

**RAKIRO BIOTECH SYSTEMS PVT LTD**

R-466, TTC Industrial Area, MIDC

Rabale, Navi Mumbai - 400701

Tel No. +91-022-47804040

Email :- sales@rakiro.net

Doc No : PDAE257

Date : 01-02-2024

Type : AQUASOL

Product Code: AE257

**PRODUCT DATA SHEET****1 INFORMATION**

CODE: AE257

PARAMETER: NITRITE

RANGE: 0.025 - 0.8 mg/l as NO<sub>2</sub>**2 METHOD**

In acidic solution nitrite ions react with sulfanilic acid to form a diazonium salt, which in turn reacts with N-(1-naphthyl)ethylenediamine dihydrochloride to form a red-violet azo dye. This dye is determined by colorimetric method.

**3 APPLICATION**

Groundwater, drinking water, and surface water

**4 INTERFERENCE**

NO<sub>3</sub><sup>-</sup> imparts a false red color when color reagent is added. The Following ions interfere because of precipitation under test conditions and should be absent: Sb<sup>+</sup>, Au<sup>3+</sup>, Bi<sup>3+</sup>, Fe<sup>3+</sup>, Pb<sup>2+</sup>, Hg<sup>2+</sup>, Ag<sup>+</sup>, Chloroplatinate, and metavanadate. Cupric ion may cause low results by catalysing decomposition of the diazonium salts. Colored ions that alter the color system also should be absent. Remove suspended solid by filtration.

**5 METHOD CONTROL**

To Check test reagents,

Prepare 1000 ppm Nitrite as NO<sub>2</sub> standard :- Take 1.5 gm of sodium nitrite in 1000ml standard volumetric flask, dilute it with demineralised water up to 1000ml stir well, and analyse as described in procedure.

**6 REAGENTS AND ACCESSORIES**

Reagents: HNT2(1Nos), HNT3(1Nos)

Accessories: 25 ml Test Jar(1Nos), Procedure Label(1Nos), spoon, Comparator tube(2 nos)

**7 STORAGE**

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

**8 REFERENCE**The method is analogous to APHA 4500-NO<sub>2</sub> B, IS 3025-1964**9 DIRECTION FOR USE**

- 1) Take 2 ml sample in the test jar.
- 2) Now add 3 drops of HNT2, mix well, Keep standing for 3 minutes.
- 3) Now add 1 spoonful of HNT3, mix and wait for 5 minutes.
- 4) Dilute the above mixture upto 25 ml mark with demineralised or Nitrite free water.
- 5) Transfer the content in the comparator tube.
- 6) Place the comparator tube in the comparator slot.
- 7) Read the Nitrite as NO<sub>2</sub> as follows.
  - a) Hold the comparator vertically against the light at eye level.
  - b) Match the colour to the colour shade on the comparator.
  - c) Read the Nitrite value corresponding to the colour.