

Method:	Potassiumpermaga Pot. permaganate 01	9/20/2012 10:40:58 AM
Start time:	9/20/2012 5:18:44 PM	

Sample data

No.	Comment / ID	Start time	Sample size	Corr. f	Density
1/6	Disodium oxalat	9/20/2012 5:18:44 PM	0.0431 g	1.0	0 g/mL
2/6	Disodium oxalat	9/20/2012 5:32:13 PM	0.047 g	1.0	0 g/mL
3/6	Disodium oxalat	9/20/2012 5:46:16 PM	0.0466 g	1.0	0 g/mL
4/6	Disodium oxalat	9/20/2012 6:00:21 PM	0.0463 g	1.0	0 g/mL
5/6	Disodium oxalat	9/20/2012 6:14:23 PM	0.0436 g	1.0	0 g/mL
6/6	Disodium oxalat	9/20/2012 6:28:04 PM	0.0442 g	1.0	0 g/mL

Results

No.	Comment / ID	Start time	Sample size and results			
1/6	Disodium oxalat	9/20/2012 5:18:44 PM	0.0431	g		
			R1 = 1.00267	--		Titer
2/6	Disodium oxalat	9/20/2012 5:32:13 PM	0.047	g		
			R1 = 0.99910	--		Titer
3/6	Disodium oxalat	9/20/2012 5:46:16 PM	0.0466	g		
			R1 = 1.00339	--		Titer
4/6	Disodium oxalat	9/20/2012 6:00:21 PM	0.0463	g		
			R1 = 1.00464	--		Titer
5/6	Disodium oxalat	9/20/2012 6:14:23 PM	0.0436	g		
			R1 = 0.99905	--		Titer
6/6	Disodium oxalat	9/20/2012 6:28:04 PM	0.0442	g		
			R1 = 1.00109	--		Titer
-/-			R2 = 1.00166	--		Mean Titer

Titer

Titer 1.00166

Series comment

Statistics

Rx	Name	n	Mean value	Unit	s	srel [%]
R1	Titer	6	1.00166	--	0.00231	0.230
R2	Mean Titer	1	1.00166	--	NaN	NaN

Raw data

Sample

No. 1/6
Standard Disodium oxalat
Type of standard solid
Comment
Titration stand Rondo60/1A
Weight m = 0.0431 g

Method: Potassiumpermaga Pot. permaganate 01 **9/20/2012 10:40:58 AM**
Start time: 9/20/2012 5:18:44 PM

Correction factor f = 1.0
Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 9/20/2012 5:18:44 PM
Sample end 9/20/2012 5:32:13 PM

Measure (normal) [1]

Sensor Pt1000
Temperature DH 100 49.3 oC
Measured value
Time tMe = 0:30 min

EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Start potential EST = 644.5 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.415215 mL
Q1 = 0.642574 mmol
EEQ1 = 944.0 mV
EHN1 = 718.4 mV
Excess VEX = 0.884785 mL
QEX = 0.088624 mmol
End VEND = 7.3000 mL
QEND = 0.731197 mmol
Termination at EQPs
Time t = 6:25 min

Calculation

Result R1 = 1.00267 -- Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.067005
Molar mass M[Disodium oxalat] = 134.01 g/mol
Equivalent number z[Disodium oxalat] = 2
Duration tUSE = 12:34 min

