

Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

pH-metric Result

logP (XH +) 0.40 ±0.06 (n=50) logP (neutral X) 3.80 ±0.01 (n=50)

18C-03015 Points 1 to 18

M12_octanol concentration factor 1.084
Carbonate 0.0827 mM
Acidity error -3.00593 mM

18C-03015 Points 19 to 29

M12_octanol concentration factor 1.664
Carbonate 0.1338 mM
Acidity error -2.74094 mM

18C-03015 Points 30 to 56

M12_octanol concentration factor 0.918
Carbonate 0.0569 mM
Acidity error 8.57201 mM

Warnings and errors

Errors None Warnings None

Sample logD and percent species

рН	M12_octanol	M12_octanol	M12_octanol	M12_octanol	M12_octanol	Comment
	logD	M12_octanolH	M12_octanol	M12_octanolH*	M12_octanol*	
1.000	0.45	26.11 %	0.00 %	65.29 %	8.60 %	
1.200	0.48	24.86 %	0.00 %	62.16 %	12.97 %	Stomach pH
2.000	0.76	14.72 %	0.01 %	36.81 %	48.46 %	
3.000	1.55	2.75 %	0.01 %	6.86 %	90.38 %	
4.000	2.50	0.30 %	0.02 %	0.75 %	98.93 %	
5.000	3.33	0.03 %	0.02 %	0.08 %	99.88 %	
6.000	3.72	0.00 %	0.02 %	0.01 %	99.97 %	
6.500	3.77	0.00 %	0.02 %	0.00 %	99.98 %	
7.000	3.79	0.00 %	0.02 %	0.00 %	99.98 %	
7.400	3.79	0.00 %	0.02 %	0.00 %	99.98 %	Blood pH
8.000	3.80	0.00 %	0.02 %	0.00 %	99.98 %	
9.000	3.80	0.00 %	0.02 %	0.00 %	99.98 %	
10.000	3.80	0.00 %	0.02 %	0.00 %	99.98 %	
11.000	3.80	0.00 %	0.02 %	0.00 %	99.98 %	
12.000	3.80	0.00 %	0.02 %	0.00 %	99.98 %	



Assay ID:

Filename:

Sample name: M12_octanol Assay name:

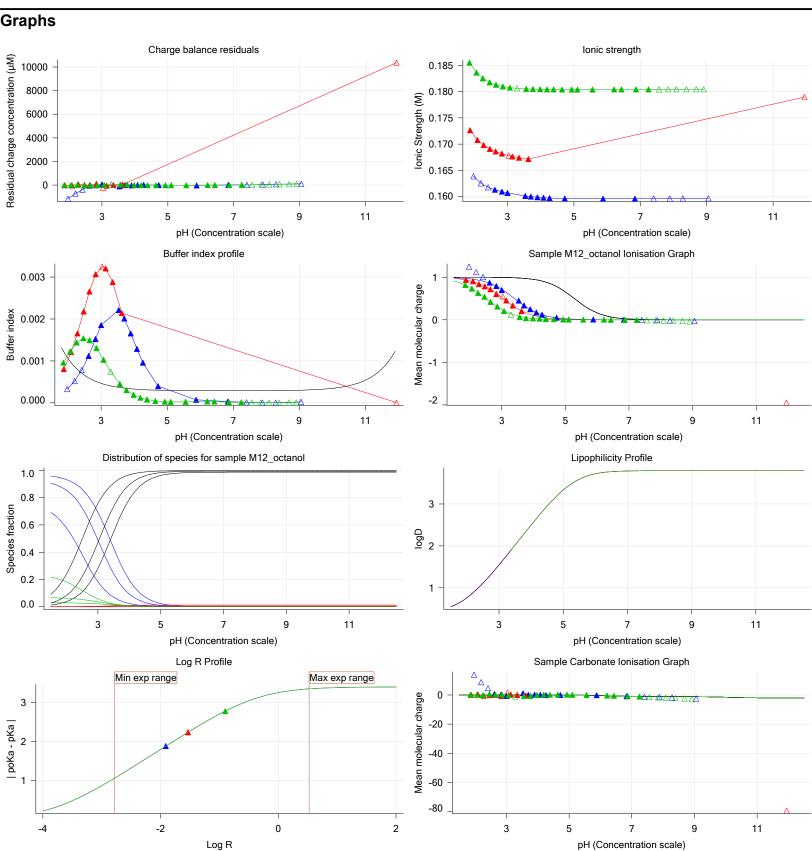
pH-metric high logP

18C-03015

Experiment start time: 3/3/2018 7:38:51 PM

Analyst: Pion Instrument ID: T312060

C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

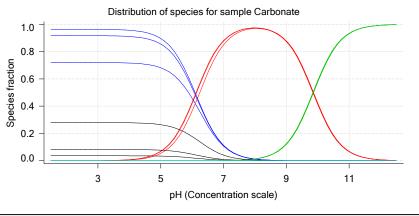




Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Graphs (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

pH-metric high logP Titration 1 of 3 18C-03015 Points 1 to 18

Overall results

RMSD 0.115
Average ionic strength 0.160 M
Average temperature 24.9°C
Partition ratio 0.0123 : 1

Analyte concentration range 3571.6 µM to 3683.7 µM

Total points considered 11 of 18

Warnings and errors

Errors None

Warnings Excessive acidity error present

Four-Plus parameters

Alpha	0.111	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
S	0.9988	3/3/2018 7:38:51 PM	C:\Sirius T3\HCl18C02.t3r
jΗ	1.0	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
jОН	-0.8	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r

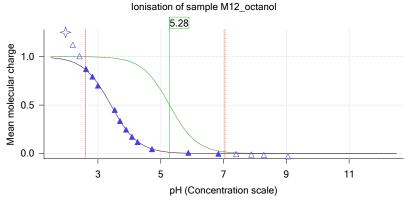
Titrants

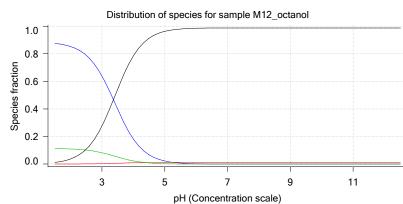
0.50 M HCI 0.999058 3/3/2018 7:38:51 PM C:\Sirius_T3\HCl18C02.t3r 0.50 M KOH 0.999845 3/3/2018 7:38:51 PM C:\Sirius_T3\KOH18B27.t3r

Sample

7	M12_octanol concentration factor	1.084
	M12_octanol stoichiometry	1.000
	Chloride stoichiometry	1.000
	Base pKa 1	5.28
₩	logP (XH +)	1.02
7	logP (neutral X)	3.82

Sample graphs



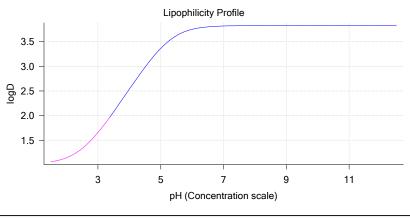




Assay name: pH-metric high logP Analyst: Pion Instrument ID: T312060 Assay ID: 18C-03015

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Sample graphs (continued)



Sample logD and percent species

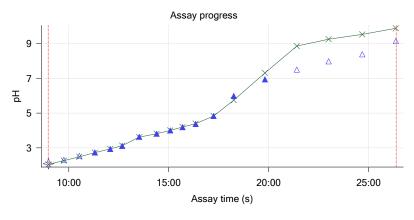
рН	M12_octanol	M12_octanol	M12_octanol	M12_octanol	M12_octanol	Comment
	logD	M12_octanolH	M12_octanol	M12_octanolH*	M12_octanol*	
1.000	1.03	88.26 %	0.00 %	11.36 %	0.38 %	
1.200	1.04	88.06 %	0.01 %	11.33 %	0.60 %	Stomach pH
2.000	1.15	85.31 %	0.04 %	10.98 %	3.67 %	
3.000	1.66	63.92 %	0.34 %	8.22 %	27.52 %	
4.000	2.54	18.23 %	0.96 %	2.34 %	78.47 %	
5.000	3.36	2.24 %	1.17 %	0.29 %	96.30 %	
6.000	3.75	0.23 %	1.20 %	0.03 %	98.54 %	
6.500	3.80	0.07 %	1.20 %	0.01 %	98.71 %	
7.000	3.82	0.02 %	1.20 %	0.00 %	98.77 %	
7.400	3.82	0.01 %	1.20 %	0.00 %	98.79 %	Blood pH
8.000	3.82	0.00 %	1.20 %	0.00 %	98.79 %	
9.000	3.82	0.00 %	1.20 %	0.00 %	98.80 %	
10.000	3.82	0.00 %	1.20 %	0.00 %	98.80 %	
11.000	3.82	0.00 %	1.20 %	0.00 %	98.80 %	
12.000	3.82	0.00 %	1.20 %	0.00 %	98.80 %	

