



HYDROGEN PEROXIDE & PERACETIC ACID KIT

Drop Count

CODE 7191-02

QUANTITY	CONTENTS	CODE
30 mL	*Sulfuric Acid, 1:1	*6141WT-G
15 mL	Ferriin Indicator	6410-E
2 x 30 mL	*Hydrogen Peroxide Titrant	*5650LWT-G
30 mL	*Potassium Iodide 20% Solution	*6521-G
60 mL	Peracetic Acid Titrant	S-6155-H
1	Test Tube, 5-10-25 mL, plastic, w/cap	0715
1	Pipet, 0.5 mL, plastic	0353

*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.

NOTE: Do not use for tapwater or less than 20 ppm peracetic acid.

PROCEDURE

HYDROGEN PEROXIDE

1. Fill test tube (0715) to 10 mL line with sample water.
2. Add 10 drops of *Sulfuric Acid, 1:1 (6141WT). Swirl to mix. Make sure solution is thoroughly mixed.
3. Add 1 drop of Ferriin Indicator (6410). Swirl to mix. Make sure solution is thoroughly mixed. Solution will turn pale orange-pink if hydrogen peroxide is present.
4. While gently swirling tube, add *Hydrogen Peroxide Titrant (5650LWT) one drop at a time until pale orange-pink color changes to colorless or pale yellow. Make sure solution is thoroughly mixed. Count the number of drops added. Hold bottle vertically.
5. Discard titrated sample and rinse tube out with sample water.
6. Multiply the number of drops used in Step 4 by 50 (fifty). Record as ppm Hydrogen Peroxide.

PERACETIC ACID

NOTE: This method may be used to test low to high concentration of peracetic acid. Choose the procedure that is most appropriate for the sample being tested.

1 drop = 15 ppm

1. Fill test tube (0715) to 10 mL line with sample water.
2. Add 10 drops of *Sulfuric Acid, 1:1 (6141WT). Swirl to mix. Make sure solution is thoroughly mixed.
3. Add 1 drop of Ferroin Indicator (6410). Swirl to mix. Make sure solution is thoroughly mixed.
4. Add 1 drop of *Potassium Iodide 20% Solution (6521). Swirl to mix. Make sure solution is thoroughly mixed. Solution will turn a cloudy brown if peracetic acid is present.
5. While gently swirling tube, add Peracetic Acid Titrant (S-6155), one drop at a time until brown color changes to a clear, pale orange-pink which persists for 20 seconds. Make sure solution is thoroughly mixed. Count the number of drops added.
6. Multiply the number of drops used in Step 5 by 15 (fifteen). Record as ppm Peracetic Acid.

For example:

$$10 \text{ drops} \times 15 = 150 \text{ ppm Peracetic Acid}$$

Low Range (20-90 ppm) 1 drop = 6ppm

Fill the test tube to the 25 mL line. Follow the test procedure and use 25 drops of *Sulfuric Acid, 1:1 (6141WT), 3 drops of Ferroin Indicator (6410) and 3 drops of *Potassium Iodide 20% Solution (6521). In Step 6 multiply the number of drops used by 6 (six). Record as ppm Peracetic Acid.

For example:

$$10 \text{ drops} \times 6 = 60 \text{ ppm Peracetic Acid}$$

High Range (300-500 ppm) 1 drop = 300 ppm

For higher concentrations of peracetic acid use the 0.5 mL pipet (0353) to add 0.5 mL of the sample to the test tube (0715). Fill the tube to the 10 mL line with hydrogen peroxide/peracetic acid-free water. Follow Steps 2 - 5. In Step 6 multiply the number of drops used by 300 (three hundred). Record as ppm Peracetic Acid

For example:

$$10 \text{ drops} \times 300 = 3000 \text{ ppm Peracetic Acid}$$

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