Simazine ($C_7H_{12}ClN_5$)

What is Simazine?

Simazine is an organic white solid. Simazine is 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 non-crop use; Surflan on Christmas trees; Dual on corn and ornamentals. The major source of Simazine in drinking water is herbicide runoff.

Does Simazine have any additional names?

6-chloro-N,N'-diethyl-1,3,5-triazine-2,4-diamine

What are the known health effects?

Some people who drink water containing Simazine well in excess of the maximum contaminant level (MCL) for many years could experience problems with their blood.

How does exposure occur?

The primary route of human exposure to Simazine is consumption of contaminated food and of water from contaminated wells. Occupational exposure to high levels of simazine is due to product handling and most cases of Simazine poisoning occur from loading and application of the pesticide.

Is this contaminant regulated?

Yes, and water supplied to Mount Laurel MUA customers is in compliance with USEPA and NJDEP requirements. The maximum concentration of Simazine permitted in drinking water is 4 ppb; water supplied by the MLTMUA system has not reported any detections of Combined Simazine.

How can I reduce exposure?

Simazine in drinking water can be removed by point of use granular activated carbon filtration.

Additional information regarding Simazine, including the information referenced, can be found at:
https://archive.epa.gov/pesticides/reregistration/web/pdf/simazine_red.pdf
https://ohiowatersheds.osu.edu/node/1575