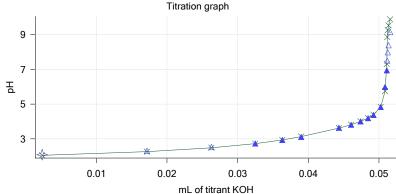
Carbonate and acidity



0.083 mM Acidity error -3.006 mM

Other graphs



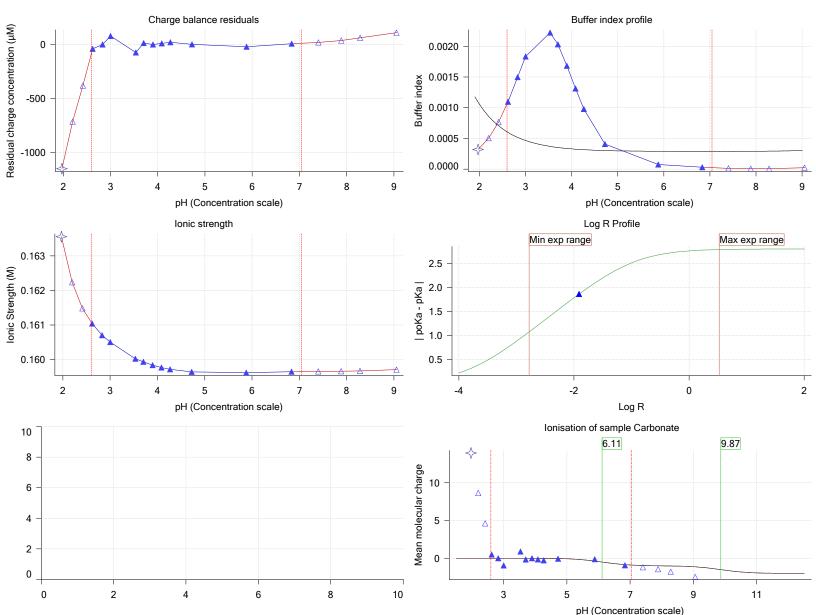




Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Other graphs (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

pH-metric high logP Titration 2 of 3 18C-03015 Points 19 to 29

Overall results

RMSD 0.008
Average ionic strength 0.168 M
Average temperature 25.0°C
Partition ratio 0.0293 : 1

Analyte concentration range 3109.3 µM to 3391.7 µM

Total points considered 9 of 11

Warnings and errors

Errors None

Warnings Sample concentration factor out of range

Excessive acidity error present

Four-Plus parameters

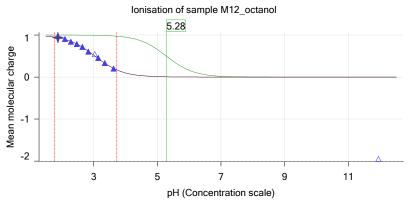
Alpha	0.111	3/3/2018 7:38:51 PM	C:\Sirius_13\HCl18C02.t3r
S	0.9988	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
jΗ	1.0	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
jОН	-0.8	3/3/2018 7:38:51 PM	C:\Sirius T3\HCl18C02.t3r

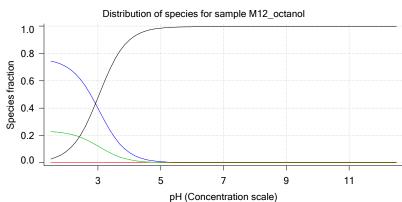
Titrants

Sample

1	M12_octanol concentration factor	1.664
	M12_octanol stoichiometry	1.000
	Chloride stoichiometry	1.000
	Base pKa 1	5.28
	logP (XH +)	1.02
٠	logP (neutral X)	3.89

Sample graphs



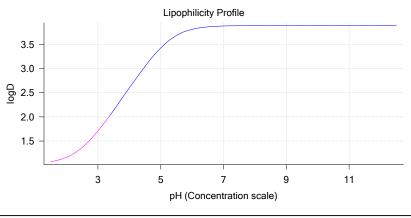




Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

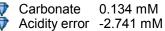
Sample graphs (continued)



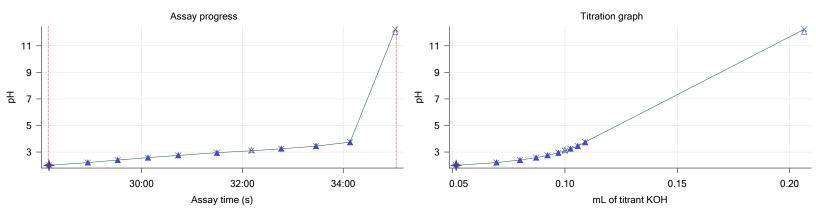
Sample logD and percent species

рН	M12_octanol logD	M12_octanolH		M12_octanol M12_octanolH*	M12_octanol M12_octanol*	
1.000	1.04	75.84 %	0.00 %	23.25 %	0.90 %	
1.200	1.05	75.44 %	0.01 %	23.13 %	1.43 %	Stomach pH
2.000	1.16	70.11 %	0.04 %	21.50 %	8.36 %	
3.000	1.71	39.94 %	0.21 %	12.25 %	47.60 %	
4.000	2.60	7.53 %	0.40 %	2.31 %	89.76 %	
5.000	3.43	0.83 %	0.43 %	0.25 %	98.49 %	
6.000	3.81	0.08 %	0.44 %	0.03 %	99.45 %	
6.500	3.86	0.03 %	0.44 %	0.01 %	99.53 %	
7.000	3.88	0.01 %	0.44 %	0.00 %	99.55 %	
7.400	3.89	0.00 %	0.44 %	0.00 %	99.56 %	Blood pH
8.000	3.89	0.00 %	0.44 %	0.00 %	99.56 %	·
9.000	3.89	0.00 %	0.44 %	0.00 %	99.56 %	
10.000	3.89	0.00 %	0.44 %	0.00 %	99.56 %	
11.000	3.89	0.00 %	0.44 %	0.00 %	99.56 %	
12.000	3.89	0.00 %	0.44 %	0.00 %	99.56 %	

Carbonate and acidity



Other graphs

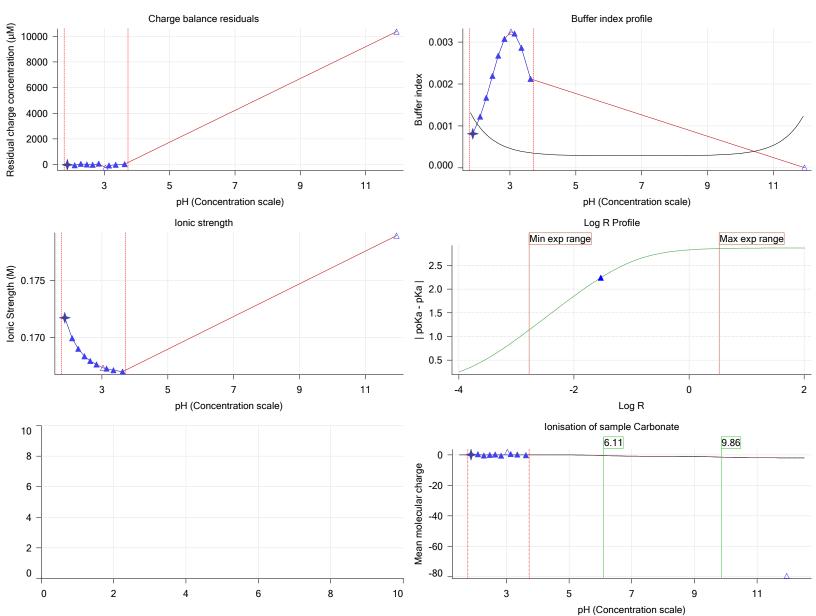




Assay name: pH-metric high logP Analyst: Pion 18C-03015 Instrument ID: T312060 Assay ID: Filename:

 $C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric\ high\ logP.t3r$

Other graphs (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

pH-metric high logP Titration 3 of 3 18C-03015 Points 30 to 56

Overall results

RMSD 0.199
Average ionic strength 0.181 M
Average temperature 25.0°C
Partition ratio 0.1256 : 1

Analyte concentration range 2574.7 µM to 2650.8 µM

Total points considered 20 of 27

Warnings and errors

Errors None

Warnings Excessive acidity error present

Four-Plus parameters

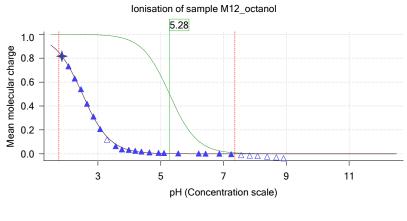
à	Alpha	0.111	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
à	S	0.9988	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
à	jΗ	1.0	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
à	jОН	-0.8	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r

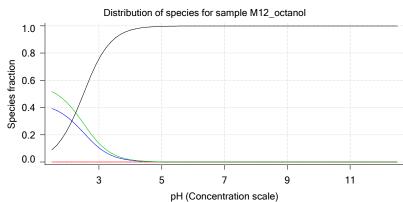
Titrants

Sample

₩	M12_octanol concentration factor	0.918
	M12_octanol stoichiometry	1.000
	Chloride stoichiometry	1.000
	Base pKa 1	5.28
	logP (XH +)	1.02
₩	logP (neutral X)	4.04

Sample graphs



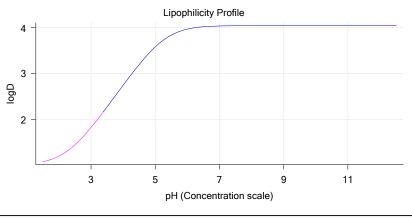




Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

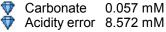
Sample graphs (continued)



