



Total Chlorine Test

0.2 to 4 and 1 to 20 mg/L Cl₂
For test kit 225401 (Model CN-65)

DOC326.98.00029

Additional copies available on www.hach.com

Test preparation

- Rinse tubes and bottles with the sample water before testing. Rinse tubes and bottles with deionized water after testing.
- Accuracy is not affected by undissolved powder.

CAUTION: Handle chemical standards and reagents carefully. Review Material Safety Data Sheets for safe handling, storage and disposal information.

Replacement items

Description	Unit	Catalog no.
Bottle, square mixing	6/pkg	43906
Flask, Erlenmeyer, 50-mL	each	50541
Chlorine Reagent Set	100 tests/pkg	2438600
Includes:		
Sulfamic Acid Powder Pillows	100/pkg	105599
Sulfite 1 Reagent Powder Pillows ¹	100/pkg	220399
Sodium Thiosulfate Standard Solution, stabilized, 0.00246N	100 mL MDB ²	2408532
Measuring Tube, plastic, 5.83 mL	each	43800

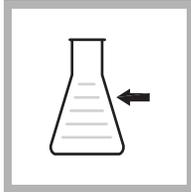
¹Sulfite 1 Reagent is a specially formulated starch-iodide reagent used in both the sulfite and chlorine tests.

²Marked Dropping Bottle

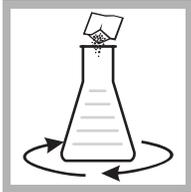
Optional items

Description	Unit	Catalog no.
Deionized Water	500 mL	27249

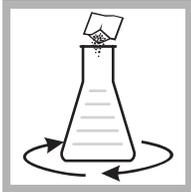
Medium range (1 to 20 mg/L) test procedure



1. Fill the flask to the 40-mL mark with sample.



2. Add one Sulfite 1 Reagent Powder Pillow to the flask. Swirl to mix.



3. Add one Sulfamic Acid Powder Pillow to the flask. Swirl to mix.

If chlorine is present, a blue color develops.

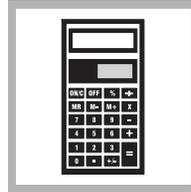


4. Fill the measuring tube to the top with prepared sample from step 3.

Pour the sample into the bottle.



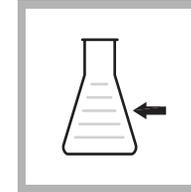
5. Add Sodium Thiosulfate Standard Solution by drops. Count the drops until the color becomes colorless. Swirl to mix after each drop.



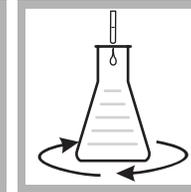
6. Calculate the result. Each drop of Sodium Thiosulfate Standard Solution used equals 1 mg/L chlorine (Cl₂).

Note: If the result is 2 mg/L or less, it is advisable to perform a more sensitive test. Follow low range test procedure.

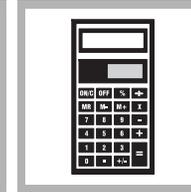
Low range (0.2 to 4 mg/L) test procedure



1. Use the prepared sample from step 3 of the Medium range test procedure. Pour off the contents of the flask until the level reaches the 30-mL mark.



2. Add Sodium Thiosulfate Standard Solution by drops. Count the drops until the color becomes colorless. Swirl to mix after each drop.



3. Calculate the result. Each drop of Sodium Thiosulfate Standard Solution used equals 0.2 mg/L chlorine (Cl₂).