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**Doc No :** TDSAE357**Date :** 01-02-2024**Type :** AQUASOL**Product Code:** AE357**PRODUCT DATA SHEET****1 INFORMATION**

CODE: AE357

PARAMETER: Ammonia ( Fresh water)

RANGE: 0.05 TO 8.0 ppm as NH<sub>4</sub>**2 METHOD**

In a strongly alkaline solution, ammonia reacts with Nessler's Reagent to produce a yellow - Orange colored complex in direct proportion to the ammonia concentration. Results are expressed in ppm (mg/L) ammonia.

**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**

Addition of extra stabilizer solution to the sample prior to analysis makes this chemistry applicable for the analysis of natural seawater and some synthetic seawaters. Other synthetic seawaters may cause the reagent to precipitate. Other types of samples may require a preliminary distillation to remove interferences. If distillation is not possible, dilution of the sample prior to analysis can help to minimize many interferences. High levels of calcium, magnesium, and other dissolved solids may also cause the reagent to precipitate. Iron and sulfide may cause the reagent to precipitate. Residual free chlorine may interfere with this by giving low test results or by forming a precipitate. Hydrazine also interfere with this chemistry. Glycine will cause high test results. Chloride at concentrations up to approximately 2% will not interfere. Nitrite at up to approximately 200 ppm as N does not interfere.

**5 METHOD CONTROL**

To Check test reagents,

Preparation of 1000 ppm Ammonia standard solution: Take 2.966 gm of Ammonium Chloride in 1000ml standard volumetric flask, Dilute it With demineralised water, stir well.

**5 REAGENTS AND ACCESSORIES**

Reagents: NH<sub>1</sub> (2Nos)

Accessories: 5 ml Comparator tube (2Nos), Procedure Label(1Nos), Colour Comparator, Rubber plug (2nos).

**6 STORAGE**

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

**7 REFERENCE**

IS : 3025 ( Part 34 ) - 1988, APHA Standard Methods, 22nd ed., Method 4500-NH<sub>3</sub> C Standard Methods for Chemical Analysis of Water and waste water.

**9 DIRECTION FOR USE**

- 1) Fill the test jar with the water sample upto the mark.
- 2) Add 10 drops of NH<sub>1</sub> and mix well. Keep for 10 minutes.
- 3) Place the test jar in the Comparator slot, after vigorously shaking.
- 4) Read the Ammonia as NH<sub>3</sub>/NH<sub>4</sub><sup>+</sup> 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 Ammonia value corresponding to the colour shade.