

Power-Kleen

Titration Kit

Titration Instructions

Perform this test to determine the concentration of parts washer chemical by titrating the alkalinity of the solution with an indicator and a drop count. The results determine the number of ounces of washer chemical to add per gallon of water-capacity

This test, which consists of an "indicator" and a "titrant" (acid), shows the concentration of POWER-KLEEN in solution. **Caution:** Wear eye protection and gloves during test.

Take a sample of the parts washer solution from below the surface. Avoid collecting oil in the sample. Allow the solution to cool to room temperature.

For accuracy:

- Filter the cooled solution through a coffee filter to remove impurities and make it clear enough to see the color change.
- Use clean test tools. Always clean the test tube before each test.
- Hold the acid bottle vertically when adding drops to ensure consistent droplet size.



1. Pour 12.5 ml of washer solution into marked Test Tube.
2. If the solution is murky, add another 12.5 ml of clean water for clarification. Swirl the test tube to mix the solution thoroughly.



3. Add 5 droplets of the Phenolphthalein Indicator. The sample solution will turn pink. Again, swirl the test tube to mix the solution thoroughly.



4. Add the acid, one droplet at a time, and count the drops while swirling the sample solution until the pink color is completely gone. Remember to hold the acid bottle vertically when adding drops to ensure consistent droplet size.



5. Reading: Use the chart below to find the Type of Power Kleen Chemical you are testing. The concentration of the Power Kleen Chemical, expressed as oz/gal, equals (the number of drops or acid) divide by the appropriate "Drop Number Divider" in the chart below

Chemical Type	Drop Number Divider
Power-Kleen I	10
Power-Kleen I L	3.5
Power-Kleen II	5
Power-Kleen III P	4.5
Power-Kleen III L	3
Power-Kleen V	3

Pour test solution into machine reservoir, wash Test Tube, and repeat to confirm results. Most Parts Washer Manufacturers recommends that the chemical concentration be maintained between 2 oz and 8 oz per gallon, depending on the cleaning required and machine specifications. If, for example, the test indicates 3 oz per gallon and the desired concentration is 6 oz, then sufficient amount of chemical to bring the solution to full strength or use our calculator at:

http://marttechservices.com/Chemical_Concentration_Calculator.htm

Titration Kit refills:

Chemical Type	Part Number
Power-Kleen I, I L, II, III L	22200
Power-Kleen V	22205

Please contact: MART Tech Service 1-800-543-6278