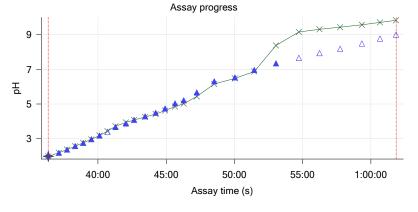
Sample logD and percent species

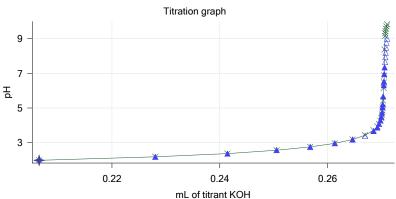
M12_octanol	M12_octanol	M12_octanol	M12_octanol	M12_octanol	Comment
logD	M12_octanolH	M12_octanol	M12_octanolH*	M12_octanol*	
1.04	41.89 %	0.00 %	55.08 %	3.02 %	
1.06	41.16 %	0.00 %	54.12 %	4.71 %	Stomach pH
1.21	32.92 %	0.02 %	43.29 %	23.77 %	
1.83	10.48 %	0.06 %	13.78 %	75.68 %	
2.75	1.34 %	0.07 %	1.76 %	96.83 %	
3.58	0.14 %	0.07 %	0.18 %	99.61 %	
3.96	0.01 %	0.07 %	0.02 %	99.90 %	
4.01	0.00 %	0.07 %	0.01 %	99.92 %	
4.03	0.00 %	0.07 %	0.00 %	99.92 %	
4.04	0.00 %	0.07 %	0.00 %	99.93 %	Blood pH
4.04	0.00 %	0.07 %	0.00 %	99.93 %	
4.04	0.00 %	0.07 %	0.00 %	99.93 %	
4.04	0.00 %	0.07 %	0.00 %	99.93 %	
4.04	0.00 %	0.07 %	0.00 %	99.93 %	
4.04	0.00 %	0.07 %	0.00 %	99.93 %	
	1.04 1.06 1.21 1.83 2.75 3.58 3.96 4.01 4.03 4.04 4.04 4.04 4.04 4.04	logD M12_octanolH 1.04 41.89 % 1.06 41.16 % 1.21 32.92 % 1.83 10.48 % 2.75 1.34 % 3.58 0.14 % 3.96 0.01 % 4.01 0.00 % 4.03 0.00 % 4.04 0.00 % 4.04 0.00 % 4.04 0.00 % 4.04 0.00 % 4.04 0.00 % 4.04 0.00 % 4.04 0.00 % 4.04 0.00 %	logD M12_octanolH M12_octanol 1.04 41.89 % 0.00 % 1.06 41.16 % 0.00 % 1.21 32.92 % 0.02 % 1.83 10.48 % 0.06 % 2.75 1.34 % 0.07 % 3.58 0.14 % 0.07 % 4.01 0.00 % 0.07 % 4.03 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 % 4.04 0.00 % 0.07 %	logD M12_octanolH M12_octanol M12_octanolH* 1.04 41.89 % 0.00 % 55.08 % 1.06 41.16 % 0.00 % 54.12 % 1.21 32.92 % 0.02 % 43.29 % 1.83 10.48 % 0.06 % 13.78 % 2.75 1.34 % 0.07 % 0.18 % 3.58 0.14 % 0.07 % 0.18 % 3.96 0.01 % 0.07 % 0.02 % 4.01 0.00 % 0.07 % 0.01 % 4.03 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 % 4.04 0.00 % 0.07 % 0.00 %	logD M12_octanolH M12_octanol M12_octanolH* M12_octanol* 1.04 41.89 % 0.00 % 55.08 % 3.02 % 1.06 41.16 % 0.00 % 54.12 % 4.71 % 1.21 32.92 % 0.02 % 43.29 % 23.77 % 1.83 10.48 % 0.06 % 13.78 % 75.68 % 2.75 1.34 % 0.07 % 1.76 % 96.83 % 3.58 0.14 % 0.07 % 0.18 % 99.61 % 3.96 0.01 % 0.07 % 0.02 % 99.90 % 4.01 0.00 % 0.07 % 0.01 % 99.92 % 4.03 0.00 % 0.07 % 0.00 % 99.93 % 4.04 0.00 % 0.07 % 0.00 % 99.93 % 4.04 0.00 % 0.07 % 0.00 % 99.93 % 4.04 0.00 % 0.07 % 0.00 % 99.93 % 4.04 0.00 % 0.07 % 0.00 % 99.93 % 4.04 0.00 % 0.07 %

Carbonate and acidity



Other graphs







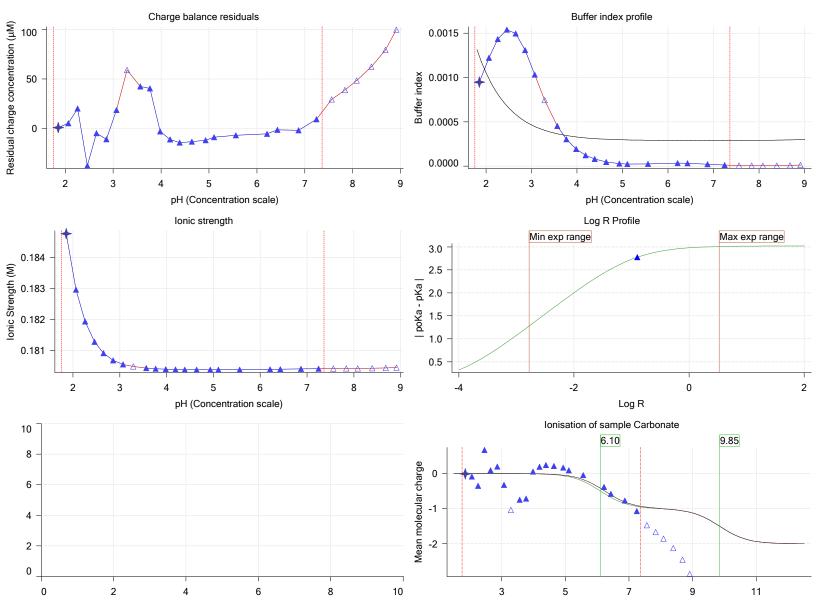
Assay ID:

Sample name: M12_octanol Experiment start time: 3/3/2018 7:38:51 PM Assay name:

pH-metric high logP Analyst: Pion 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Other graphs (continued)



pH (Concentration scale)



Assay name: pH-metric high logP Pion Analyst: Assay ID: 18C-03015 Instrument ID: T312060

Filename: $C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric\ high\ logP.t3r$

Assay Model

Settings Sample name Sample by Sample weight	Weight 0.001690 g	Date/Time changed 2/28/2018 2:58:36 PM 3/2/2018 5:10:33 PM	Imported from User entered value Default value User entered value
Formula weight Solubility	292.16 g/mol Unknown	2/28/2018 2:58:36 PM	User entered value Default value
Molecular weight Individual pKa ionic environments	255.70 No	2/28/2018 2:58:36 PM	User entered value Default value
Number of pKas	1	2/28/2018 2:58:36 PM	User entered value
Sample is a	Base	2/28/2018 2:58:36 PM	User entered value
pKa 1	5.28	2/28/2018 2:58:36 PM	User entered value
logp (XH +)	1.02	3/2/2018 3:44:28 PM	User entered value
logP (neutral X)	3.79	3/2/2018 3:44:35 PM	User entered value
Stoichiometry	1.00000		Default value
Aprotic counterion name	Chloride		From standards.xml file
Stoichiometry	1.00		From standards.xml file
Charge per counterion	-1		From standards.xml file

