

● CHLORIDE

# EZ Series: Continuous Monitoring of Chloride

**Key Applications: Drinking water treatment and production, sewer management, wastewater effluent monitoring**

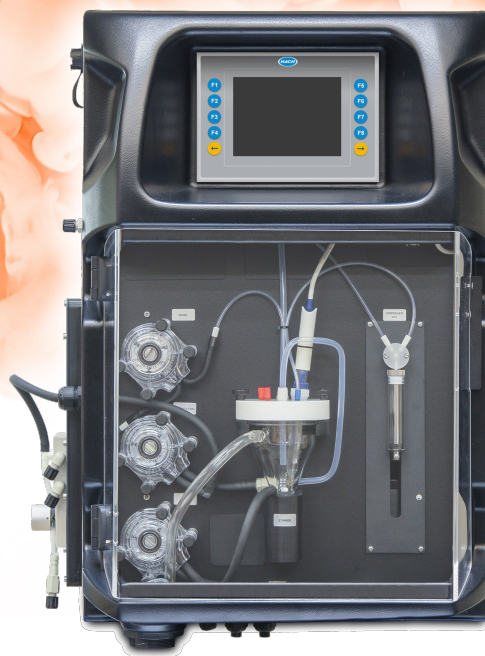
Natural sources of Chloride are rock salt and seawater. While salt is essential for life and has been used for thousands of years, its easy solubility at the same time is a threat to life: Salt can only be removed from salinated fresh-water with high technological effort and cost.

Industrial production processes can result in high Chloride loads that pose a threat to the microorganisms in wastewater treatment plants. Monitoring of Chloride is thus essential to the protection of our water sources and the environment.

## Features EZ Series Analyzers

- Continuously monitor Chloride
- Selection of technologies to match your lab method
- Wide measuring ranges starting as low as 1 mg/L
- Multiple stream analysis (1-8 streams)
- Analogue and digital communication options

**Explore the full range of parameters and technologies.  
Call your Hach representative today, or visit  
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# The Why, Where and How of Chloride Monitoring

## About

Chloride is an important resource for industrial production, especially for chlorine and caustic soda. Other uses include production of food, animal feed, fertilizers, and refrigeration mixtures. Chlorides are also needed for steel surface finishing, dyeing and tanning.

## Regulatory

The World Health Organisation (WHO) and the US EPA recommend a maximum Chloride level of 250 mg/L for drinking water. There is no health-based reason for this limit, but higher concentrations will affect taste.

While there are no nation-wide Chloride limits for wastewater effluent, local authorities may impose restrictions to protect the sewage system and the biological treatment stage.

## Chloride in Drinking Water Production

High Chloride concentrations in drinking water are undesirable as they affect taste. While most raw waters are low in Chloride, regionally Chloride leaching from rock salt deposits may reach the groundwater. Seawater intrusion is also a threat to water supplies that should be monitored.

## Chloride in Sewage Management and Industrial Wastewater

Industrial wastewater streams with high Chloride loads can be corrosive to the sewage system. Moreover, a high Chloride load will inhibit nitrification, reducing the treatment efficiency. Chloride concentrations thus need to be monitored 24/7 to allow for pre-treatment steps, dilution or interim storage in bulk tanks. That way production uptime can be ensured and the risk of permit violations mitigated.

Chloride is also a source for stress corrosion cracking in industrial cooling water applications.

## Chloride Monitoring Solutions

EZ Series Chloride Analyzers are available in several models:

EZ1005	Chloride, colorimetry
EZ3003-3005	Chloride, direct ISE analysis, for drinking water and surface water
EZ3503-3505	Chloride, ISE with standard addition for wastewater and process water
EZ4006	Chloride, titration

## Options

- Selection of different measuring ranges to match your application
- Monitoring of up to 8 sample streams per analyzer, reducing cost per sampling point
- Analogue and digital communication options
- Self-cleaning sample preconditioning panel