

# Service Bulletin: MART Power Washer

MART Tech Services

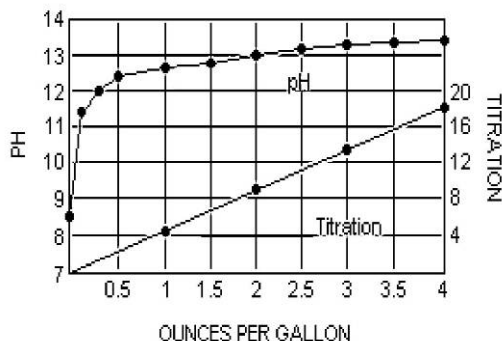
## The Best Method for Monitoring Your Detergent Concentration

Do you know that a pH measurement made with pH paper or a pH meter is not a measurement of detergent concentration? This is extremely important to know with parts washing soaps and detergents such as Power Kleen.

The pH is a number expressing the relative acidity or alkalinity of a solution. The pH value can range from 0 to 14. The pH of pure water is 7 while acidic solutions have pH values below 7 and alkaline, or basic, solutions have pH values above 7. A pH value is a measurement of the hydrogen ion concentration in a solution. Each unit of pH represents a 10x change in the ion concentration.

Remember, the only way to reliably measure chemical concentration is by titration. Titration is a simple method of chemically measuring a tracer in soap and comparing the titration to a known standard. Titrating on a daily basis will determine the percentage of cleaning chemical per gallon of water and allow you to decide if additional chemical is required.

As can be seen on the graph, a titration value is directly proportional to the concentration of Power Kleen. Each ounce per gallon generates 4 titration units. With pH the curve is not proportional. A 4 to 1 change in soap concentration only changes the pH 0.7 units. This is difficult to measure and extremely sensitive.



If your concentration is too weak and you don't know it, you will see a reduction in your cleaning

standards and you could begin having corrosion on the walls of your washer. If the solution is too strong and you don't know it, you could be using more soap than necessary and you may not get a good rinse. A titration kit as shown below is available for all recommended Power Kleen detergents. Call MART Tech Services for information.



Titration instructions are available at:  
<http://www.marttechservices.com>

## How do you prevent corrosion from attacking your washer cabinet?

There are a number of possible causes for corrosion on the inside of the washer cabinet. Two common causes are a corrosive incoming water supply, and poor chemical management. The easiest prevention step is to be sure the detergent you are using provides the proper corrosion protection and then to maintain the proper concentration of that chemical.

Know your pH level! In order to prevent corrosion of your steel washer cabinet you must maintain the pH level between 10.5 and 12.5. You can test your pH level with a MTS pH test strip P/N 85006 shown below.



**For further information or cleaning assistance please contact MART Tech Services from 8:00am to 5:00pm (central) or visit our website 24 hour 7days a week.**