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## Instruction Number: 5087

DROP TEST
CAUSTIC SODA (SODIUM HYDROXIDE) ( 1 drop $=0.1 \%$ or $1 \%$ )
COMPONENTS:

| $1 \times 4029$ | Pipet, Calibrated $0.5 \& 1.0 \mathrm{~mL}$, plastic |
| :--- | :--- |
| $1 \times 5087$ | Instruction |
| $1 \times 9198 \mathrm{G}$ | Sample Tube, Graduated, 25 mL, plastic |
| $1 \times \mathrm{w} / \mathrm{cap}$ and green dot |  |

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.
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 should turn red.
3. Add R-0691 Sulfuric Acid Reagent dropwise, swirling and counting after each drop, until color just changes from red to colorless. Always hold bottle in vertical position.
4. Multiply drops of $R-0691$ Sulfuric Acid Reagent by 0.1. Record as grams per $100 \mathrm{~mL}(\mathrm{~g} / 100 \mathrm{~mL})$ caustic soda (sodium hydroxide).

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 a 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 should turn red.
3. Add R-0691 Sulfuric Acid Reagent dropwise, swirling and counting after each drop, until color just changes from red to colorless. Always hold bottle in vertical position.
4. Record drops of R-0691 Sulfuric Acid Reagent as grams per $100 \mathrm{~mL}(\mathrm{~g} / 100 \mathrm{~mL})$ caustic soda (sodium hydroxide).

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.

| $9 / 100 \mathrm{~mL} \mathrm{NaOH}$ | $\%$ |
| :---: | ---: |
| 10 | 9.4 |
| 20 | 16.9 |
| 30 | 25.8 |
| 40 | 30.1 |
| 50 | 36.0 |
| 60 | 41.5 |
| 70 | 46.8 |
| 75 | 49.4 |