Measured values EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Sample 1/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	644.5	NaN	NaN	0	25.0
0.1000	0.1000	896.2	251.7	NaN	5	25.0
0.2000	0.1000	742.5	-153.7	NaN	10	25.0
0.3000	0.1000	759.7	17.2	NaN	15	25.0
0.4000	0.1000	739.1	-20.6	NaN	20	25.0
0.5000	0.1000	736.8	-2.3	-199.69	25	25.0
0.6000	0.1000	729.5	-7.3	30.19	30	25.0
0.7000	0.1000	727.3	-2.2	-46.78	35	25.0
0.8000	0.1000	723.3	-4.0	-20.12	40	25.0
0.9000	0.1000	722.2	-1.1	-22.00	45	25.0
1.0000	0.1000	718.8	-3.4	-15.88	50	25.0
1.1000	0.1000	718.8	0.0	-12.85	55	25.0
1.2000	0.1000	716.1	-2.7	-9.96	60	25.0
1.3000	0.1000	716.8	0.7	-8.18	65	25.0
1.4000	0.1000	714.8	-2.0	-6.60	70	25.0
1.5000	0.1000	715.6	0.8	-5.92	75	25.0
1.6000	0.1000	713.3	-2.3	-4.26	80	25.0
1.7000	0.1000	714.2	0.9	-3.19	86	25.0

