Why is my water pink?

Pink water is not toxic – it is caused by an excess of permanganate present in your drinking water.

Why is my water pink?

Your water is pink because of an excess of permanganate present in your drinking water. Potassium permanganate (KMnO4) and sodium permanganate (NaMnO4) are oxidants added to untreated drinking water as an initial step in the treatment process. Permanganate is used to control odor and taste, remove color, iron, and manganese, and limit the formation of trihalomethanes and haloacetic acids (DBPs). It is also used as a biological control agent to limit biological growth in treatment plants and to control nuisance organisms such as zebra mussels at intake structures.

Normally, these oxidants are added to raw water before standard treatment steps and are therefore removed through filtration and disinfection. However, a change in water quality, improper dosing, or mechanical failure may cause an excess of permanganate to be released into the drinking water during treatment, and even at very low doses will turn it pink. If this occurs, the water system should take necessary action to eliminate the excess permanganate by flushing the distribution system. It is still possible that pink water may reach your tap, even though the concentration of permanganate is likely very low.

Is pink water toxic?

Permanganate is not an acute contaminant, meaning it does not pose an immediate health risk. Additionally, permanganate is not classified as a carcinogen by the Occupational Safety and Health Administration (OSHA), National Toxicology Program (NTP), or International Agency for Research on Cancer (IARC).

What should I do if I have pink water?

If you observe any pink water you should contact your water provider to notify them of the issue and to see if they have posted or distributed further information regarding the situation. Once the issue has been resolved by the water system, flush your taps until the water runs clear.

If you experience staining of laundry or plumbing fixtures due to pink water, an equal parts solution of white vinegar, three-percent hydrogen peroxide and water is recommended to remove stains.

Contact

For more information, contact Sara Starr at sara.starr@epa.ohio.gov or (614) 644-2752.

The information presented in this fact sheet is based on the U.S. EPA Drinking Water Treatability Database page for Permanganate: (https://iaspub.epa.gov/tdb/pages/treatment/treatmentOverview.do?treatmentProcessId=-1644188630#content)