

DROP TEST

CAUSTIC SODA ALKALINITY (1 drop = 0.1% or 1%)

COMPONENTS:

- 1 x 4029 Pipet, Calibrated (0.5 & 1.0 mL), plastic
- 1 x 5087 Instruction
- 1 x 9198G Sample Tube, Graduated (25 mL) w/ cap & green dot, plastic
- 1 x R-0638G-C Phenolphthalein Indicator, 2 oz w/ green cap, DB
- 1 x R-0691-C Sulfuric Acid Reagent, 2 oz, DB

**TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE
800-TEST KIT (800-837-8548).**

PROCEDURE:

**CAREFULLY READ AND FOLLOW PRECAUTIONS ON REAGENT LABELS.
KEEP REAGENTS AWAY FROM CHILDREN.**

NOTE: When dispensing reagents from dropper bottles, **always** hold bottle in a vertical position.

For 1 drop = 0.1% Sodium Hydroxide

1. Rinse and fill 25 mL sample tube (#9198G) to 10 mL mark with water to be tested.
2. Add 2 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1) if caustic soda alkalinity is present.
3. Add R-0691 Sulfuric Acid Reagent dropwise, swirling and counting after each drop, until color just changes from pink to colorless.
4. Multiply drops of R-0691 Sulfuric Acid Reagent by 0.1. Record as grams per 100 mL (g/100 mL) caustic soda alkalinity (sodium hydroxide) (NaOH).

NOTE: At low levels, grams per 100 mL can be regarded as percent, but not at higher levels due to the increase in density of the solution.

For 1 drop = 1% Sodium Hydroxide

1. Using 1.0 mL pipet (#4029), add 1.0 mL water to be tested to clean 25 mL sample tube (#9198G). Dilute to 10 mL with tap water.
2. Add 2 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1) if caustic soda alkalinity is present.
3. Add R-0691 Sulfuric Acid Reagent dropwise, swirling and counting after each drop, until color just changes from pink to colorless.
4. Record drops of R-0691 Sulfuric Acid Reagent as grams per 100 mL (g/100 mL) caustic soda alkalinity (sodium hydroxide) (NaOH).

NOTE: At low levels, grams per 100 mL can be regarded as percent, but not at higher levels due to the increase in density of the solution. The following table can be used to make an approximate conversion from grams per 100 mL to percent.

g/100 mL NaOH	%
10	9.4
20	16.9
30	25.8
40	30.1
50	36.0
60	41.5
70	46.8
75	49.4



Fig. 1



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