

# Making the Baking Soda Alkalinity Standard

## Lab Guide

### *What You Need*

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|--|--|
| <input type="checkbox"/> Baking soda (1.9 g)       | <input type="checkbox"/> Stirring rod              |
| <input type="checkbox"/> Balance                   | <input type="checkbox"/> 100-mL graduated cylinder |
| <input type="checkbox"/> 500-mL graduated cylinder | <input type="checkbox"/> Pen or pencil             |
| <input type="checkbox"/> Distilled water           | <input type="checkbox"/> 500-mL beaker             |

### *In the Lab*

1. Weigh out 1.9 g baking soda and add it to the 500-mL graduated cylinder.
2. Pour distilled water into the cylinder with the baking soda to the 500-mL mark.
3. Pour this baking soda solution into the 500-mL beaker, and stir it with a stirring rod to make sure all of the baking soda has dissolved.
4. Rinse the 500-mL graduated cylinder with distilled water. Measure 15 mL of baking soda solution with the 100-mL graduated cylinder and pour it into the clean 500-mL graduated cylinder.
5. Add distilled water to the solution in the 500-mL graduated cylinder to the 500-mL mark.
6. This solution is your standard and has an alkalinity of approximately 84 mg/L.