



Suburban Property Inspections

Know what to expect - INSPECTsm
Family owned and operated since 1988

SULFATE FACT SHEET

Brief Overview:

Category:	Inorganic
Acceptable Level:	250 mg/L MCL, Secondary Drinking Water Standard
Source:	Natural occurring, Commercial use
Effect:	Short and Long-term Health Effects Test
Follow up:	for Sulfate and Total Dissolved Solids
Treatment:	Reverse osmosis, distillation, or ion exchange

Details:

Source: Sulfates are naturally occurring substances that are found in minerals, soil, and rocks. They are present in ambient air, groundwater, plants, and food. The principal commercial use of sulfate is in the chemical industry. Sulfates are discharged into water in industrial wastes and through atmospheric deposition. Sulfate concentration in seawater is about 2,700 milligrams per liter Sulfate — February 2003 2 (mg/L). It ranges from 3 to 30 mg/L in most freshwater supplies, although much higher concentrations (1000 mg/L) are found in some geographic locations. In the United States, the median concentration for a 20-State cross-section was 24 mg/L; the 99th percentile value was 560 mg/L. In general, food is the principal source of exposure. However, in areas with high sulfate concentrations, exposure from water can exceed that from food.

Effect: Acute exposures to sulfate exert a laxative effect (loose stool) and sometimes diarrhea (unusually frequent or unusually liquid bowel movements) following acute exposures to high concentrations. However, these effects are not observed for longer term exposures. This may be because of acclimation to sulfate over time. In the case of sulfate, adults appear to adapt within 1 or 2 weeks and are no longer affected by the sulfate in their drinking water supply. Infants, however, may be more sensitive.

Follow up: Treat and re-test for total dissolved solids and sulfate.

Treatment: reverse osmosis, distillation, or ion exchange

Following installation of this system, the consumer should have the treated water tested for sulfate to verify sulfate reduction is being achieved and the system is functioning properly.

For more information visit the USEPA web site: <https://www.epa.gov/safewater/ccl/pdf/sulfate.pdf>

For further technical assistance, call Suburban Property Inspections at 1-866-866-6700, or call the U. S. Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.



Home • Septic • Termite • Radon • Mold • Water