Events

Time	Event	Water	Acid	Base	Octanol	рН	dpH/dt	pH R-squared	pH SD	dpH/dt time
5:59.8	Initial pH = 4.05									tillie
8:59.2	Data point 1	1.50000 mL	0.04798 mL	0.00233 mL	0.01999 mL	2.090	-0.00070	0.00914	0.00036	10.0 s
9:45.4	Data point 2				0.01999 mL		-0.00312	0.68871	0.00019	10.5 s
10:31.9	Data point 3				0.01999 mL		0.00243	0.06275	0.00048	10.5 s
11:18.4	Data point 4	1.50000 mL	0.04798 mL	0.03248 mL	0.01999 mL	2.730	-0.00626	0.82301	0.00034	10.0 s
12:04.3	Data point 5	1.50000 mL	0.04798 mL	0.03631 mL	0.01999 mL	2.938	-0.00734	0.94317	0.00037	10.5 s
12:40.3	Data point 6	1.50000 mL	0.04798 mL	0.03899 mL	0.01999 mL	3.110	-0.01187	0.90433	0.00062	10.0 s
13:31.5	Data point 7	1.50000 mL	0.04798 mL	0.04433 mL	0.01999 mL	3.640	-0.01726	0.73640	0.00099	11.5 s
14:23.9	Data point 8	1.50000 mL	0.04798 mL	0.04605 mL	0.01999 mL	3.809	-0.01938	0.96322	0.00098	15.0 s
15:04.4	Data point 9	1.50000 mL	0.04798 mL	0.04739 mL	0.01999 mL	4.005	-0.01944	0.95579	0.00098	12.0 s
15:41.8	Data point 10	1.50000 mL	0.04798 mL	0.04845 mL	0.01999 mL	4.191	-0.01847	0.88746	0.00097	13.5 s
16:20.8	Data point 11	1.50000 mL	0.04798 mL	0.04922 mL	0.01999 mL	4.372	-0.01878	0.94552	0.00095	23.5 s
17:14.9	Data point 12	1.50000 mL	0.04798 mL	0.05024 mL	0.01999 mL	4.829	-0.01888	0.96108	0.00095	30.0 s
18:15.5	Data point 13	1.50000 mL	0.04798 mL	0.05085 mL	0.01999 mL	5.982	-0.01949	0.93892	0.00099	52.5 s
19:49.0	Data point 14	1.50000 mL	0.04798 mL	0.05111 mL	0.01999 mL	6.938	-0.03568	0.99301	0.00177	Timed out
	·									at 59.5 s
21:24.6	Data point 15	1.50000 mL	0.04798 mL	0.05118 mL	0.01999 mL	7.503	-0.03856	0.98751	0.00192	Timed out
	·									at 59.5 s
23:00.2	Data point 16	1.50000 mL	0.04798 mL	0.05125 mL	0.01999 mL	7.986	-0.04249	0.99373	0.00210	Timed out
	·									at 59.5 s
24:41.0	Data point 17	1.50000 mL	0.04798 mL	0.05134 mL	0.01999 mL	8.384	-0.03068	0.99526	0.00152	Timed out
	·									at 59.5 s
26:21.7	Data point 18	1.50000 mL	0.04798 mL	0.05158 mL	0.01999 mL	9.153	-0.01970	0.96174	0.00099	49.0 s
28:09.7	Data point 19	1.50000 mL	0.10388 mL	0.05158 mL	0.05000 mL	1.995	-0.00675	0.60729	0.00043	10.0 s
28:55.9	Data point 20	1.50000 mL	0.10388 mL	0.06954 mL	0.05000 mL	2.211	-0.00301	0.08351	0.00051	10.0 s
29:31.6	Data point 21	1.50000 mL	0.10388 mL	0.08001 mL	0.05000 mL	2.394	0.00217	0.25971	0.00021	10.5 s
30:07.6	Data point 22	1.50000 mL	0.10388 mL	0.08718 mL	0.05000 mL	2.582	0.01006	0.35818	0.00083	10.5 s
30:43.7	Data point 23	1.50000 mL	0.10388 mL	0.09226 mL	0.05000 mL	2.754	-0.00412	0.68848	0.00025	10.0 s
31:29.7	Data point 24	1.50000 mL	0.10388 mL	0.09711 mL	0.05000 mL	2.942	-0.00701	0.24786	0.00069	10.5 s
32:10.9	Data point 25	1.50000 mL	0.10388 mL	0.10002 mL	0.05000 mL	3.142	-0.00388	0.12360	0.00054	10.0 s
32:46.3	Data point 26	1.50000 mL	0.10388 mL	0.10249 mL	0.05000 mL	3.250	-0.00583	0.78197	0.00033	10.5 s
33:27.5	Data point 27	1.50000 mL	0.10388 mL	0.10574 mL	0.05000 mL	3.456	-0.01149	0.59025	0.00074	10.0 s
34:08.3		1.50000 mL	0.10388 mL	0.10898 mL	0.05000 mL	3.732	0.00666	0.19651	0.00074	10.5 s
35:02.1	Data point 29				0.05000 mL		0.00788	0.91250	0.00041	
36:22.1	Data point 30	1.50000 mL	0.22564 mL	0.20652 mL	0.25000 mL	1.977	-0.01444	0.92481	0.00074	10.0 s
37:08.5		1.50000 mL	0.22564 mL	0.22803 mL	0.25000 mL	2.180	-0.00826	0.64596	0.00051	10.0 s
37:44.3	Data point 32	1.50000 mL	0.22564 mL	0.24142 mL	0.25000 mL	2.372	-0.00705	0.53601	0.00048	10.0 s

Reported at: 3/6/2018 2:22:51 PM

Assay Events



Sample name: M12_octanol Experiment start time: 3/3/2018 7:38:51 PM

Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

1:02:13.9 Assay volumes 1.50000 mL 0.22564 mL 0.27103 mL 0.25000 mL

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Events (continued)

Time	Event	Water	Acid	Base	Octanol	рН	dpH/dt	pH R-squared	pH SD	dpH/dt
										time
38:19.9	Data point 33		0.22564 mL		0.25000 mL			0.05339	0.00043	10.0 s
38:55.5	Data point 34		0.22564 mL		0.25000 mL			0.13797	0.00053	10.0 s
39:31.1	Data point 35		0.22564 mL		0.25000 mL			0.70571	0.00032	
40:06.6	Data point 36		0.22564 mL		0.25000 mL		-0.00342	0.11319	0.00050	10.0 s
40:42.1	Data point 37		0.22564 mL		0.25000 mL			0.56380	0.00049	10.0 s
41:17.6	Data point 38		0.22564 mL		0.25000 mL			0.04091	0.00051	
42:03.3	Data point 39		0.22564 mL		0.25000 mL			0.08581	0.00066	
42:38.7	Data point 40		0.22564 mL		0.25000 mL			0.00175	0.00091	
43:27.2	Data point 41		0.22564 mL		0.25000 mL			0.00401	0.00088	
44:13.6	Data point 42		0.22564 mL		0.25000 mL			0.23363	0.00084	
44:55.1	Data point 43		0.22564 mL		0.25000 mL			0.56284	0.00098	
45:39.0	Data point 44		0.22564 mL		0.25000 mL			0.33968	0.00095	
46:16.9	Data point 45				0.25000 mL			0.90187	0.00099	
47:14.9	Data point 46				0.25000 mL			0.93799	0.00090	
48:31.5	Data point 47	1.50000 mL	0.22564 mL	0.27039 mL	0.25000 mL	6.314	-0.03485	0.93285	0.00178	Timed out
										at 59.5 s
50:02.1	Data point 48	1.50000 mL	0.22564 mL	0.27044 mL	0.25000 mL	6.532	-0.03321	0.95029	0.00168	Timed out
										at 59.5 s
51:27.4	Data point 49	1.50000 mL	0.22564 mL	0.27048 mL	0.25000 mL	6.971	-0.05095	0.98242	0.00254	
										at 59.5 s
53:03.0	Data point 50	1.50000 mL	0.22564 mL	0.27055 mL	0.25000 mL	7.347	-0.06715	0.99206	0.00333	Timed out
										at 59.5 s
54:43.9	Data point 51	1.50000 mL	0.22564 mL	0.27065 mL	0.25000 mL	7.663	-0.06618	0.98872	0.00329	Timed out
										at 59.5 s
56:14.4	Data point 52	1.50000 mL	0.22564 mL	0.27070 mL	0.25000 mL	7.938	-0.05473	0.99204	0.00271	Timed out
										at 59.5 s
57:44.9	Data point 53	1.50000 mL	0.22564 mL	0.27074 mL	0.25000 mL	8.184	-0.04284	0.94491	0.00218	Timed out
										at 59.5 s
59:20.6	Data point 54				0.25000 mL				0.00068	
1:00:40.1	Data point 55		0.22564 mL		0.25000 mL			0.07901	0.00086	
1:01:50.4	Data point 56	1.50000 mL	0.22564 mL	0.27103 mL	0.25000 mL	9.009	-0.01631	0.80065	0.00090	14.5 s



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius T3\Mehtap\20180302 exp29 logP T3-2\18C-03015 M12 octanol pH-metric high logP.t3r

Filename: C:\Sirius_T3\Meh	tap\20180302_exp2	9_logP_T3-2\180	C-03015_M12_octano	I_pH-metric high logI
Assay Settings				
Setting	Value	Original Value	Date/Time changed	Imported from
General Settings				
Analyst name	Pion			
Standard Experiment Settings				
Number of titrations	3			
Minimum pH	2.000			
Maximum pH	9.000			
pH step between points of	0.200			
Minimum titrant addition	0.00002 mL			
Maximum titrant addition	0.10000 mL			
Argon flow rate	100%			
Start titration using	Cautious pH adjust			
Advanced General Settings	oddilodo pri dajdot			
Detect turbidity using	None			
Collect turbidity sensor data	No			
Collect UV spectra	No			
Stir after titrant addition for	5 seconds			
For titrant addition, stir at	10%			
Titrant Pre-Dose	Mana			
Titrant pre-dose	None			
Assay Medium				
ISA water volume	1.50 mL			
Water added	Automatic			
Partition solvent type	Octanol			
Partition volume	0.020 mL			
Partition solvent added	Automatic			
After partition addition, stir for	1 seconds			
Sample Sonication				
Sonicate	Yes			
Adjust pH for sonication	No			
Sonicate for	120 seconds			
After sonication stir for	5 seconds			
Sample Dissolution				
Perform a dissolution stage	Yes			
Adjust and hold pH for dissolution				
Stir to dissolve for	120 seconds			
For dissolve for	10%			
,	10 /0			
Carbonate purge	No			
Perform a carbonate purge	No			
Temperature Control	Vaa			
Wait for temperature	Yes			
Required start temperature	25.0°C			
Acceptable deviation	0.5°C			
Time to wait	60 seconds			
Stir speed of	50%			
Titration 1				
Titrate from	Low to high pH			
Adjust to start pH	Yes			
After pH adjust stir for	30 seconds			
Stir to allow partitioning for	15 seconds			
Stirrer speed for partitioning	50%			
Titration 2				
Titrate from	Low to high pH			
Add additional water	0.00 mL			
Additional partition solvent volume				
Additional partition solvent added	Automatic			
After pu adjust stir for	30 seconds			

