NITRATE NITROGEN KIT

LOW RANGE COMPARATOR, 0-1.0 PPM

CODE 3615-01

QUANTITY	CONTENTS	CODE
2 x 120 mL	*Mixed Acid Reagent	*V-6278-J
10g	*Nitrate Reducing Reagent	*V-6279-D
1	Dispenser cap	0693
1	Spoon, 0.1g, plastic	0699
2	Test Tubes, 5 & 10 mL, glass, w/1 cap	0898
1	Water Sample Bottle	0688
1	Pipet, plastic, 0.5 mL	0353
1	Low Range Comparator Viewer	1102
1	Nitrate-Nitrogen Low Range Comparator Bar, 0-1.0 ppm	3614-01

*WARNING: Reagents marked with an * are considered to be potential health hazards. To view or print a Safety Data Sheet (SDS) for these reagents go to www.lamotte.com. Search for the four digit reagent code number listed on the reagent label, in the contents list or in the test procedures. Omit any letter that follows or precedes the four digit code number. For example, if the code is 4450WT-H, search 4450. To obtain a printed copy, contact LaMotte by email, phone or fax.

Emergency information for all LaMotte reagents is available from Chem-Tel: (US, 1-800-255-3924) (International, call collect, 813-248-0585).

To order a complete set of refill reagents, order as R-3615. To order individual reagents or test kit components, use the specified code number.

NOTES:

- Distilled water is required for the High Range procedure.
- Place Dispenser Cap (0693) on *Mixed Acid Reagent (V-6278). Save Dispenser Cap for reagent refills.
- Best results are obtained when all solutions are kept close to 23°C.
- Nitrites can cause serious interference in this test and should be determined and compensated for if present. Order Nitrite Nitrogen test kit, Code 3352.

Warning! This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

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 ten times compared to comparators that view the reaction across the diameter of the tube.

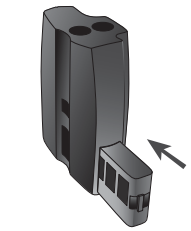

fig.1

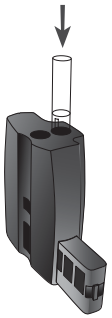

fig.2

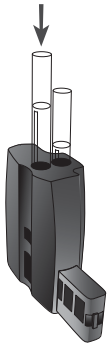

fig.3

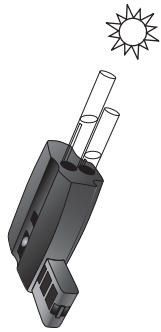

fig.4

1. Slide the Low Range Comparator Bar into the Low Range Comparator (fig.1).
2. Fill a test tube to the 10 mL line with untreated sample water. Insert it in the rear hole on the top of the Low Range Comparator (fig.2).
3. Fill a 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 (fig.3).
4. Position the comparator so that light shines down through the test tubes (fig.4). Tilt the comparator until the color standards and sample are illuminated. Match the color of the reaction to the color standards. Read the result from the Low Range Comparator Bar.

PROCEDURE

LOW RANGE (0-1.0 ppm Nitrate Nitrogen)

1. Fill the water sampling bottle (0688) with sample water.
2. Slide the Nitrate-Nitrogen Low Range Comparator Bar (3614-01) into the Low Range ComparatorViewer (1102). Fill one test tube (0898) to the 10 mL line with sample water. Place in Low Range Comparator.
3. Fill one test tube (0898) to the lower line (5 mL) with sample water.
4. Dilute to second line with *Mixed Acid Reagent (V-6278). Cap and mix.
5. Wait 2 minutes.
6. Use the 0.1 g spoon (0699) to add one level measure (avoid any excess) of *Nitrate Reducing Reagent (V-6279).
7. The mixing procedure is extremely important. Cap tube. Invert tube slowly and completely 30 times in 1 minute to insure complete mixing.
8. Wait 10 minutes.
9. Insert test tube into Low Range Comparator (1102). Match sample color to a color standard. Record as ppm Nitrate-Nitrogen.

NOTE: To convert to nitrate, multiply by 4.4. Record as ppm Nitrate.

HIGH RANGE (0-10.0 ppm Nitrate Nitrogen)

1. Use the 0.5 mL pipet (0353) to add 0.5 mL of the water sample to a test tube (0898).
2. Slide the Nitrate Nitrogen Low Range Comparator Bar (3614-01) into the Low Range Comparator Viewer (1102). Fill one test tube (0898) to the 10 mL line with sample water. Place in Low Range Comparator.
3. Add Distilled Water to the lower line (5 mL).
4. Dilute to second line with *Mixed Acid Reagent (V-6278). Cap and mix.
5. Wait 2 minutes. Use the 0.1 g spoon (0699) to add one level measure (avoid any excess) of *Nitrate Reducing Reagent (V-6279).
6. The mixing procedure is extremely important. Cap tube. Invert tube slowly and completely 30 times in 1 minute to insure complete mixing.
7. Wait 10 minutes.
8. Insert test tube into Low Range Comparator (1102). Match sample color to a color standard. Multiply the reading by 10. Record as ppm Nitrate-Nitrogen.

NOTE: To convert to nitrate, multiply by 4.4. Record as ppm Nitrate.

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