

SODIUM HYDROXIDE TEST KIT

DIRECT READING TITRATOR METHOD

MODEL DCA-DR • CODE 7516-DR-01

QUANTITY	CONTENTS	CODE
30 g	*Barium Chloride Powder	*6073-G
2 x 30 mL	*Hydrochloric Acid, 2.5N	*6251-DR-G
60 mL	Deionized Water	5115-H
15 mL	*Phenolphthalein Indicator, 1%	*2246-E
1	Pipet, 1.0 mL, plastic	0354
1	Test Tube, 5-10-15 mL, glass, w/cap	0778
1	Direct Reading Titrator, 0 - 10 Range	0377
1	Spoon, 0.5 g, plastic	0698

***WARNING:** Reagents marked with a * are considered hazardous substances. Material Safety Data Sheets (MSDS) are supplied for these reagents. For your safety, read label and accompanying MSDS before using.

To order individual reagents or test kit components, use the specified code number.

Read the LaMotte Direct Reading Titrator Manual before proceeding. The Titrator is calibrated in % Sodium Hydroxide. Each minor division equals 0.2%.

PROCEDURE

1. Use the 1.0 mL pipet (0354) to add 1.0 mL of sample to test tube (0778).
2. Fill the test tube (0778) to 10 mL line with Deionized Water (5115).
3. Use the 0.5 g spoon (0698) to add one level measure of *Barium Chloride Powder (6073). A white precipitate will form if carbonates are present.
4. Add two drops of *Phenolphthalein Indicator, 1% (2246). Cap and mix. Solution will turn pink.
5. Fill the Direct Reading Titrator (0377) with the *Hydrochloric Acid, 2.5N (6251). Insert the tip of the Titrator into the center hole of the test tube cap.
6. While gently swirling the tube, slowly press the plunger to titrate until the pink color disappears.
7. Read the concentration of the test sample where the plunger meets Titrator scale. Record as % Sodium Hydroxide.

EXAMPLE: Titrator reading is 3 minor divisions below line 7.

$$7 + (3 \text{ divisions} \times 0.2) = 7.6\% \text{ NaOH}$$