Reported at: 3/6/2018 2:22:51 PM

30 seconds

15 seconds

55%

After pH adjust stir for

Stir to allow partitioning for

Stirrer speed for partitioning



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Assay Settings (continued)

Setting	Value	Original Value	Date/Time changed	Imported from
Titration 3				
Titrate from	Low to high pH			
Add additional water	0.00 mL			
Additional partition solvent volume	0.200 mL			
Additional partition solvent added	Automatic			
After pH adjust stir for	30 seconds			
Stir to allow partitioning for	15 seconds			
Stirrer speed for partitioning	60%			
Data Point Stability				
Stir during data point collection	No			
Delay before data point collection	0 seconds			
Number of points to average	20 points			
Time interval between points	0.50 seconds			
Required maximum standard deviation	0.00100 dpH/dt			
Stability timeout after	60 seconds			

Calibration Settings

Setting	Value	Date/Time changed	Imported from
Four-Plus alpha	0.111	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
Four-Plus S	0.9988	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
Four-Plus jH	1.0	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
Four-Plus jOH	-0.8	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r
Base concentration factor	1.000	3/3/2018 7:38:51 PM	C:\Sirius_T3\KOH18B27.t3r
Acid concentration factor	0.999	3/3/2018 7:38:51 PM	C:\Sirius_T3\HCl18C02.t3r

Instrument Settings

Setting	Value	Batch Id	Install date
Instrument owner	Merck		
Instrument ID	T312060		
Instrument type	T3 Simulator		
Software version	1.1.3.0		
Dispenser module		T3DM1200361	3/31/2009 5:24:52 AM
Dispenser 0	Water		3/31/2009 5:25:05 AM
Syringe volume	2.5 mL		
Firmware version	1.2.1(r2)		
Titrant	Water (0.15 M KCI)	02-06-2018	2/27/2018 10:05:59 AM
Dispenser 2	Acid		3/31/2009 5:25:11 AM
Syringe volume	0.5 mL		
Firmware version	1.2.1(r2)		
Titrant	Acid (0.5 M HCI)	02-27-2018	2/27/2018 10:27:22 AM
Dispenser 1	Base		3/31/2009 5:25:21 AM
Syringe volume	0.5 mL		
Firmware version	1.2.1(r2)		
Titrant	Base (0.5 M KOH)	9/22/2017	2/27/2018 10:21:22 AM
Dispenser 5	Cosolvent		3/31/2009 5:26:24 AM
Syringe volume	2.5 mL		
Firmware version	1.2.1(r2)		
Distribution valve 5	Distribution Valve		3/31/2009 5:28:19 AM
Firmware version	1.1.3		
Port A	Methanol (80%, 0.15 M KCl)	09-26-17	2/7/2018 9:42:01 AM
Port B	Cyclohexane	11-01-17	2/27/2018 10:37:57 AM
Dispenser 3	Buffer		8/3/2010 5:05:16 AM
Syringe volume	0.5 mL		
Firmware version	1.2.1(r2)		
Titrant	Dodecane	2018/01/31	2/28/2018 10:18:04 AM
Dispenser 6	Octanol		10/22/2010 10:52:43 AM

Reported at: 3/6/2018 2:22:51 PM



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Instrument Settings (continued)

Setting	Value 0.5 mL	Batch Id	Install date
Syringe volume Firmware version	1.2.1(r2)		
Titrant	Octanol	01-31-2018	2/27/2018 9:59:35 AM
Titrator			3/31/2009 5:24:17 AM
Horizontal axis firmware version	1.17 Al1Dl2DO2 Stepper 2		
Vertical axis firmware version	1.17 Al1Dl2DO2 Stepper 2		
Chassis I/O firmware version	1.11 Al1DI0DO4 Norgren I/O		
Probe I/O firmware version	1.1.1		
Electrode	T3 Electrode	T3E0923	1/23/2018 2:01:00 PM
E0 calibration	+5.90 mV	1/01 007	3/3/2018 7:39:19 PM
Filling solution	3M KCI	KCL097	3/2/2018 9:43:24 AM
Liquids	FOO/ IDA:FOO/ Motor		2/2/2019 0:45:12 AM
Wash 1 Wash 2	50% IPA:50% Water 0.5% Trition X-100 in H20		3/2/2018 9:45:12 AM 3/2/2018 9:45:15 AM
Buffer position 1	pH7 Wash		3/2/2018 9:45:18 AM
Buffer position 2	pH 7		3/2/2018 9:45:21 AM
Storage position	pri 7		3/2/2018 9:44:44 AM
Wash water	6.6e+003 mL	02-27-2018	2/27/2018 9:54:39 AM
Waste	8.9e+003 mL	02 27 20 10	11/28/2017 10:36:29 AM
Temperature controller			8/5/2010 6:35:13 AM
Turbidity detector			3/31/2009 5:24:45 AM
Spectrometer		074811	11/23/2010 11:22:28 AM
Dip probe		10196	
Wavelength coefficient A0	183.333		
Wavelength coefficient A1	2.21568		
Wavelength coefficient A2	-0.000289308		
Total lamp lit time	120:41:49		11/23/2010 11:22:28 AM
Calibrated on	2/27/2018 10:40:38 AM		
Integration time Scans averaged	40 10		
Autoloader	10	T3AL1200345	11/10/2015 9:34:13 AM
Left-right axis firmware version	1.17 Al1Dl2DO2 Stepper 2	10/AL1200040	11/10/2013 3:54:13 AW
Front-back axis firmware version	1.17 Al1Dl2DO2 Stepper 2		
Vertical axis firmware version	1.17 Al1Dl2DO2 Stepper 2		
Chassis I/O firmware version	1.11 Al1Dl0DO4 Norgren I/O		
Configuration	•		
Alternate titration position	Titration position		
Alternate reference position	Reference position		
Maximum standard vial volume	3.50 mL		
Maximum alternate vial volume	25.00 mL		
Automatic action idle period	5 minute(s)		
Titrant tube volume	1.3 mL		
Syringe flush count	3.50 20.0 mL		
Flowing wash pump volume Flowing wash stir duration	5 s		
Flowing wash stir speed	30%		
Solvent wash stir duration	5 s		
Solvent wash stir speed	30%		
Surfactant wash stir duration	5 s		
Surfactant wash stir speed	30%		
E0 calibration minimum number of points	10		
E0 calibration maximum standard deviation	0.01500		
E0 calibration timeout period	60 s		
E0 calibration stir duration	5 s		
E0 calibration preparation stir speed	30%		
E0 calibration buffer wash stir duration	5 s		
E0 calibration buffer wash stir speed	30%		
E0 calibration reading stir speed	0%		

Reported at: 3/6/2018 2:22:51 PM



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Instrument Settings (continued)

Setting	Value	Batch Id	i Install date
Spectrometer calibration stir duration	5 s		
Spectrometer calibration stir speed	30%		
Spectrometer calibration wash pump volume	20.0 mL		
Spectrometer calibration wash stir duration	5 s		
Spectrometer calibration wash stir speed	30%		
Overhead dispense height	10000		

Refinement Settings

S 441		5 ()/
Setting	Value	Default value
Turbidity detection method	None	None
Turbidity wavelength to assess	500.0 nm	500.0 nm
Turbidity maximum absorbance	0.100	0.100
Turbidity probe threshold	50.00	50.00
• •		

Experiment Log

- [2:37] Air gap created for Water (0.15 M KCI) [2:37] Air gap created for Acid (0.5 M HCI)
- [2:38] Air gap created for Base (0.5 M KOH)
- [2:38] Air gap released for Water (0.15 M KCI)
- [2:42] Titrator arm moved over Titration position
- [2:42] Titration 1 of 3
- [2:42] Adding initial titrants
- [2:42] Automatically add 1.50000 mL of water
- [3:07] Dispensed 1.500000 mL of Water (0.15 M KCI)
- [3:11] Titrator arm moved over Drain
- [5:53] Titrator arm moved to Titration position
- [5:53] Argon flow rate set to 100
- [5:53] Stirrer speed set to 10
- [5:58] Automatically add 0.02000 mL of Octanol
- [5:58] Dispensed 0.019991 mL of Octanol
- [6:00] Initial pH = 4.05
- [6:00] Iterative adjust 4.05 -> 2.00
- [6:00] pH 4.05 -> 2.00
- [6:01] Air gap released for Acid (0.5 M HCI)
- [6:02] Dispensed 0.047977 mL of Acid (0.5 M HCI)
- [6:07] Holding pH 2.00
- [8:07] Stirrer speed set to 0
- [8:07] Stirrer speed set to 50
- [8:07] Iterative adjust 1.98 -> 2.00
- [8:07] pH 1.98 -> 2.00
- [8:08] Air gap released for Base (0.5 M KOH)
- [8:09] Dispensed 0.002328 mL of Base (0.5 M KOH)
- [8:59] Stirrer speed set to 0
- [9:09] Datapoint id 1 collected
- [9:09] Stirrer speed set to 50
- [9:14] pH 2.10 -> 2.30
- [9:14] Using cautious pH adjust
- [9:14] Dispensed 0.006232 mL of Base (0.5 M KOH)
- [9:19] Stepping pH = 2.16
- [9:20] Dispensed 0.006726 mL of Base (0.5 M KOH)
- [9:25] Stepping pH = 2.26
- [9:25] Dispensed 0.001881 mL of Base (0.5 M KOH)
- [9:30] Stepping pH = 2.31
- [9:45] Stirrer speed set to 0
- [9:56] Datapoint id 2 collected
- [9:56] Charge balance equation is out by -18.9%
- [9:56] Stirrer speed set to 50



