has the potential to cause the following effects from a lifetime exposure at levels above the MCL: tremors; damage to testes, kidneys, liver and thyroid; gene mutations; cancer.

The amount of simazine used annually in the USA was estimated in 1985 to be 4.8 billion pounds. Simazine may be released into the environment via effluents at manufacturing sites and at points of application where it is employed as a herbicide.

If released to water, simazine will not bind to sediments or evaporate. It may leach to ground water. Its persistence varies from a few months to a few years, depending mainly on the rate of degradation by microbes. Simazine has a low potential to bioaccumulate in fish.

The regulation for simazine became effective in 1994. 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 simazine is present above 0.07 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 simazine so that it is consistently below that level. The following treatment methods have been approved by EPA for removing simazine: Granular activated charcoal.

If the levels of simazine exceed the MCL, 4 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.

**HOW MUCH SIMAZINE  
IS PRODUCED AND  
RELEASED TO THE  
ENVIRONMENT?**

**WHAT HAPPENS TO  
SIMAZINE  
WHEN IT IS RELEASED TO  
THE ENVIRONMENT?**

**HOW WILL  
SIMAZINE  
BE DETECTED IN AND  
REMOVED FROM  
MY DRINKING WATER?**

**HOW WILL I KNOW IF  
SIMAZINE IS IN MY  
DRINKING WATER?**

## **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) 535-0202.**