US ERA ARCHIVE DOCUMENT

Consumer Factsheet on: OXAMYL (VYDATE)

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 Oxamyl and how is it used?

Oxamyl is a white crystalline organic solid with a slight sulfurous odor. It is widely used for control of insects, mites and nematodes on field crops, fruits and ornamentals. The majority of oxamyl is applied to apples, potatoes, and tomatoes.

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:

Vydate K Thioxamyl Dioxamyl DPX 1410 Dupont 1410

Why is Oxamyl 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 oxamyl 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 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: EPA has found oxamyl to potentially cause the following health effects when people are exposed to it at levels above the MCL for relatively short periods of time: tremors, salivation and tearing due to interference with nerve function.

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

How much Oxamyl is produced and released to the environment?

Oxamyl is released directly to the environment in its use as an insecticide and during its manufacture, handling and storage. EPA estimated that 400,000 lbs. of oxamyl were produced in the US in 1982.

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

Oxamyl is highly soluble in water, and is relatively stable in acidic waters. Otherwise it is readily broken down. Degradation is also rapid in soils which makes it unlikely that oxamyl will leach to ground water. Accumulation in aquatic life is not expected as oxamyl is rapidly absorbed, metabolized and eliminated in toxicological tests.

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

The regulation for oxamyl 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 oxamyl is present above 2 parts per billion. 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 oxamyl so that it is consistently below that level. The following treatment methods have been approved by EPA for removing oxamyl: Granular activated charcoal.

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

If the levels of oxamyl 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.

Drinking Water Standards:

Mclg: 0.2 ppm

Mcl: 0.2 ppm

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