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [10:01] pH 2.32 -> 2.52
- [10:01] Using cautious pH adjust
- [10:01] Dispensed 0.003810 mL of Base (0.5 M KOH)
- [10:06] Stepping pH = 2.39
- [10:06] Dispensed 0.004186 mL of Base (0.5 M KOH)
- [10:11] Stepping pH = 2.49
- [10:12] Dispensed 0.001129 mL of Base (0.5 M KOH)
- [10:17] Stepping pH = 2.53
- [10:32] Stirrer speed set to 0
- [10:42] Datapoint id 3 collected
- [10:42] Charge balance equation is out by -19.8%
- [10:42] Stirrer speed set to 50
- [10:47] pH 2.54 -> 2.74
- [10:47] Using cautious pH adjust
- [10:48] Dispensed 0.002469 mL of Base (0.5 M KOH)
- [10:53] Stepping pH = 2.60
- [10:53] Dispensed 0.002893 mL of Base (0.5 M KOH)
- [10:58] Stepping pH = 2.70
- [10:58] Dispensed 0.000823 mL of Base (0.5 M KOH)
- [11:03] Stepping pH = 2.73
- [11:18] Stirrer speed set to 0
- [11:28] Datapoint id 4 collected
- [11:28] Charge balance equation is out by -25.7%
- [11:28] Stirrer speed set to 50
- [11:33] pH 2.74 -> 2.94
- [11:33] Using cautious pH adjust
- [11:34] Dispensed 0.001740 mL of Base (0.5 M KOH)
- [11:39] Stepping pH = 2.82
- [11:39] Dispensed 0.001599 mL of Base (0.5 M KOH)
- [11:44] Stepping pH = 2.90
- [11:44] Dispensed 0.000494 mL of Base (0.5 M KOH)
- [11:49] Stepping pH = 2.94
- [12:04] Stirrer speed set to 0
- [12:15] Datapoint id 5 collected
- [12:15] Charge balance equation is out by -9.6%
- [12:15] Stirrer speed set to 50
- [12:20] pH 2.94 -> 3.14
- [12:20] Using charge balance adjust
- [12:20] Dispensed 0.002681 mL of Base (0.5 M KOH)
- [12:40] Stirrer speed set to 0
- [12:50] Datapoint id 6 collected
- [12:50] Charge balance equation is out by -17.5%
- [12:50] Stirrer speed set to 50
- [12:55] pH 3.11 -> 3.31
- [12:55] Using cautious pH adjust
- [12:55] Dispensed 0.001152 mL of Base (0.5 M KOH)
- [13:01] Stepping pH = 3.19
- [13:01] Dispensed 0.001129 mL of Base (0.5 M KOH)
- [13:06] Stepping pH = 3.27
- [13:06] Dispensed 0.000447 mL of Base (0.5 M KOH)
- [13:11] Stepping pH = 3.27
- [13:11] Dispensed 0.002611 mL of Base (0.5 M KOH)
- [13:16] Stepping pH = 3.68
- [13:31] Stirrer speed set to 0
- [13:43] Datapoint id 7 collected
- [13:43] Charge balance equation is out by -131.1%
- [13:43] Stirrer speed set to 50
- [13:48] pH 3.65 -> 3.85
- [13:48] Using cautious pH adjust



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [13:48] Dispensed 0.000800 mL of Base (0.5 M KOH)
- [13:53] Stepping pH = 3.73
- [13:53] Dispensed 0.000682 mL of Base (0.5 M KOH)
- [13:58] Stepping pH = 3.83
- [13:58] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [14:03] Stepping pH = 3.83
- [14:04] Dispensed 0.000141 mL of Base (0.5 M KOH)
- [14:09] Stepping pH = 3.85
- [14:24] Stirrer speed set to 0
- [14:39] Datapoint id 8 collected
- [14:39] Charge balance equation is out by -7.4%
- [14:39] Stirrer speed set to 50
- [14:44] pH 3.82 -> 4.02
- [14:44] Using charge balance adjust
- [14:44] Dispensed 0.001341 mL of Base (0.5 M KOH)
- [15:04] Stirrer speed set to 0
- [15:16] Datapoint id 9 collected
- [15:16] Charge balance equation is out by -8.5%
- [15:16] Stirrer speed set to 50
- [15:21] pH 4.01 -> 4.21
- [15:21] Using charge balance adjust
- [15:21] Dispensed 0.001058 mL of Base (0.5 M KOH)
- [15:42] Stirrer speed set to 0
- [15:55] Datapoint id 10 collected
- [15:55] Charge balance equation is out by -11.1%
- [15:55] Stirrer speed set to 50
- [16:00] pH 4.21 -> 4.41
- [16:00] Using charge balance adjust
- [16:00] Dispensed 0.000776 mL of Base (0.5 M KOH)
- [16:21] Stirrer speed set to 0
- [16:44] Datapoint id 11 collected
- [16:44] Charge balance equation is out by -19.6%
- [16:44] Stirrer speed set to 50
- [16:49] pH 4.41 -> 4.61
- [16:49] Using cautious pH adjust
- [16:49] Dispensed 0.000282 mL of Base (0.5 M KOH)
- [16:54] Stepping pH = 4.43
- [16:55] Dispensed 0.000729 mL of Base (0.5 M KOH)
- [17:00] Stepping pH = 4.88
- [17:15] Stirrer speed set to 0
- [17:45] Datapoint id 12 collected
- [17:45] Charge balance equation is out by -84.8%
- [17:45] Stirrer speed set to 50
- [17:50] pH 4.90 -> 5.10
- [17:50] Using cautious pH adjust
- [17:50] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [17:55] Stepping pH = 4.89
- [17:55] Dispensed 0.000517 mL of Base (0.5 M KOH)
- [18:00] Stepping pH = 5.56
- [18:15] Stirrer speed set to 0
- [19:08] Datapoint id 13 collected
- [19:08] Charge balance equation is out by -203.9%
- [19:08] Stirrer speed set to 50
- [19:13] pH 6.15 -> 6.35
- [19:13] Using cautious pH adjust
- [19:13] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [19:18] Stepping pH = 6.19
- [19:18] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [19:23] Stepping pH = 6.22



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [19:23] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [19:29] Stepping pH = 6.26
- [19:29] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [19:34] Stepping pH = 6.43
- [19:49] Stirrer speed set to 0
- [20:49] Datapoint id 14 collected
- [20:49] Charge balance equation is out by -426.3%
- [20:49] Stirrer speed set to 50
- [20:54] pH 7.06 -> 7.26
- [20:54] Using cautious pH adjust
- [20:54] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [20:59] Stepping pH = 7.13
- [20:59] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [21:04] Stepping pH = 7.20
- [21:04] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [21:09] Stepping pH = 7.31
- [21:24] Stirrer speed set to 0
- [22:24] Datapoint id 15 collected
- [22:24] Charge balance equation is out by -279.1%
- [22:24] Stirrer speed set to 50
- [22:29] pH 7.62 -> 7.82
- [22:29] Using cautious pH adjust
- [22:30] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [22:35] Stepping pH = 7.71
- [22:35] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [22:40] Stepping pH = 7.77
- [22:40] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [22:45] Stepping pH = 7.83
- [23:00] Stirrer speed set to 0
- [24:00] Datapoint id 16 collected
- [24:00] Charge balance equation is out by -785.0%
- [24:00] Stirrer speed set to 50
- [24:05] pH 8.16 -> 8.36
- [24:05] Using cautious pH adjust
- [24:05] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [24:10] Stepping pH = 8.25
- [24:10] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [24:15] Stepping pH = 8.30
- [24:15] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [24:21] Stepping pH = 8.32
- [24:21] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [24:26] Stepping pH = 8.35
- [24:41] Stirrer speed set to 0
- [25:41] Datapoint id 17 collected
- [25:41] Charge balance equation is out by -917.7%
- [25:41] Stirrer speed set to 50
- [25:46] pH 8.43 -> 8.63
- [25:46] Using cautious pH adjust
- [25:46] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [25:51] Stepping pH = 8.44
- [25:51] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [25:56] Stepping pH = 8.44
- [25:56] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [26:01] Stepping pH = 8.46
- [26:01] Dispensed 0.000141 mL of Base (0.5 M KOH)
- [26:06] Stepping pH = 8.83
- [26:22] Stirrer speed set to 0
- [27:11] Datapoint id 18 collected
- [27:11] Charge balance equation is out by -1,849.5%



