

COMBI KIT
AE 106

PURIFIED WATER



AQUASOL

Any time ... Any where...

Analyzing Waters

Analyzing Waters



AQUASOL

Analyzing Waters
Anytime... Anywhere...

COMBI KIT PURIFIED WATER I.P.(1996)



- ◆ **AQUASOL** systems are extremely convenient, and free you from the tedium of the laboratory, while saving precious time. Now you do not have to bother about reagent preparations and standardization.
- ◆ **AQUASOL** gives you freedom from the need of a laboratory, trained manpower and laborious processes involved
- ◆ Simple, easy to follow procedures, **Anytime... Anywhere...**
- ◆ Based on proven laboratory methods backed by sound chemical research
- ◆ Rapid, accurate and reliable results are achieved
- ◆ Low cost, user friendly, compact and portable systems

Highly purified water, is an essential component of biopharmaceutical industry. It is used as an ingredient in both research procedures and drug formulations and also for general cleaning, rinsing, etc. In each case the water source must be processed and treated to microbial and chemical contaminants that would otherwise compromise the quality, safety, efficacy and purity of finished product.

AQUASOL AE 106 is specially designed for **Purified Water Analysis (I.P. 1996)**.



**Purified Water (I.P. 1996)
Analysis
AE 106**



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ACIDITY - ALKALINITY



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Step A

- 1) Take 10 ml. freshly boiled and cooled purified water in borosilicate glass jar (provided here)
- 2) Add 0.05 ml (2 drops) of Methyl red solution. The resulting solution is not red.

Step B

- 1) Take 10 ml of purified water in jar.
- 2) Add 0.1 ml (3 drops) of Bromothymol blue solution. The resulting solution is not Blue.

Conclusion :

If resulting solution A & B are as per statement, purified water passes the test.



Calcium & Magnesium



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- 1) Take 100 ml of purified water in test flask.
- 2) Add 2 ml (60 drops) of Ammonium buffer pH 10.0. Mix well.
- 3) Add 50 mg (1 spoonful) of mordant black II mixture Mix well
- 4) Add 0.5 ml (15 drops) of 0.01 M disodiumedetate solution. Mix well.

Conclusion :

If pure Blue colour is produced Purified water passes the test.

CHLORIDE



- 1) Take 10 ml of purified water in test jar.
- 2) Add 1 ml (30 drops) of 2 M Nitric acid. Mix well.
- 3) Add 0.2 ml (6 drops) of 0.1 M Silver Nitrate solution.
- 4) Keep for 15 minutes.

Conclusion :

The appearance of the solution does not change for at least 15 minutes
Purified water passes the test.



SULPHATE



- 1) Take 10 ml of purified water in test jar.
- 2) Add 0.1 ml (3 drops) of 2 M Hydrochloric acid. Mix well.
- 3) Add 0.1 ml (3 drops) of Barium Chloride solution. Mix well.
- 4) Keep for one hour.

Conclusion :

The appearance of the solution does not change for at least one hour purified water passes the test.

AMMONIUM



Step A

1. Take 20 ml of purified water in test jar (Test Solution A)
2. Add 1 ml (30 drops) of Potassium Mercuric Iodide solution and allow standing for 5 minutes.

Step B

1. Take 2.5 ml (75 drops) dilute Ammonium Chloride in another 10 ml test jar.
2. Add 7.5 ml of purified water (up to 10 ml mark) (Control solution B)
3. Add 1 ml (30 drops) of Potassium Mercuric Iodide solution.

Conclusion :

View the solution vertically.

If the Test Solution 'A' Is less intensely coloured than Control Solution 'B',
Purified water passes the test.



HEAVY METALS



Sample Preparation

In evaporating dish, evaporate 150 ml purified water sample to 15 ml on a water bath.

Step A: STANDARD SOLUTION

1. Take 10 ml. of distilled water (lead free) in Test jar.
2. Add 10 drops of Lead standard solution. Mix well.
3. Add 2 ml of Test sample. Mix well.
4. Add 60 drops of Acetate buffer. Mix well.

Step B : STANDARD SOLUTION

1. Take 12 ml of purified water sample in test jar as prepared by evaporation.
2. Add 60 drops of Acetate buffer. Mix well.

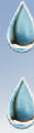
TESTING PROCEDURE

1. Take two test jars provided here, one mark as Standard and another Test sample.
2. Add 30 drops of Sodium Hydroxide Glycerin mixture and 6 drops of Thioacetamide solution in both test jars. Mix well & warm in water bath. And Cool it.
3. Add Standard solution and Test solution (prepared as above) to respective test jar.
Allow to stand for 2 minutes. View downwards over a white surface.

Conclusion :

If colour produced with the Test solution is not more intense than the Standard solution, Purified water passes the test.





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AQUASOL Systems are available for almost all water parameters in individual packs as well as combination packs depending on the specific requirements of different industries, such as, 'Boiler Water', 'Cooling Water', 'Construction Industry', 'Swimming Pools', 'R.O. Water', etc.

Also for any specific requirements,
Custom Made AQUASOL Systems can be devised
both as Individual or Combination Kits.





AQUASOL systems are also available for different industries, such as :

- Boiler Water • Cooling Water • Construction Industry
- Swimming Pools • R. O. Water • Purified Water Etc.



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