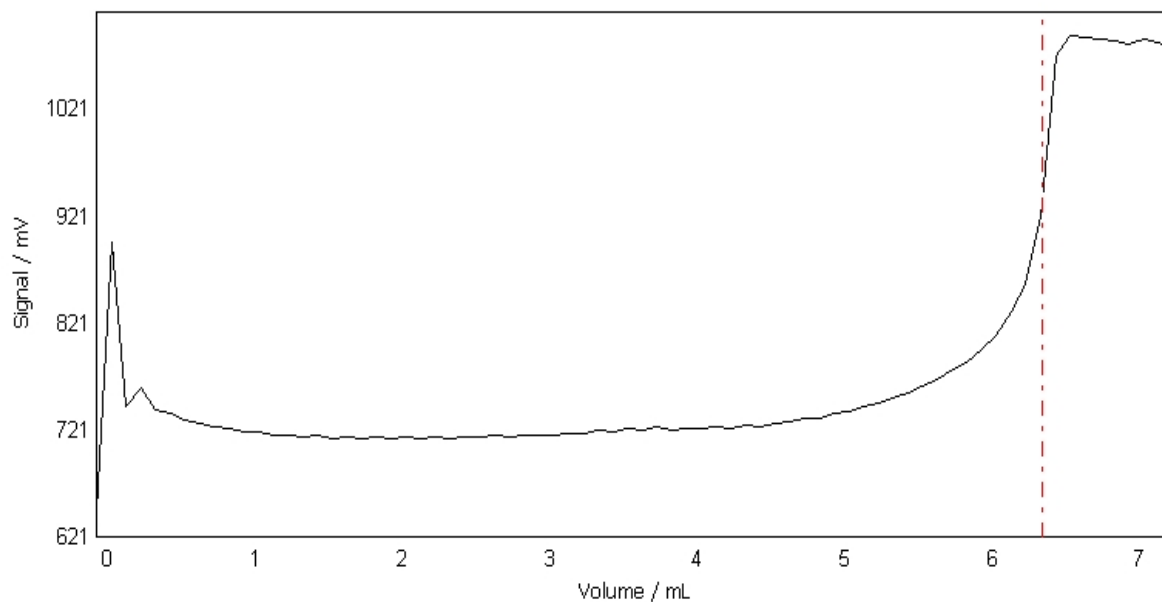
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM
9/20/2012 10:40:58 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
1.8000	0.1000	713.1	-1.1	-2.11	91	25.0
1.9000	0.1000	713.9	0.8	-1.79	96	25.0
2.0000	0.1000	713.0	-0.9	-0.61	101	25.0
2.1000	0.1000	713.7	0.7	-0.49	106	25.0
2.2000	0.1000	712.3	-1.4	0.88	111	25.0
2.3000	0.1000	713.8	1.5	2.77	116	25.0
2.4000	0.1000	713.4	-0.4	3.42	121	25.0
2.5000	0.1000	714.5	1.1	3.98	126	25.0
2.6000	0.1000	714.1	-0.4	4.30	131	25.0
2.7000	0.1000	715.5	1.4	2.08	136	25.0
2.8000	0.1000	714.3	-1.2	4.45	141	25.0
2.9000	0.1000	716.2	1.9	4.17	146	25.0
3.0000	0.1000	715.7	-0.5	7.07	151	25.0
3.1000	0.1000	716.4	0.7	6.81	156	25.0
3.2000	0.1000	718.4	2.0	9.29	161	25.0
3.3000	0.1000	717.8	-0.6	6.48	166	25.0
3.4000	0.1000	720.0	2.2	10.88	171	25.0
3.5000	0.1000	719.3	-0.7	8.98	176	25.0
3.6000	0.1000	721.6	2.3	7.52	181	25.0
3.7000	0.1000	720.8	-0.8	5.21	186	25.0
3.8000	0.1000	724.6	3.8	2.85	191	25.0
3.9000	0.1000	720.9	-3.7	0.29	196	25.0
4.0000	0.1000	722.3	1.4	-0.16	201	25.0
4.1000	0.1000	722.0	-0.3	0.98	206	25.0
4.2000	0.1000	723.3	1.3	3.64	211	25.0
4.3000	0.1000	722.2	-1.1	9.31	216	25.0
4.4000	0.1000	725.1	2.9	10.53	221	25.0
4.5000	0.1000	724.4	-0.7	13.32	226	25.0
4.6000	0.1000	727.5	3.1	16.42	231	25.0
4.7000	0.1000	728.5	1.0	18.88	236	25.0
4.8000	0.1000	731.1	2.6	21.70	241	25.0
4.9000	0.1000	732.2	1.1	25.08	246	25.0
5.0000	0.1000	736.2	4.0	28.18	251	25.0
5.1000	0.1000	738.3	2.1	33.01	256	25.0
5.2000	0.1000	743.0	4.7	38.34	261	25.0
5.3000	0.1000	745.4	2.4	42.71	266	25.0
5.4000	0.1000	751.6	6.2	48.78	272	25.0
5.5000	0.1000	755.6	4.0	54.39	277	25.0
5.6000	0.1000	762.6	7.0	60.94	282	25.0
5.7000	0.1000	767.9	5.3	68.13	287	25.0
5.8000	0.1000	777.1	9.2	78.39	292	25.0
5.9000	0.1000	784.0	6.9	82.33	297	25.0
6.0000	0.1000	796.7	12.7	66.67	302	25.0
6.1000	0.1000	809.7	13.0	223.14	307	25.0
6.2000	0.1000	831.0	21.3	438.41	312	25.0
6.3000	0.1000	857.7	26.7	603.61	317	25.0
6.4000	0.1000	921.1	63.4	654.32	322	25.0
EQP1 6.415215	NaN	944.0	NaN	655.64	NaN	NaN
6.5000	0.1000	1071.5	150.4	577.34	327	25.0
6.6000	0.1000	1090.0	18.5	388.29	332	25.0
6.7000	0.1000	1088.0	-2.0	161.79	337	25.0
6.8000	0.1000	1087.2	-0.8	-29.72	342	25.0
6.9000	0.1000	1084.6	-2.6	NaN	347	25.0
7.0000	0.1000	1082.5	-2.1	NaN	352	25.0
7.1000	0.1000	1087.0	4.5	NaN	357	25.0
7.2000	0.1000	1083.5	-3.5	NaN	362	25.0
7.3000	0.1000	1079.4	-4.1	NaN	367	25.0

