

AQUAKLEAN RP 700 CONTROL TITRATION - Drop Method

Reagents and Equipment:

- Hach Test Kit (avail from NuGenTec) model number: TK- AL-TA.
- 150 or 200 or 250 ml Beaker or Erlenmeyer flask with a 100 ml marking

Procedure for 1% and 2% Tanks of RP700:

1. Fill the small bottle to the 20ml mark with RP700 solution from tank to be tested.
2. Add one packet of Bromocresol Green/Methyl Red Powder.
3. Titrate with 0.5N "Acid" solution to an endpoint - "green/blue to purple" color change.
4. Record number of DROPS of titrant (0.5N acid) testing solution used as "T₁".
5. Concentration of AquaKlean RP 700, in percent by volume, is calculated by

$$T_1 \times 0.33 = \% \text{ by volume of AquaKlean RP 700}$$

Calculation Example: For T = 6, $6 \times 0.33 = 2\%$ by volume of AquaKlean RP 700

Drops of 0.5N Titrant Used:	% Concentration of RP 700 Tank
1	0.33
2	0.66
3	1.0
4	1.33
5	1.66
6	2.0
7	2.33
8	2.66
9	3.0

Procedure for Tanks with <1% of RP700:

6. Fill the Beaker or Erlenmeyer flask to the 100ml mark with RP700 solution from tank to be tested.
7. Add one packet of Bromocresol Green/Methyl Red Powder.
8. Titrate with 0.5N "Acid" solution to an endpoint - "green/blue to purple" color change.
9. Record number of DROPS of titrant (0.5N acid) testing solution used as "T₂".
10. Concentration of AquaKlean RP 700, in percent by volume, is calculated by

$$T_2 \times 0.041 = \% \text{ by volume of AquaKlean RP 700}$$

Calculation Example: For T = 6, $6 \times 0.041 = 0.25\%$ by volume of AquaKlean RP 700