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Doc No : PDAE206**Date :** 01-02-2024**Type :** AQUASOL**Product Code:** AE206**PRODUCT DATA SHEET****1 INFORMATION**

CODE: AE206

PARAMETER: SULPHITE

RANGE: 5 - 100 mg/l as SO₃**2 METHOD**

In acidified sample, the starch indicator is used to indicate end point of iodide- iodate titration of sulphite (SO₃). The result is expressed as mg/l (ppm) SO₃.

3 APPLICATION

Drinking Water, Mineral Water, Well Water, Swimming Pool Water, Surface and Ground Water, Aquaculture, Boiler Water, Process Water, Industrial Wastewater, Effluent Water, Cooling System Water, Chiller Water etc

4 INTERFERENCE

The presence of other oxidisable materials, such as sulphide, thiosulphate, & Fe²⁺ ions, can cause high results for sulphite. Sulfamic acid is added to the sample during analysis to prevent interference from nitrite. Some metal ion such as Cu²⁺, may catalyse the oxidation of SO₃²⁻ to SO₄²⁻ when the sample is exposed to air, thus leading to low results. Minimize oxidation of sulphite to sulphate by metals such as copper, the reagent is formulated with EDTA. Ascorbic acid (Vitamin C) will cause false high test results.

5 METHOD CONTROL

To Check test reagents,

Prepare 1000 ppm sulphite standard(as SO₃):- Dissolve 1.57 gm Sodium Sulphite in distilled water and make up the volume to one liter in standard volumetric flask. Dilute this standard solution with distilled water to 50 mg/l SO₃, analyse as described in procedure card.

6 REAGENTS AND ACCESSORIES

Reagents: ZN1(1Nos), DO4(1Nos), ST3(2 Nos)

Accessories: 25ML Plastic Test Jar(1Nos), Procedure Label(1Nos)

7 STORAGE

The test reagents are stable up to the date stated on the pack when stored closed at ambient temperature.

8 REFERENCE

APHA Standard Methods, 22nd ed., Method 4500- SO₃ - B – Standard Methods for Chemical Analysis of Water and Waste water. IS 3025 (Part 40): 1991

9 Directions for Use:

1. Take 10 ml of water sample to be tested in the test jar.
2. Add 10 drops of ZN1. Mix well.
3. Add 4 drops of DO4. Mix well
4. Now drop wise* add ST 3, counting the number of drops while mixing, until the colour changes from colourless to blue.

Calculations:

Sulphite ppm as SO₃ = 5 x (Number of drops of ST 3)

AE 206 is recommended for use in detecting Sulphite residues in Boiler water or in water where Sulphite has been added.

Note: Very high Sulphite Content (above prescribed range) may not show the colour change, unless suitably diluted.