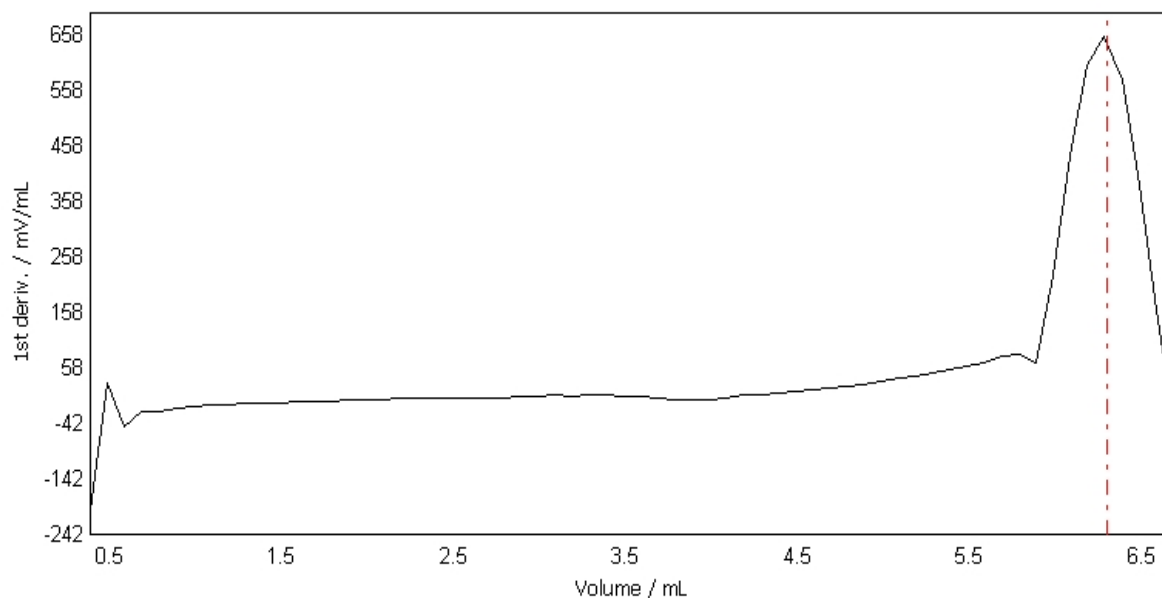
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM

9/20/2012 10:40:58 AM

E - V curve EQP titration [1]
Sample 1/6



dE/dV - V curve EQP titration [1]
Sample 1/6



Raw data

Sample

No.	2/6
Standard	Disodium oxalat
Type of standard	solid
Comment	
Titration stand	Rondo60/1A
Weight	m = 0.047 g
Correction factor	f = 1.0

Method: Potassiumpermaga Pot. permaganate 01 **9/20/2012 10:40:58 AM**
Start time: 9/20/2012 5:18:44 PM

Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 9/20/2012 5:32:13 PM
Sample end 9/20/2012 5:46:15 PM

Measure (normal) [1]

Sensor Pt1000
Temperature DH 100 49.4 oC
Measured value
Time tMe = 0:30 min

EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Start potential EST = 648.3 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 7.020709 mL
Q1 = 0.703222 mmol
EEQ1 = 945.2 mV
EHN1 = 707.8 mV
Excess VEX = 0.879291 mL
QEX = 0.088073 mmol
End VEND = 7.9000 mL
QEND = 0.791296 mmol
Termination at EQPs
Time t = 6:57 min

Calculation

Result R1 = 0.99910 -- Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.067005
Molar mass M[Disodium oxalat] = 134.01 g/mol
Equivalent number z[Disodium oxalat] = 2
Duration tUSE = 13:06 min