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [27:11] Titration 2 of 3
- [27:11] Adding initial titrants
- [27:11] Automatically add 0.03000 mL of Octanol
- [27:11] Dispensed 0.030009 mL of Octanol
- [27:11] Stirrer speed set to 10
- [27:11] Stirrer speed set to 10 [27:13] Stirrer speed set to 55
- [27:13] Iterative adjust 9.17 -> 2.00
- [27:13] pH 9.17 -> 2.00
- [27:14] Dispensed 0.053763 mL of Acid (0.5 M HCI)
- [27:19] pH 2.02 -> 2.00
- [27:19] Dispensed 0.002140 mL of Acid (0.5 M HCI)
- [28:09] Stirrer speed set to 0
- [28:19] Datapoint id 19 collected
- [28:19] Stirrer speed set to 55
- [28:25] pH 2.01 -> 2.21
 - .0.20] pi i 2.01 -> 2.21
- [28:25] Using cautious pH adjust
- [28:25] Dispensed 0.008208 mL of Base (0.5 M KOH)
- [28:30] Stepping pH = 2.09
- [28:30] Dispensed 0.007785 mL of Base (0.5 M KOH)
- [28:35] Stepping pH = 2.18
- [28:36] Dispensed 0.001976 mL of Base (0.5 M KOH)
- [28:41] Stepping pH = 2.21
- 20.41] Stepping pri 2.21
- [28:56] Stirrer speed set to 0
- [29:06] Datapoint id 20 collected
- [29:06] Charge balance equation is out by -9.5%
- [29:06] Stirrer speed set to 55
- [29:11] pH 2.22 -> 2.42
- [29:11] Using charge balance adjust
- [29:11] Dispensed 0.010466 mL of Base (0.5 M KOH)
- [29:31] Stirrer speed set to 0
- [29:42] Datapoint id 21 collected
- [29:42] Charge balance equation is out by -10.6%
- [29:42] Stirrer speed set to 55
- [29:47] pH 2.40 -> 2.60
- [29:47] Using charge balance adjust
- [29:47] Dispensed 0.007173 mL of Base (0.5 M KOH)
- [30:07] Stirrer speed set to 0
- [30:18] Datapoint id 22 collected
- [30:18] Charge balance equation is out by -9.0%
- [30:18] Stirrer speed set to 55
- [30:23] pH 2.59 -> 2.79
- [30:23] Using charge balance adjust
- [30:23] Dispensed 0.005080 mL of Base (0.5 M KOH)
- [30:43] Stirrer speed set to 0
- [30:53] Datapoint id 23 collected
- [30:53] Charge balance equation is out by -17.4%
- [30:53] Stirrer speed set to 55
- [30:59] pH 2.76 -> 2.96
- [30:59] Using cautious pH adjust
- [30:59] Dispensed 0.001952 mL of Base (0.5 M KOH)
- [31:04] Stepping pH = 2.83
- [31:04] Dispensed 0.002070 mL of Base (0.5 M KOH)
- [31:09] Stepping pH = 2.91
- [31:09] Dispensed 0.000823 mL of Base (0.5 M KOH)
- [31:14] Stepping pH = 2.95
- [31:29] Stirrer speed set to 0
- [31:40] Datapoint id 24 collected
- [31:40] Charge balance equation is out by -23.5%
- [31:40] Stirrer speed set to 55



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [31:45] pH 2.95 -> 3.15
- [31:45] Using cautious pH adjust
- [31:45] Dispensed 0.001552 mL of Base (0.5 M KOH)
- [31:50] Stepping pH = 3.03
- [31:50] Dispensed 0.001364 mL of Base (0.5 M KOH)
- [31:56] Stepping pH = 3.15
- [32:11] Stirrer speed set to 0
- [32:21] Datapoint id 25 collected
- [32:21] Charge balance equation is out by 5.6%
- [32:21] Stirrer speed set to 55
- [32:26] pH 3.15 -> 3.35
- [32:26] Using charge balance adjust
- [32:26] Dispensed 0.002469 mL of Base (0.5 M KOH)
- [32:46] Stirrer speed set to 0
- [32:57] Datapoint id 26 collected
- [32:57] Charge balance equation is out by -50.0%
- [32:57] Stirrer speed set to 55
- [33:02] pH 3.25 -> 3.45
- [33:02] Using cautious pH adjust
- [33:02] Dispensed 0.001105 mL of Base (0.5 M KOH)
- [33:07] Stepping pH = 3.29
- [33:07] Dispensed 0.002140 mL of Base (0.5 M KOH)
- [33:12] Stepping pH = 3.45
- [33:27] Stirrer speed set to 0
- [33:37] Datapoint id 27 collected
- [33:37] Charge balance equation is out by -46.4%
- [33:37] Stirrer speed set to 55
- [33:42] pH 3.46 -> 3.66
- [33:42] Using cautious pH adjust
- [33:43] Dispensed 0.000870 mL of Base (0.5 M KOH)
- [33:48] Stepping pH = 3.48
- [33:48] Dispensed 0.002375 mL of Base (0.5 M KOH)
- [33:53] Stepping pH = 3.75
- [34:08] Stirrer speed set to 0
- [34:19] Datapoint id 28 collected
- [34:19] Charge balance equation is out by -87.2%
- [34:19] Stirrer speed set to 55
- [34:24] pH 3.74 -> 3.94
- [34:24] Using cautious pH adjust
- [34:24] Dispensed 0.000588 mL of Base (0.5 M KOH)
- [34:29] Stepping pH = 3.73
- [34:29] Dispensed 0.003057 mL of Base (0.5 M KOH)
- [34:34] Stepping pH = 3.73
- [34:35] Dispensed 0.015522 mL of Base (0.5 M KOH)
- [34:40] Stepping pH = 3.73
- [34:42] Dispensed 0.078363 mL of Base (0.5 M KOH)
- [34:47] Stepping pH = 12.02
- [35:02] Stirrer speed set to 0
- [35:12] Datapoint id 29 collected
- [35:12] Charge balance equation is out by -8,214.2%
- [35:12] Titration 3 of 3
- [35:12] Adding initial titrants
- [35:12] Automatically add 0.20000 mL of Octanol
- [35:17] Dispensed 0.200000 mL of Octanol
- [35:17] Stirrer speed set to 10
- [35:18] Stirrer speed set to 60
- [35:18] Iterative adjust 12.03 -> 2.00
- [35:18] pH 12.03 -> 2.00
- [35:21] Dispensed 0.100000 mL of Acid (0.5 M HCI)



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [35:26] pH 2.19 -> 2.00
- [35:26] Dispensed 0.018650 mL of Acid (0.5 M HCI)
- [35:31] pH 2.03 -> 2.00
- [35:32] Dispensed 0.003104 mL of Acid (0.5 M HCI)
- [36:22] Stirrer speed set to 0 [36:32] Datapoint id 30 collected
- [36:32] Stirrer speed set to 60
- [36:37] pH 1.98 -> 2.18
- [36:37] Using cautious pH adjust
- [36:37] Dispensed 0.010348 mL of Base (0.5 M KOH)
- [36:42] Stepping pH = 2.07
- [36:43] Dispensed 0.008420 mL of Base (0.5 M KOH)
- [36:48] Stepping pH = 2.15
- [36:48] Dispensed 0.002752 mL of Base (0.5 M KOH)
- [36:53] Stepping pH = 2.18
- [37:08] Stirrer speed set to 0
- [37:18] Datapoint id 31 collected
- [37:18] Charge balance equation is out by -4.0%
- [37:18] Stirrer speed set to 60
- [37:23] pH 2.18 -> 2.38
- [37:23] Using charge balance adjust
- [37:24] Dispensed 0.013382 mL of Base (0.5 M KOH)
- [37:44] Stirrer speed set to 0
- [37:54] Datapoint id 32 collected
- [37:54] Charge balance equation is out by -6.2%
- [37:54] Stirrer speed set to 60
- [37:59] pH 2.38 -> 2.58
- [37:59] Using charge balance adjust
- [38:00] Dispensed 0.009102 mL of Base (0.5 M KOH)
- [38:20] Stirrer speed set to 0
- [38:30] Datapoint id 33 collected
- [38:30] Charge balance equation is out by -2.7%
- [38:30] Stirrer speed set to 60
- [38:35] pH 2.58 -> 2.78
- [38:35] Using charge balance adjust
- [38:35] Dispensed 0.006256 mL of Base (0.5 M KOH)
- [38:55] Stirrer speed set to 0
- [39:05] Datapoint id 34 collected
- [39:05] Charge balance equation is out by -9.2%
- [39:05] Stirrer speed set to 60
- [39:10] pH 2.77 -> 2.97
- [39:10] Using charge balance adjust
- [39:11] Dispensed 0.004563 mL of Base (0.5 M KOH)
- [39:31] Stirrer speed set to 0
- [39:41] Datapoint id 35 collected
- [39:41] Charge balance equation is out by -0.9%
- [39:41] Stirrer speed set to 60
- [39:46] pH 2.97 -> 3.17
- [39:46] Using charge balance adjust
- [39:46] Dispensed 0.003293 mL of Base (0.5 M KOH)
- [40:06] Stirrer speed set to 0
- [40:16] Datapoint id 36 collected
- [40:16] Charge balance equation is out by 3.4%
- [40:16] Stirrer speed set to 60
- [40:22] pH 3.18 -> 3.38
- [40:22] Using charge balance adjust
- [40:22] Dispensed 0.002305 mL of Base (0.5 M KOH)
- [40:42] Stirrer speed set to 0
- [40:52] Datapoint id 37 collected



