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Instructions

Instruction Number: 5307G

LAUNDRY WASHROOM KIT
ALKALINITY

COMPONENTS:

- | | |
|---------------|--|
| 1 x 5307G | Instruction |
| 1 x 9198G | Sample Tube, Graduated, 25 mL, plastic w/cap and green dot |
| 1 x R-0638G-A | Phenolphthalein Indicator(green cap), .75 oz, DB |
| 1 x R-0645-C | Total Alkalinity Indicator, 2 oz, DB |
| 1 x R-0896-C | Sulfuric Acid, 2 oz, DB |

TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE
877-7WATER6 (877-792-8376)or [email us](#) with your requirements.

PROCEDURE:

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

Alkalinity

NOTE: Two indicators, R-0638G Phenolphthalein Indicator and R-0645 Total Alkalinity Indicator are used to test for active and inactive alkali. The alkali which is detected using R-0638G Phenolphthalein Indicator is considered active alkali, and the rest is largely inactive in the washing process. However, it is important that the concentration of alkali present to give good cleaning not affect the suds bath. The total alkalinity value is important as a measure of the probable rinsing efficiency.

1. Rinse and fill 25 mL sample tube (#9198G) to 25 mL mark with water to be tested.

NOTE: To test for Total Alkalinity only, omit Steps 2 & 3.

2. Add 3 drops R-0638G Phenolphthalein Indicator. Swirl to mix. If colorless--proceed to Step 4. If pink, add R-0896 Sulfuric Acid dropwise, swirling and counting after each drop, until color just changes from pink to colorless. Always hold bottle in vertical position.
3. Multiply drops of R-0896 Sulfuric Acid by 100. Record as parts per million (ppm) active alkalinity as sodium oxide

(Na₂O).

4. Add 5 drops R-0645 Total Alkalinity Indicator. Swirl to mix. Sample should turn green.
5. Add R-0896 Sulfuric Acid dropwise, swirling and counting after each drop, until color changes from green to pink. Always hold bottle in vertical position.
6. Multiply drops of R-0896 used in Step 5 by 100. Add to active alkalinity (Step 3). Record as parts per million (ppm) total alkalinity as sodium oxide (Na₂O).

TOTAL ALKALINITY FOR VARIOUS WASH FORMULAS

Formula	ppm of Na ₂ O	Drops of R-0896 Needed for Titration
light soil	400-600	4-6
medium soil	600-900	6-9
heavy soil	1800-2500	18-25
shop towels	2500-3700	25-37

04/09