Measured values EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Sample 2/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	648.3	NaN	NaN	0	25.0
0.1000	0.1000	882.3	234.0	NaN	5	25.0
0.2000	0.1000	732.5	-149.8	NaN	10	25.0
0.3000	0.1000	759.4	26.9	NaN	15	25.0
0.4000	0.1000	731.9	-27.5	NaN	20	25.0
0.5000	0.1000	733.6	1.7	-186.37	25	25.0
0.6000	0.1000	725.5	-8.1	23.36	30	25.0
0.7000	0.1000	723.2	-2.3	-55.54	35	25.0
0.8000	0.1000	717.6	-5.6	-24.85	40	25.0
0.9000	0.1000	716.1	-1.5	-32.96	45	25.0
1.0000	0.1000	711.8	-4.3	-23.48	50	25.0
1.1000	0.1000	710.9	-0.9	-21.89	55	25.0
1.2000	0.1000	707.5	-3.4	-16.55	60	25.0
1.3000	0.1000	707.9	0.4	-13.25	65	25.0
1.4000	0.1000	705.0	-2.9	-9.34	70	25.0
1.5000	0.1000	704.6	-0.4	-8.93	76	25.0
1.6000	0.1000	704.5	-0.1	-5.58	80	25.0
1.7000	0.1000	704.0	-0.5	-6.07	86	25.0
1.8000	0.1000	702.5	-1.5	-3.14	90	25.0
1.9000	0.1000	702.5	0.0	-3.80	96	25.0

