Dalapon

What is dalapon and how is it used?

Dalapon is a colorless liquid with an acrid odor sold as sodium or magnesium salt. Dalapon is a herbicide used to control grasses in a wide variety of crops, including fruit trees, beans, coffee, corn, cotton and peas. It is also registered for use in a number of non-crop applications such as lawns, drainage ditches, along railroad tracks, and in industrial areas.

Why is dalapon 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 dalapon has been set at 0.2 parts per million (ppm) 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 0.2 ppm 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: Dalapon is not known to cause any health problems when people are exposed to it at levels above the MCL for relatively short periods of time.

Long-term: Dalapon has the potential to cause the following effects from a lifetime exposure at levels above the MCL: increased kidney-to-body weight.

How much dalapon is produced and released to the environment?
Dalapon is released directly to the environment in its use as a herbicide for the control of annual and perennial grasses. Domestic production of dalapon in 1982 ranged between 7 and 9 million lbs. active ingredient. In 1984, its use in California was reported as follows: Non-food use, 92.9% (mostly on rights of way); main food crop treated was sugarbeet (6.7% of total).

**What happens to dalapon when it is released to the environment?**

Dalapon leaches readily in soil, though in some soils, microbes may break it down fast enough to prevent ground water contamination. Still, a persistence of six months has been observed in soils of various forests and tree nurseries. Microbes will also degrade most of any releases to water. Accumulation in aquatic life is not expected to be a problem.

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

The regulation for dalapon 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 dalapon 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 dalapon so that it is consistently below that level. The following treatment methods have been approved by EPA for removing dalapon: Granular activated charcoal.

**How will I know if dalapon is in my drinking water?**

If the levels of dalapon exceed the MCL, 0.2 ppm, 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.

*This factsheet was adapted from U.S. EPA.*

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