



## DEHA TEST KIT™

### DESCRIPTION

MARICHEM DEHA TEST KIT is used for the determination of DEHA chemical compound in the Marine Boilers. The test is performed when **Oxyblock D** is used in the Boiler's Water as an Oxygen scavenger. The water sample tested is received from the condensate, as this way we can ensure that the product has been distributed into the system. The measurement is very simple and a residual of DEHA is necessary to be maintained in the condensate's water. This indicates that dissolved Oxygen has been effectively removed and passivation has been occurred on the metallic surfaces of the boiler system.

### TEST KIT CONTENTS

Contents of the test kit are sufficient for 125 measurements with a range between 0.01-0.30 ppm.

#### A. Accessories

- ◆ 2 Screw-plug measuring glasses
- ◆ 1 Slide comparator.
- ◆ 1 Color Chart.
- ◆ 1 Plastic Syringe of 5 ml

#### B. Reagents

- ◆ 1 bottle of 30ml DEHA-1
- ◆ 1 bottle of 25ml DEHA-2

### PACKAGING

Order Number : 700120  
 Container : Plastic Case

### TESTING PROCEDURE

1. Collect the Water sample from the Condensate System and cool it to 20-25°C. Please consider that it is critical for the determination of DEHA to perform immediately the test after sample's receipt. The reagents below should be added within a period of 2-3 minutes to get an accurate and real result. Do not leave the sample for long time open to the atmosphere as the DEHA will be lost.
2. Pour a 5 ml water sample into each of the measuring glasses using the plastic syringe. Place a measuring glass on position A in the comparator.
3. Add 4 drops of DEHA-1 reagent, seal the glass and mix.
4. Add 4 drops of DEHA-2 reagent, seal the glass and mix.
5. Open the glass after 10 minutes and place it on position B in the comparator.
6. Slide the comparator until the colors match in the inspection hole on top. Check the measurements reading in the recess on the comparator reed. Mid values can be estimated.

### EVALUATION OF THE TEST RESULT

The test will give us the DEHA concentration in ppm in the condensate water and considering its value we can increase or decrease **Oxyblock D** dosage. Test is performed in the condensate water as we wish to ensure that DEHA has been distributed into the system.

The product has the ability to passivate the metallic surfaces of the condensate system. For the application of the product follow the following recommendations: Initial Dosage: 150ml/day in DEHA for untreated Boiler systems.

DEHA residual in the Condensate System:  
 0.15-0.25ppm.

Maintenance dosage: 100-200ml/day depending in condensate DEHA concentration value.

After initial dosage has been introduced into the system, the test must be performed after 3-6 hours. Then the test must be performed on a daily basis. Once the system stabilized the number of measurements could be switched to 3 measurements per week.

Successful DEHA treatment requires the Boiler's Feedwater Temperature to be close to its boiling point



TABLE 1

ppm DEHA in the condensate sample	0 – 0.15	0.15 – 0.25	0.25 – 0.30 or higher
Dosage Oxyblock D product	Increase dosage by 25%	Satisfactory	Reduce dosage by 25%

(90°C - 95°C) as in this manner the water releases most of its dissolved Oxygen. **DEHA** in this case remains free

to act in the Boiler's Water, distributed with the steam and could easily passivate the metallic surfaces.

### ADDITIONAL INFORMATION

For higher **DEHA** concentrations the dilution of the sample should be done by Deaerated water (no Dissolved Oxygen). The De ionized water contains dissolved Oxygen and during the dilution could decrease **DEHA** in the final solution giving a wrong result. For further information on the above please come in contact with Marichem Marigases Technical Department.

After the test results are obtained must be recorded in the **Marichem Boiler Water Treatment Log Sheet**. 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 **DEHA TEST KIT** measurements and the **Boiler Water Treatment** program you also may contact **Marichem Marigases 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.

MARICHEM MARIGASES Worldwide Services or any subsidiary or associated companies warranties of merchantability and competence, if any, along with any expressed warranties concerning this merchandise, shall not be actionable or pertinent or effective if the good is used contrarily or differently to the directions herein and in no other way due to impending hazards from inappropriate use of the good explained herein. Merchandise might vary insubstantially depending on country of origin. The information provided concerning merchandise is exclusively presented to the customer.