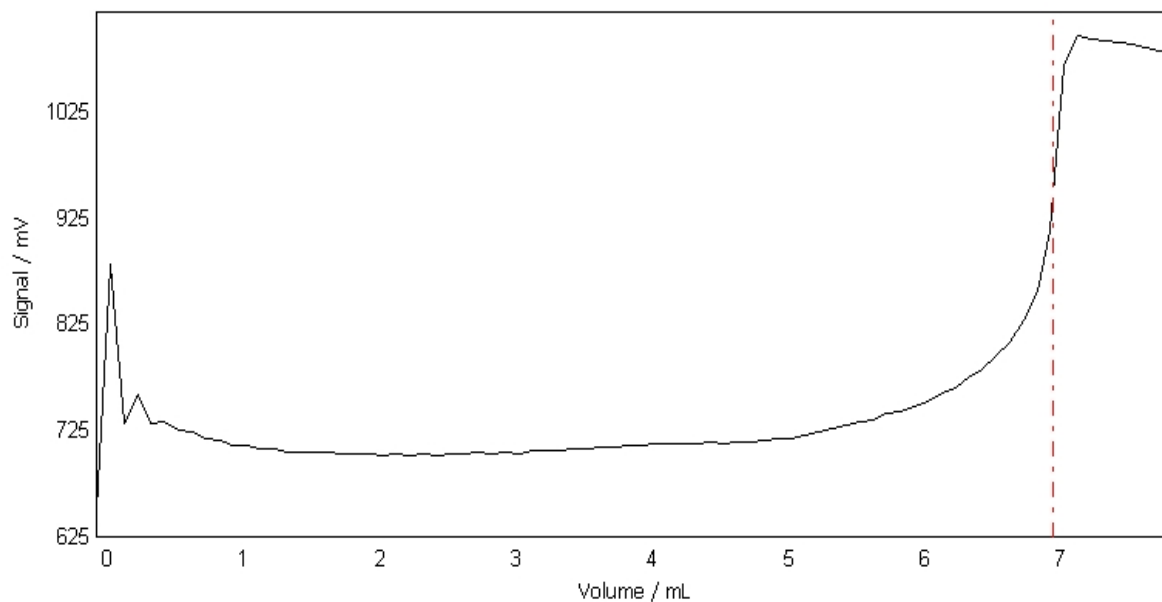
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM
9/20/2012 10:40:58 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.0000	0.1000	703.0	0.5	-1.63	101	25.0
2.1000	0.1000	701.7	-1.3	-0.82	106	25.0
2.2000	0.1000	702.8	1.1	0.06	111	25.0
2.3000	0.1000	702.0	-0.8	-1.25	116	25.0
2.4000	0.1000	702.6	0.6	0.48	121	25.0
2.5000	0.1000	701.7	-0.9	2.02	126	25.0
2.6000	0.1000	702.8	1.1	3.23	131	25.0
2.7000	0.1000	702.4	-0.4	3.57	136	25.0
2.8000	0.1000	704.0	1.6	3.77	141	25.0
2.9000	0.1000	703.6	-0.4	5.15	146	25.0
3.0000	0.1000	704.4	0.8	3.42	151	25.0
3.1000	0.1000	703.6	-0.8	5.05	156	25.0
3.2000	0.1000	705.8	2.2	4.81	161	25.0
3.3000	0.1000	705.9	0.1	7.01	166	25.0
3.4000	0.1000	705.6	-0.3	7.06	171	25.0
3.5000	0.1000	707.8	2.2	9.66	176	25.0
3.6000	0.1000	707.5	-0.3	8.50	181	25.0
3.7000	0.1000	709.3	1.8	10.63	186	25.0
3.8000	0.1000	709.9	0.6	8.99	191	25.0
3.9000	0.1000	711.7	1.8	7.27	196	25.0
4.0000	0.1000	710.6	-1.1	5.63	201	25.0
4.1000	0.1000	712.7	2.1	4.46	206	25.0
4.2000	0.1000	712.0	-0.7	3.16	211	25.0
4.3000	0.1000	713.0	1.0	4.02	216	25.0
4.4000	0.1000	712.6	-0.4	3.08	221	25.0
4.5000	0.1000	714.2	1.6	1.99	226	25.0
4.6000	0.1000	713.0	-1.2	4.96	231	25.0
4.7000	0.1000	715.0	2.0	4.75	236	25.0
4.8000	0.1000	713.6	-1.4	7.36	241	25.0
4.9000	0.1000	716.3	2.7	9.44	246	25.0
5.0000	0.1000	717.3	1.0	15.72	251	25.0
5.1000	0.1000	717.7	0.4	19.12	256	25.0
5.2000	0.1000	720.9	3.2	26.78	262	25.0
5.3000	0.1000	723.2	2.3	26.89	267	25.0
5.4000	0.1000	727.4	4.2	32.30	272	25.0
5.5000	0.1000	729.5	2.1	33.11	277	25.0
5.6000	0.1000	734.0	4.5	32.27	282	25.0
5.7000	0.1000	734.8	0.8	32.15	287	25.0
5.8000	0.1000	741.4	6.6	35.42	292	25.0
5.9000	0.1000	743.0	1.6	40.41	297	25.0
6.0000	0.1000	747.6	4.6	48.16	302	25.0
6.1000	0.1000	752.3	4.7	55.25	307	25.0
6.2000	0.1000	760.0	7.7	63.66	312	25.0
6.3000	0.1000	765.7	5.7	74.11	317	25.0
6.4000	0.1000	775.1	9.4	82.45	322	25.0
6.5000	0.1000	782.3	7.2	86.64	327	25.0
6.6000	0.1000	795.8	13.5	63.12	332	25.0
6.7000	0.1000	807.9	12.1	209.90	337	25.0
6.8000	0.1000	828.5	20.6	430.63	342	25.0
6.9000	0.1000	855.8	27.3	606.89	347	25.0
7.0000	0.1000	913.0	57.2	668.30	352	25.0
EQP1 7.020709	NaN	945.2	NaN	668.97	NaN	NaN
7.1000	0.1000	1068.5	155.5	600.66	357	25.0
7.2000	0.1000	1096.6	28.1	418.65	362	25.0
7.3000	0.1000	1093.1	-3.5	184.38	367	25.0
7.4000	0.1000	1092.0	-1.1	-24.55	372	25.0
7.5000	0.1000	1090.9	-1.1	NaN	377	25.0
7.6000	0.1000	1088.7	-2.2	NaN	382	25.0
7.7000	0.1000	1085.8	-2.9	NaN	387	25.0
7.8000	0.1000	1082.1	-3.7	NaN	392	25.0
7.9000	0.1000	1078.9	-3.2	NaN	397	25.0

