

#### **How To Guide**



### Using Phenolphthalein (Its cool, no one knows how to pronounce it)

#### What is Phenolphthalein

Phenolphthalein: is a base indicator. It will register solutions with a pH of 8.0 and above.



It will change the color of a basic solution light pink to deep purple, depending on how basic your solution is.

Phenolphthalein doesn't do great inside our body. Try not to drink it. Or place it near your electric pink lemonade. That would be awkward.

#### What to Do:

Start with a clear plastic cup, beaker, or test tube and a few empty plastic droppers.

Take an empty dropper and fill your test tube with 1 or 2 full droppers of a solution to be tested. A clear solution makes the test results much more obvious.

Add **1 DROP** of Phenolphthalein to your test tube of solution. Okay, you can add a second drop if you really want to, (but only if you REALLY want to).

Gently shake your test tube to mix.

If your solution turns pink, your solution is basic! (the change will be obvious, if it happens)

Phenolphthalein gives you an indication of the pH of your solution, not an exact numeric value.

You can compare two different solutions by looking at them side by side to determine how different the color change of each one is. This can help you determine the pH of different solutions relative to each other.

#### Phenolphthalein at Start

Phenolphthalein is a clear liquid. When mixed with a solution with a pH of 7 or below, the color will remain clear





## Phenolphthalein Mixed With A Slightly Basic Solution



When mixed with a solution with a pH around 8, the color will turn slightly pink.

# Phenolphthalein Mixed With A Very Basic Solution



When mixed with a solution with a pH around 10 or higher, the color will turn deep purple.

#### **Phenolphthalein Color Spectrum**

This represents the pH of liquids from acidic, to slightly basic, to very basic.

