

# Chlorite (HClO<sub>2</sub>)

## **What is Chlorite?**

Chlorite (assume it's supposed to be chlorite) dioxide is a yellow to reddish-yellow manufactured gas. Chlorite is formed when chlorine dioxide reacts with water. It does not occur naturally in the environment. When added to water, chlorine dioxide forms chlorite ion, which is also a very reactive chemical.

Chlorine dioxide is used as a bleaching agent at paper manufacturing plants, and in public water treatment facilities to make water safe to drink. In 2001, chlorine dioxide and chlorite were used to decontaminate a number of public buildings following the release of anthrax spores in the United States.

## **Does Chlorite have any additional names?**

No

## **What are the known health effects?**

Both chlorine dioxide and chlorite react quickly in water or moist body tissues. Breathing air containing chlorine dioxide gas may cause nose, throat, and lung irritation. Eating or drinking large amounts of chlorite salts may cause irritation in the mouth, esophagus, or stomach. There is no evidence that chlorine dioxide or chlorite affect reproduction in humans.

## **How does exposure occur?**

In water, chlorine dioxide quickly forms chlorite. Chlorite in water may move into groundwater, although reactions with soil and sediments may reduce the amount of chlorite reaching groundwater. Neither chlorine dioxide or chlorite build up in the food chain.

## **Is this contaminant regulated?**

Yes, if chlorine dioxide is used in the treatment process, MLTMUA does not use chlorine dioxide therefore we do not need to test for chlorite.

## **How can I reduce exposure?**

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

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

<https://www.atsdr.cdc.gov/toxprofiles/tp160.pdf>

<https://www.atsdr.cdc.gov/toxfaqs/tfacts160.pdf>