

# Sodium Chloride (Salt) 80

Range(s): 0-80 ppm NaCl, 0-49 ppm Cl<sup>-</sup>



## Procedure

Note: When testing multiple samples simultaneously, a separate sample cell with an unreacted sample of the water tested must be used to zero the colorimeter. Please note that varying the test procedure from the original can affect the precision of the test.

Note: To prevent the sample cell from accumulating residual silver chloride precipitate, clean thoroughly before use with hot water and a phosphate-free detergent (available at local stores); then rinse with Nitric Acid 1N (R-0801) followed by DI Water (R-0833) or sample water.

Note: Filter turbid or colored sample water before testing.

1. If the expected concentration is above 80 ppm NaCl, dilute the designated volume of sample water to 50 mL using DI Water (R-0833) in the dilution vial; then cap and mix thoroughly. If the expected concentration is above 500 ppm NaCl, obtain designated volume of sample water using the provided pipet (part #4029).

Range	Sample Water Volume	Multiplication Factor
75-150 ppm NaCl	25 mL	2
150-500 ppm NaCl	5 mL	10
500-2000 ppm NaCl	1 mL	50
2000-8000 ppm NaCl	0.5 mL	100

2. Turn on the Colorimeter.
3. Select a test menu (ALL TESTS, RECENT TESTS, or FAVORITES) containing Sodium Chloride (Salt) 80 using ◀▶.
4. Select Sodium Chloride (Salt) 80 using ▲▼; then press ENTER ○.
5. Select a chemical form (NaCl or Cl) for expression of test results using ▲▼.
6. Rinse and fill 25 mm sample cell to 10 mL mark with sample; then cap.
7. Insert sample cell into sample cell compartment. Align marks per User's Manual.
8. Select ZERO using ◀▶; then press ENTER ○. Zero will be displayed.

9. Remove sample cell from sample cell compartment; remove cap.
10. Add 5 drops Sodium Chloride (Salt) 80 - Reagent A; then swirl to mix.
11. Add 5 drops Sodium Chloride (Salt) 80 - Reagent B; cap and invert 5 times; then swirl to mix thoroughly.
12. Insert sample cell into sample cell compartment. Align marks.  
**Note: Do not disturb the sample after inserting sample cell. Any movement of the sample will cause erroneous results.**
13. Select TIMER using ◀▶; then press ENTER ○.
14. Select START using ◀▶; then press ENTER ○. (A 5-minute [05:00] countdown will begin.) Immediately select AUTO using ◀▶; then press ENTER ○.
15. When the timer beeps, the instrument will read the sample and the result will be displayed. If a sample dilution was performed, multiply the displayed result by the appropriate multiplication factor.

## Interferences

Alkalinity, Total (CaCO<sub>3</sub>) > 375 ppm – negative interference  
 Biguanide (as product), all levels – negative interference  
 Bromide, all levels – positive interference  
 Hardness, Calcium (CaCO<sub>3</sub>) > 1275 ppm – negative interference  
 Iodide, all levels – positive interference

Particulates (dirt, metal oxides, tannins, etc.), all levels – negative interference  
 To remove interference: Filter sample before performing test.

Polyacrylate Polymer, all levels – positive interference  
 To remove interference: Filter sample before performing test.  
 Sulfide, all levels – positive interference  
 Temperature > 122°F (50°C) – negative interference

## Instruction #5038

### Interferences (continued)

The following analytes were tested to the levels listed and found not to cause any interference up to the specified values:

Azole (BT) – 5 ppm  
Azole (TT) – 5 ppm  
Bromine – 5 ppm  
Chlorine – 5 ppm  
Copper – 5 ppm

Fluoride – 10 ppm  
Iron, Ferric – 10 ppm  
Iron, Ferrous – 10 ppm  
Magnesium – 500 ppm  
Molybdate – 10 ppm  
Nitrate – 2000 ppm  
Nitrite – 2000 ppm

Phosphate – 100 ppm  
Phosphonate – 20 ppm  
Polyphosphate – 5 ppm  
Silica – 150 ppm  
Sulfate – 1000 ppm  
Sulfite – 100 ppm  
Zinc – 5 ppm

### Test Method

Turbidity (Absorptometric)

In the presence of halides, silver produces a precipitate proportional to the concentration of halide in a sample.

### Estimated Detection Limit

1 ppm NaCl

### Precision

Using two lots of reagent and a standard solution of 50 ppm Cl<sup>-</sup>, an individual analyst obtained a standard deviation with the instrument of  $\pm 2$  ppm Cl<sup>-</sup>

### Application

Industrial Water, Potable Water, Recreational Water, and Wastewater

### Ordering Info

#### Reagent Pack

K-8023 Sodium Chloride (Salt) 80  
Formulated for exclusive use with Taylor's TTI<sup>®</sup> Colorimeter.

#### Reagent Pack Components

R-8023A Sodium Chloride (Salt) 80 - Reagent A  
R-8023B Sodium Chloride (Salt) 80 - Reagent B

#### Optional Reagents & Accessories

R-0801 Nitric Acid 1N  
R-0833 DI Water

#### Optional Reagents & Accessories (cont'd)

#4029 Pipet (eye dropper), Calibrated (0.5 & 1.0 mL), plastic  
#6249 Filter Disc Holder, 25 mm, Millipore™ (for 6247 & 6260)  
#6257 Filter Discs, Syringe, 2.5 μm, 25 mm, Whatman™, 100/ box  
#6260 Syringe (no filter disc holder or filter discs), 30 mL, plastic



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