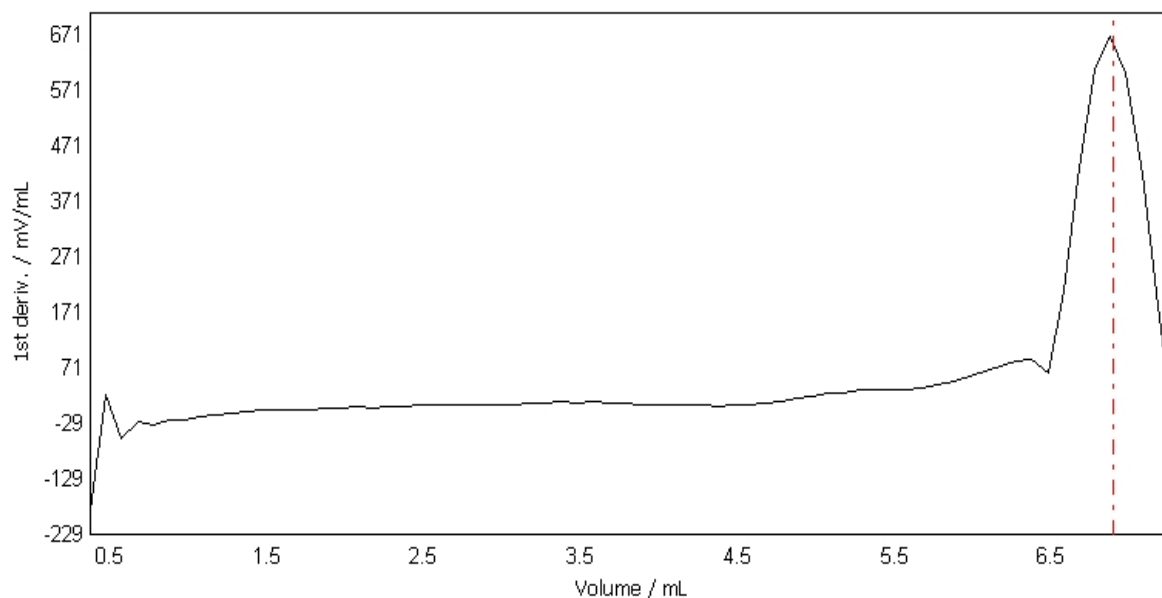
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM

9/20/2012 10:40:58 AM

E - V curve EQP titration [1]
Sample 2/6



dE/dV - V curve EQP titration [1]
Sample 2/6



Raw data

Sample

No.	3/6
Standard	Disodium oxalat
Type of standard	solid
Comment	
Titration stand	Rondo60/1A
Weight	m = 0.0466 g
Correction factor	f = 1.0

Method: Potassiumpermaga Pot. permaganate 01 **9/20/2012 10:40:58 AM**
Start time: 9/20/2012 5:18:44 PM

Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 9/20/2012 5:46:16 PM
Sample end 9/20/2012 6:00:20 PM

Measure (normal) [1]

Sensor Pt1000
Temperature DH 100 50.3 oC
Measured value
Time tMe = 0:30 min

EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Start potential EST = 655.6 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.931220 mL
Q1 = 0.694259 mmol
EEQ1 = 938.5 mV
EHN1 = 705.3 mV
Excess VEX = 0.968780 mL
QEX = 0.097037 mmol
End VEND = 7.9000 mL
QEND = 0.791296 mmol
Termination at EQPs
Time t = 6:57 min

Calculation

Result R1 = 1.00339 -- Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.067005
Molar mass M[Disodium oxalat] = 134.01 g/mol
Equivalent number z[Disodium oxalat] = 2
Duration tUSE = 13:09 min