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [40:52] Charge balance equation is out by 6.0%
- [40:52] Stirrer speed set to 60
- [40:57] pH 3.40 -> 3.60
 - 0.57] pri 5.46 -> 5.66
- [40:57] Using charge balance adjust
- [40:57] Dispensed 0.001576 mL of Base (0.5 M KOH)
- [41:17] Stirrer speed set to 0
- [41:27] Datapoint id 38 collected
- [41:27] Charge balance equation is out by 34.7%
- [41:27] Stirrer speed set to 60
- [41:32] pH 3.68 -> 3.88
- [41:33] Using cautious pH adjust
- [41:33] Dispensed 0.000447 mL of Base (0.5 M KOH)
- [41:38] Stepping pH = 3.80
- [41:38] Dispensed 0.000212 mL of Base (0.5 M KOH)
- [41:43] Stepping pH = 3.87
 - 1.43] Stepping pri = 3.07
- [41:43] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [41:48] Stepping pH = 3.88
- [42:03] Stirrer speed set to 0
- [42:13] Datapoint id 39 collected
- [42:13] Charge balance equation is out by 21.2%
- [42:13] Stirrer speed set to 60
- [42:18] pH 3.88 -> 4.08
- [42:18] Using cautious pH adjust
- [42:18] Dispensed 0.000306 mL of Base (0.5 M KOH)
- [42:23] Stepping pH = 4.09
- [42:38] Stirrer speed set to 0
- [42:57] Datapoint id 40 collected
- [42:57] Charge balance equation is out by 50.0%
- [42:57] Stirrer speed set to 60
- [43:02] pH 4.10 -> 4.30
- [43:02] Using cautious pH adjust
- [43:02] Dispensed 0.000188 mL of Base (0.5 M KOH)
- [43:07] Stepping pH = 4.24
- [43:07] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [43:12] Stepping pH = 4.29
- [43:27] Stirrer speed set to 0
- [43:38] Datapoint id 41 collected
- [43:38] Charge balance equation is out by 32.9%
- [43:38] Stirrer speed set to 60
- [43:43] pH 4.32 -> 4.52
- [43:43] Using cautious pH adjust
- [43:43] Dispensed 0.000118 mL of Base (0.5 M KOH)
- [43:48] Stepping pH = 4.48
- [43:48] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [43:53] Stepping pH = 4.50
- [43:53] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [43:58] Stepping pH = 4.51
- [44:13] Stirrer speed set to 0
- [44:24] Datapoint id 42 collected
- [44:24] Charge balance equation is out by 33.2%
- [44:24] Stirrer speed set to 60
- [44:30] pH 4.50 -> 4.70
- [44:30] Using cautious pH adjust
- [44:30] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [44:35] Stepping pH = 4.58
- [44:35] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [44:40] Stepping pH = 4.76
- [44:55] Stirrer speed set to 0
- [45:13] Datapoint id 43 collected



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [45:13] Charge balance equation is out by 6.7%
- [45:13] Stirrer speed set to 60
- [45:19] pH 4.82 -> 5.02
- [45:19] Using charge balance adjust
- [45:19] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [45:39] Stirrer speed set to 0
- [45:51] Datapoint id 44 collected
- [45:51] Charge balance equation is out by 9.7%
- [45:51] Stirrer speed set to 60
- [45:56] pH 5.11 -> 5.31
- [45:56] Using charge balance adjust
- [45:56] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [46:17] Stirrer speed set to 0
- [46:44] Datapoint id 45 collected
- [46:44] Charge balance equation is out by -48.8%
- [46:44] Stirrer speed set to 60
- [46:49] pH 5.25 -> 5.45
- [46:49] Using cautious pH adjust
- [46:49] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [46:54] Stepping pH = 5.29
- [46:55] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [47:00] Stepping pH = 5.71
- [47:15] Stirrer speed set to 0
- [48:01] Datapoint id 46 collected
- [48:01] Charge balance equation is out by -35.1%
- [48:01] Stirrer speed set to 60
- [48:06] pH 5.76 -> 5.96
- [48:06] Using cautious pH adjust
- [48:06] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [48:11] Stepping pH = 5.77
- [48:11] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [48:16] Stepping pH = 6.49 [48:31] Stirrer speed set to 0
- [49:31] Datapoint id 47 collected
- [49:31] Charge balance equation is out by -96.3%
- [49:31] Stirrer speed set to 60
- [49:36] pH 6.31 -> 6.51
- [49:36] Using cautious pH adjust
- [49:37] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [49:42] Stepping pH = 6.43
- [49:42] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [49:47] Stepping pH = 6.61
- [50:02] Stirrer speed set to 0
- [51:02] Datapoint id 48 collected
- [51:02] Charge balance equation is out by 8.4%
- [51:02] Stirrer speed set to 60
- [51:07] pH 6.70 -> 6.90
- [51:07] Using charge balance adjust
- [51:07] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [51:27] Stirrer speed set to 0
- [52:27] Datapoint id 49 collected
- [52:27] Charge balance equation is out by 34.8%
- [52:27] Stirrer speed set to 60
- [52:32] pH 7.04 -> 7.24
- [52:32] Using cautious pH adjust
- [52:32] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [52:37] Stepping pH = 7.10
- [52:38] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [52:43] Stepping pH = 7.22



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

- [52:43] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [52:48] Stepping pH = 7.37
- [53:03] Stirrer speed set to 0
- [54:03] Datapoint id 50 collected
- [54:03] Charge balance equation is out by -157.9%
- [54:03] Stirrer speed set to 60
- [54:08] pH 7.43 -> 7.63
- [54:08] Using cautious pH adjust
- [54:08] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [54:13] Stepping pH = 7.56
- [54:13] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [54:18] Stepping pH = 7.60
- [54:18] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [54:23] Stepping pH = 7.61
- [54:24] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [54:29] Stepping pH = 7.67
- [54:44] Stirrer speed set to 0 [55:44] Datapoint id 51 collected
- [55:44] Charge balance equation is out by -542.8% [55:44] Stirrer speed set to 60
- [55:49] pH 7.65 -> 7.85
- [55:49] Using cautious pH adjust
- [55:49] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [55:54] Stepping pH = 7.78
- [55:54] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [55:59] Stepping pH = 7.97
- [56:14] Stirrer speed set to 0
- [57:14] Datapoint id 52 collected
- [57:14] Charge balance equation is out by -323.4%
- [57:14] Stirrer speed set to 60
- [57:19] pH 8.02 -> 8.22
- [57:19] Using cautious pH adjust
- [57:19] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [57:24] Stepping pH = 8.15
- [57:25] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [57:30] Stepping pH = 8.27
- [57:45] Stirrer speed set to 0
- [58:45] Datapoint id 53 collected
- [58:45] Charge balance equation is out by -340.7%
- [58:45] Stirrer speed set to 60
- [58:50] pH 8.22 -> 8.42
- [58:50] Using cautious pH adjust
- [58:50] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [58:55] Stepping pH = 8.29
- [58:55] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [59:00] Stepping pH = 8.35
- [59:00] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [59:05] Stepping pH = 8.51
- [59:20] Stirrer speed set to 0
- [59:59] Datapoint id 54 collected
- [59:59] Charge balance equation is out by -425.0%
- [59:59] Stirrer speed set to 60
- [1:00:04] pH 8.57 -> 8.77
- [1:00:04] Using cautious pH adjust
- [1:00:04] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:00:09] Stepping pH = 8.60
- [1:00:09] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:00:15] Stepping pH = 8.67
- [1:00:15] Dispensed 0.000024 mL of Base (0.5 M KOH)
- Reported at: 3/6/2018 2:22:51 PM

Experiment Log



Sample name: M12_octanol Experiment start time: 3/3/2018 7:38:51 PM

Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-03015 Instrument ID: T312060

Filename: C:\Sirius_T3\Mehtap\20180302_exp29_logP_T3-2\18C-03015_M12_octanol_pH-metric high logP.t3r

Experiment Log (continued)

[1:00:20] Stepping pH = 8.72

[1:00:20] Dispensed 0.000024 mL of Base (0.5 M KOH)

[1:00:25] Stepping pH = 8.80

[1:00:40] Stirrer speed set to 0

[1:01:09] Datapoint id 55 collected

[1:01:09] Charge balance equation is out by -284.9%

[1:01:09] Stirrer speed set to 60

[1:01:15] pH 8.80 -> 9.00

[1:01:15] Using cautious pH adjust

[1:01:15] Dispensed 0.000024 mL of Base (0.5 M KOH)

[1:01:20] Stepping pH = 8.81

[1:01:20] Dispensed 0.000047 mL of Base (0.5 M KOH)

[1:01:25] Stepping pH = 8.92

[1:01:25] Dispensed 0.000024 mL of Base (0.5 M KOH)

[1:01:30] Stepping pH = 8.97

[1:01:30] Dispensed 0.000024 mL of Base (0.5 M KOH)

[1:01:35] Stepping pH = 9.01

[1:01:50] Stirrer speed set to 0

[1:02:05] Datapoint id 56 collected

[1:02:05] Charge balance equation is out by -258.0%

[1:02:05] Argon flow rate set to 0

[1:02:09] Titrator arm moved over Titration position