

Carbofuran (C₁₂H₁₅NO₃)

What is Carbofuran?

Carbofuran is a white crystalline solid with a slightly phenolic odor. Carbofuran is a broad-spectrum insecticide that is sprayed directly onto soil and plants just after emergence to control beetles, nematodes and rootworm. The greatest use of carbofuran is on alfalfa and rice, with turf and grapes making up most of the remainder. Earlier uses were primarily on corn crops. Carbofuran is allowed for use on only a few U.S. crops and will soon be banned for use on corn and sorghum in California. The major source of carbofuran in drinking water is leaching of soil fumigant used on rice and alfalfa.

Does Carbofuran have any additional names?

2,3-dihydro-2,2-dimethylbenzofuran-7-yl methylcarbamate; Trade names include Furadan 4F, Curaterr, 4F, Yaltox and others.

What are the known health effects?

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

How does exposure occur?

Carbofuran is used primarily on corn and alfalfa crops, generally applied directly to soil and plants by spray (aerial or ground) and then leaches into the ground water and surface water.

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 Carbofuran permitted in drinking water is 40 ppb; water supplied by the MLTMUA system has not reported any detections of Carbofuran.

How can I reduce exposure?

Carbofuran in drinking water can be removed at point of use by granular activated carbon and reverse osmosis filtration.

Additional information regarding Carbofuran, including the information referenced, can be found at:

<https://ohiowatersheds.osu.edu/node/1551>

https://cdn.who.int/media/docs/default-source/wash-documents/wash-chemicals/carbofuran.pdf?sfvrsn=d2ad724e_4