

# Limit of Bromides

## Step-by-Step Instructions

1. Prepare the sample solution as specified.
2. Add pH 4.7 phenol red TS and chloramine T solution.
3. Mix immediately and wait exactly 2 minutes.
4. Add sodium thiosulfate to stop the reaction.
5. Measure the absorbance at 590 nm using UV-Vis spectroscopy.
6. Compare the absorbance against a standard solution containing 3 µg/mL of potassium bromide.

## Acceptance Criteria

- The absorbance of the Sample solution is not greater than that of the Standard solution (NMT 100 ppm).

## Tips and Cautions

- Starch Preparation: Starch indicator must be "iodide-free" to prevent false positives.
- Timing: The Bromide reaction is time-sensitive; exactly 2 minutes must be observed before stopping the reaction with thiosulfate.

**Natural Light: Observations for color changes in the Iodide test should be done in natural light for accuracy.**

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