



CHLORICOOOL WT TEST KIT™

DESCRIPTION

The **CHLORICOOOL WT TEST KIT** is designed to count the concentration of Chloride ions in water. Specifically its purpose is to check and control the Chloride ions in the Marine Engines Cooling Systems.

The test results obtained in coordination with the other water tests (**NITRITE**, **pH**) provide us with relevant information about the water conditions in the Cooling System.

CONTENTS OF THE TEST KIT

Contents of the test kits are sufficient for 90 test with Chloride concentration range 1–60mg/lit Cl⁻.

ACCESSORIES

- ◆ 2 pieces of Screw–plug measuring glasses with a ring mark of 5ml.
- ◆ 1 piece of Slide comparator.
- ◆ 1 piece of Color Chart with a color range 0–60 mg/lit.
- ◆ 1 piece of Plastic Syringe of 5ml.

REAGENTS

- ◆ 2 plastic bottles of 20ml solution, Cl–1
- ◆ 1 plastic bottle of 24ml solution, Cl–2

PACKAGING

Order Number : 700112
 Container : Plastic Case

TESTING PROCEDURE

A. Determination of Chloride Ions (Cl⁻) concentration

For the instructions for use also refer to the pictogram on the back of the color chart.

1. Fill both glasses with a quantity of 5ml of the sample you wish to determine the Chloride concentration using the syringe and place measuring glass on position A in the comparator.
2. You will only add the reagents to measuring glass B. Add 10 drops of Cl–1 in the glass B and seal the glass and mix.
3. Add 10 drops of Cl–2 in the glass B and seal the glass and mix.



4. Open the glass after 1 min and place it in the position B in the comparator.

5. Slide the comparator on the color chart until the colors match in the inspection hole on top. Check the measurement reading in the recess on the comparator reed. Mid values can be estimated. A higher than 60mg/lit measurement is also apparent.

6. After use, rinse out both measuring glasses thoroughly and seal them.

B. Evaluation of the Test Results

With that procedure we can determine the concentration of Chloride ions in ppm without any conversion in the unit.

For the Cooling Water samples (Cooling Water Treatment) which contain more than 60ppm of Chloride Cl⁻ concentration you have to perform partial draining and replenish with distilled water.

It is worth being noted that it does not exist nor has it been suggested any other way of reducing the Chloride ions concentration except by blowdown and system's replenishment by distilled or fresh water.

Considering the procedure of water replenishment for cooling water system you may be advised by the following table.



Chloride Ions Concentration (Cl⁻) in Cooling Systems

ppm Cl ⁻ ions (Cooling System)	5	10	30	60	Over 60
Procedure	Partial Draining not required				Partial Draining Required

The method could not be applied to Sea Water due to high level of Chloride concentration.

The test kit could also be applied in the water which comes from Evaporation to check whether it could be applied as Feed Water in the Cooling or Boiler Systems. In that case the water must have a Chloride concentration less than 20ppm.

One of the great advantages of the test kit is that it is more sensitive in the range of the measurements 0–20ppm.

C. Additional Information

The test kit could also be used for measurements up to 300mg/l of Chloride, for that purpose you must proceed as follows:

1. Pour 1 ml water sample and 4ml of distilled water (no Chloride content) into each of the measuring glasses. That way we have a dilution 5 times of the initial sample.

2. Follow the same procedure as described in the previous page and determine the Chloride concentration in the prepared sample. You have to multiply the value by 5 to take the result in the initial sample.

After the test results are obtained must be recorded in the **Marichem Cooling Water Treatment Log Sheets**. At the end of every month, these Log Sheets should be submitted by the head engineer to the owner company, who in turn should send them to **MARICHEM MARIGASES Worldwide Services** for further evaluation and technical analysis.

► For more information and literature concerning the **CHLORICOOOL WT TEST KIT** measurements for the Cooling Water Treatment program you also may contact **MARICHEM MARIGASES Worldwide Services** technical department.

 **Read the Material Safety Data Sheet before using this product.**

For detailed information on safety and health, please refer to Material Safety Data Sheet and/or Product Label.

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