

## Method

Zinc deposits are present in much of the earth's crust. The metal provides an effective protective coating for steel (galvanized coatings) and is useful as an alloying agent. Zinc salts are useful as corrosion inhibitors in cooling water treatment formulations. The USEPA has established a Maximum Secondary Drinking Water Standard of 5 mg/L for zinc.

### The Zincon Method

References: APHA Standard Methods, 21<sup>st</sup> ed., Method 3500-Zn B (2005). ASTM D 1691-84, Zinc in Water, Test Method A.

CHEMetrics' method determines soluble zinc in drinking water and wastewater. Zinc reacts with the reagent *zincon* in a buffered alkaline solution to form a blue complex. Interference from other heavy metals can be eliminated by the addition of cyanide. However, for safety, cyanide has not been included in the reagent formulation. Results are expressed as ppm (mg/L) Zn.

Shelf-life: although the reagent in the ampoule is stable, the indicator solution has an eight-month shelf-life. We recommend stocking quantities that will be used within seven months.



## Instrumental Kits

### V-2000 Multi-Analyte Photometer

(See page 14 for instrumental features)

Range: 0.30-3.00 ppm

Method: Zincon

Cat#

Vacu-vials Kit, Shelf-life 8 months

K-9903

Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Indicator Solution, 25 mL sample cup, ampoule blank, instructions, and MSDS.

Range: 0.60-6.00 ppm

Method: Zincon

Cat#

Vacu-vials Kit, Shelf-life 8 months

K-9923

Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules, Indicator Solution, 25 mL sample cup, ampoule blank, instructions, and MSDS.

*Vacu-vials Kits require the use of the V-2000 Photometer or a spectrophotometer capable of accepting a 13 mm diameter round cell. Instrument sold separately*

### Kit Components common to Zinc

Description

Cat#

Sample Cup Pack, 25 mL (6 ea)

A-0013

Ampoule Blank Pack (5 ea)

A-0023

*Instructions and MSDS(s) are posted on our website.*

*If no shelf-life is listed for a product, then the shelf-life is at least 2 years.*