

2,3,7,8-Tetrachlorodibenzo-p-Dioxin (C₁₂H₄Cl₄O₂)

What is 2,3,7,8-Tetrachlorodibenzo-p-Dioxin?

2,3,7,8-Tetrachlorodibenzo-p-Dioxin is an organic solid of white crystalline needles. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin is not produced or used commercially in the United States. It is a contaminant formed in the production of some chlorinated organic compounds, including a few herbicides such as silvex.

Does 2,3,7,8-Tetrachlorodibenzo-p-Dioxin have any additional names?

2,3,7,8-TCDD, Dioxin

What are the known health effects?

Some people who drink water containing 2,3,7,8-Tetrachlorodibenzo-p-Dioxin well in excess of the maximum contaminant level (MCL) for many years could experience reproductive difficulties and may have an increased risk of getting cancer.

How does exposure occur?

The major sources of dioxin in drinking water are emissions from waste incineration and other combustion, and discharge from chemical factories. When released in waste waters, some 2,3,7,8-Tetrachlorodibenzo-p-Dioxin is broken down by sunlight, some evaporate to air, but most attach to soil and settle to the bottom sediment in water. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin concentrations may build up in the food chain, resulting in measurable levels in animals.

Is this contaminant regulated?

Yes, if Dioxin has been previously detected by the water system. MLTMUA has not detected Dioxin, therefore we do not need to test for it at this time. **What about WMUA and NJAWC?**

How can I reduce exposure?

2,3,7,8-Tetrachlorodibenzo-p-Dioxin in drinking water can be removed by point of use Granular Activated Carbon filtration.

Additional information regarding 2,3,7,8-Tetrachlorodibenzo-p-Dioxin, including the information referenced, can be found at:

<https://ohiowatersheds.osu.edu/node/1559>

<https://www.epa.gov/sites/production/files/2016-09/documents/2-3-7-8-tetrachlorodibenzo-p-dioxin.pdf>