# Lovibonď

# **INSTRUCTIONS FOR TEST KIT 411000**

## pH using disc 2/1J

- 1. Fit the disc into the Comparator. Fill two 13.5mm./10m.I moulded cells to the 10ml. mark with sample and place one cell in the left-hand compartment of the Comparator.
- 2. To the other cell add a Phenol Red tablet. Crush the tablet and mix to dissolve with a clean stirring rod.
- 3. Place the cell in the right-hand compartment of the Comparator. Match the colour against the standards by holding the Comparator facing North Daylight\* and rotate the disc until the nearest colour match is obtained.
- 4. The pH value of the solution is shown in the bottom right-hand aperture of the Comparator.

### CHLORINE using disc 3/2ARP

- 1. Fit disc into Comparator. Fill one 13.5mm./10ml. moulded cell to the 10ml. mark and place in the left-hand compartment of the Comparator.
- 2. Rinse out another cell and fill to the 10ml. mark. Add one Potassium lodide tablet, crush with a clean stirring rod and mix to disintegrate.
- 3. Add one Acidifying General Purpose tablet, crush and mix thoroughly until both tablets have dissolved.
- 4. Place the cell in the right-hand compartment and holding the Comparator facing North Daylight\*, rotate the disc until the nearest colour match is obtained.
- 5. The figure shown in the bottom right-hand aperture of the Comparator is the concentration of total chlorine in mg./l..

### CHLORINE using disc 3/40B

- 1. Fit the disc into the Comparator. Fill one 13.5mm./1.0ml moulded cell to the 10ml. mark and place in the left-hand compartment of the Comparator.
- 2. Rinse out another cell with sample leaving a few drops of liquid in the bottom. Add one DPD No. 1 tablet, crush with a clean stirring rod and make the volume up to the 10ml. mark with sample. Mix well to dissolve tablet.
- 3. Place the cell in the right-hand compartment and holding the Comparator facing North Daylight\*, rotate the disc until the nearest colour match is obtained.
- 4. The figure shown in the bottom right-hand aperture of the Comparator is the concentration of **free chlorine** in mg./l..
- 5. For **total chlorine** remove the cell from the right-hand side of the Comparator and add a DPD No. 3 tablet to it. Crush and mix to dissolve. Allow to stand for 2 minutes.
- 6. Replace the cell in the Comparator and match as before. This reading represents the concentration of total chlorine in mg./l.. For **combined** chlorine subtract the free chlorine reading from the total chlorine reading.



#### HYPOCHLORITE using disc 3/2 HYPO

- 1. Using the syringe, take 2.5ml. of sample and place in the shaker tube. Dilute to the 50ml. mark with deionised or chlorine-free water. Mix well.
- 2. Take 0.5ml. of this solution and place into the second shaker tube diluting to the 50ml. mark with deionised water as before and again mix well.
- 3. Rinse a 13.5mm./10m.I moulded cell with this solution and fill to the 10ml. mark. Add one Potassium lodide tablet and then one Acidifying General Purpose tablet, crush and mix to dissolve.
- 4. Place the cell in the right-hand side of the Comparator and fit disc 3/2HYPO. Match by holding the Comparator facing North Daylight\* and rotate the disc until the nearest colour match is obtained.
- 5. The figure shown in the bottom right-hand aperture of the Comparator represents % w/w of available chlorine present in the original sample.

#### \* NORTH DAYLIGHT

The correct light source must be used when matching colours in the Comparator, North Daylight is acceptable; the portable Lovibond<sup>®</sup> Daylight Unit TK102 or the Lovibond<sup>®</sup> Daylight 2000 Unit are recommended.

Tests conducted in the Southern Hemisphere require South Daylight instead of North Daylight.

384780