# Low Range Phosphate Kit

**Low Range Comparator, 0.0-2.0 PPM**

**Code 3121-02**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Contents</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 30 mL</td>
<td>*Phosphate Acid Reagent</td>
<td>*V-6282-G</td>
</tr>
<tr>
<td>5 g</td>
<td>*Phosphate Reducing Reagent</td>
<td>*V-6283-C</td>
</tr>
<tr>
<td>2</td>
<td>Test Tubes, 10.0 mL, glass, w/cap</td>
<td>0843</td>
</tr>
<tr>
<td>1</td>
<td>Pipet, 1.0 mL, plastic</td>
<td>0354</td>
</tr>
<tr>
<td>1</td>
<td>Spoon, 0.1 g, plastic</td>
<td>0699</td>
</tr>
<tr>
<td>1</td>
<td>Low Range Comparator</td>
<td>1102</td>
</tr>
<tr>
<td>1</td>
<td>Phosphate Low Range Comparator Bar 0.0-2.0 ppm</td>
<td>3122-01</td>
</tr>
</tbody>
</table>

*WARNING: Reagents marked with an * are considered to be potential health hazards. To view or print a Material Safety Data Sheet (MSDS) for these reagents go to www.lamotte.com. To obtain a printed copy, contact LaMotte by e-mail, phone or fax. To order individual reagents or test kit components, use the specified code number.*

**NOTES:**
- This test determines levels of orthophosphates only.
- This test should be run on clear samples only. Filter the sample if necessary.
- Best results are obtained when solution temperatures are 23-25°C.
PROCEDURE

1. Fill test tube (0843) to 10 mL line with sample water.
2. Use 1.0 mL pipet (0354) to add 1.0 mL of *Phosphate Acid Reagent (V-6282). Cap and mix.
3. Use 0.1 g spoon (0699) to add one level measure of *Phosphate Reducing Reagent (V-6283). Cap and mix until dissolved. Wait 5 minutes.
4. Remove cap from test tube. Place tube in Low Range Comparator (1102) with Phosphate Low Range Comparator Bar (3122-01). Fill one test tube (0843) to the 10 mL line with sample water. Place in Low Range Comparator. Match sample color to a color standard. Record as ppm Orthophosphate.

USE OF LOW RANGE COMPARATOR

The Low Range Comparator allows extremely faint colors to be matched to color standards by viewing the reaction down the length of the tube increasing the path length by five to ten times compared to comparators that view the reaction across the diameter of the tube.

PROCEDURE

1. Fill a test tube to the 10 mL line with sample water. Insert it in the rear hole on the top of the Low Range Comparator.
2. Fill another test tube with sample water. Follow the test procedure. Remove the cap. Insert the tube in the front hole on the top of the Low Range Comparator.
3. Slide the Low Range Comparator Bar into the Low Range Comparator. Position the comparator so that light shines down through the test tubes. Match the color of the reaction to the color standards. Read the result from the Low Range Comparator Bar.

LaMOTTE COMPANY
Helping People Solve Analytical Challenges®
PO Box 329 • Chestertown • Maryland • 21620 • USA
800-344-3100 • 410-778-3100 (Outside U.S.A.) • Fax 410-778-6394
Visit us on the web at www.lamotte.com