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 :	TDSAE411
Date :	01-02-2024
Type :	AQUASOL
Product Code:	AE411

PRODUCT DATA SHEET

1 INFORMATION

CODE: AE411 PARAMETER: Phoshonate RANGE: 2-40 & 5-100 ppm

2 METHOD

Classic chemical method.

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

Not Known

5 METHOD CONTROL

To Check test reagents,

Preparation of 1000 ppm Phosphonate standard solution Take 0.3 gm of 1-Hydroxy ethylidene -1 ,1 Diphosphonic Acid (HEDP=60%) in 100 ml standard Volumetric flask , dilute It with demineralised water , stir well .
Now this is 1800 ppm phosphonate standard solution.
Now prepare 1000 ppm standard solution from 1800 ppm solution by using following formula

$$N1V1 = N2V2$$

6 REAGENTS AND ACCESSORIES

Reagents: SQ1 (1No), SQ2(1 no), SQ3(1 no), SQ4(1 No), SQ5(1 No)
Accessories: Comparator tube (2Nos), Procedure Label(1Nos), Colour Comparator.

7 STORAGE

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

8 REFERENCE

Classic chemical method.

8 DIRECTION FOR USE

1.Take 10 ml of filtered water sample in the test jar.
2.Add two drops of SQ 1. Mix well to dissolve
3.Adjust pH of the sample between 2 to 3 by dropwise addition of SQ2. Use pH paper.
4.Add one spoonful (provided herewith) of SQ3 Powder, Mix well. Then the sample turns yellow.
5.Now drop wise * add SQ 4 L, counting the number of drops while mixing until the colour changes from yellow to red / reddish orange. Note the number of drops added.
Say (S)
6.Repeat the procedure given above with raw water of makeup water/ sample blank. Note the number of drops added say (B)
If the expected Phosphonate level of the sample is more than 40 ppm, then use SQ4 instead of SQ 4L.

Calculations:
Phosphonate ppm as HEDP = 2 X (S-B)
= 2X (No. of drops of SQ4L for Sample–No. of drops of SQ4L for Blank)
= 5 X (S-B)
=5 X (No. of drops of SQ4 for Sample - No. of drops of SQ 4 for Blank)