

## Conductometric titration of NaOH Vs HCl

S. No.	Volume of NaOH added (mL)	Total volume of NaOH added (mL)	Specific conductance (or) conductivity mS/cm
1	0.0 mL	0.0 mL	19.88
2	1.0 mL	1.0 mL	17.50
3	1.0 mL	2.0 mL	15.26
4	1.0 mL	3.0 mL	13.23
5	1.0 mL	4.0 mL	11.50
6	1.0 mL	5.0 mL	9.79
7	1.0 mL	6.0 mL	8.38
8	1.0 mL	7.0 mL	6.90
9	1.0 mL	8.0 mL	5.67
10	1.0 mL	9.0 mL	4.28
11	1.0 mL	10.0 mL	4.06
12	1.0 mL	11.0 mL	4.66
13	1.0 mL	12.0 mL	5.24
14	1.0 mL	13.0 mL	5.80
15	1.0 mL	14.0 mL	6.32
16	1.0 mL	15.0 mL	6.75
17	1.0 mL	16.0 mL	7.01

Volume of HCl = 10 ml

Molarity of HCl = ?

Molarity of NaOH = 0.1 M

Volume of NaOH = \_\_\_\_\_ (Obtain from specific conductance Vs Volume of NaOH graph)

Questions: (Please answer below question in 2 or 3 sentences)

1. Why specific conductance decreases with addition of NaOH?
2. Can conductivity be measured in aqueous solutions only?
3. What is the cell constant of a conductivity cell?