Measured values EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Sample 3/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	655.6	NaN	NaN	0	25.0
0.1000	0.1000	842.1	186.5	NaN	5	25.0
0.2000	0.1000	732.4	-109.7	NaN	10	25.0
0.3000	0.1000	747.8	15.4	NaN	15	25.0
0.4000	0.1000	731.1	-16.7	NaN	20	25.0
0.5000	0.1000	730.0	-1.1	-148.33	25	25.0
0.6000	0.1000	724.8	-5.2	17.80	30	25.0
0.7000	0.1000	722.7	-2.1	-39.58	35	25.0
0.8000	0.1000	719.8	-2.9	-16.37	40	25.0
0.9000	0.1000	716.6	-3.2	-20.45	45	25.0
1.0000	0.1000	716.5	-0.1	-11.94	50	25.0
1.1000	0.1000	714.5	-2.0	-11.63	55	25.0
1.2000	0.1000	714.4	-0.1	-9.40	60	25.0
1.3000	0.1000	712.1	-2.3	-10.71	65	25.0
1.4000	0.1000	713.2	1.1	-11.05	70	25.0
1.5000	0.1000	709.2	-4.0	-10.53	75	25.0
1.6000	0.1000	710.2	1.0	-8.52	80	25.0
1.7000	0.1000	708.4	-1.8	-5.64	86	25.0
1.8000	0.1000	708.9	0.5	-5.20	90	25.0
1.9000	0.1000	707.4	-1.5	-1.67	96	25.0

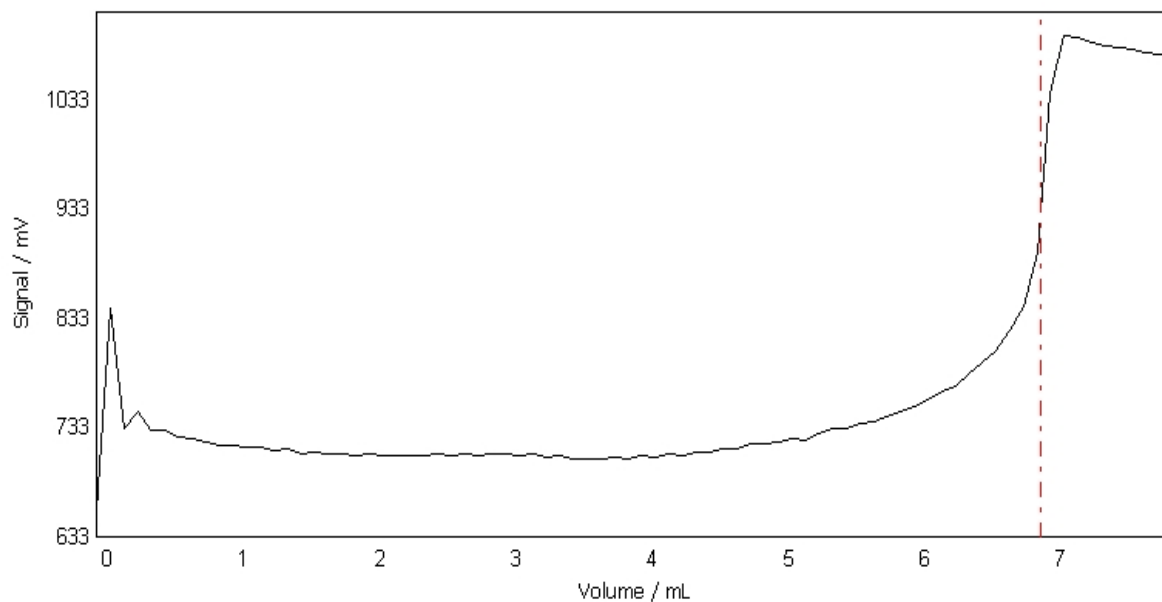
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM
9/20/2012 10:40:58 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.0000	0.1000	708.7	1.3	-3.79	100	25.0
2.1000	0.1000	707.2	-1.5	-0.69	106	25.0
2.2000	0.1000	707.0	-0.2	-1.73	111	25.0
2.3000	0.1000	707.9	0.9	0.17	116	25.0
2.4000	0.1000	706.9	-1.0	0.30	121	25.0
2.5000	0.1000	708.2	1.3	2.12	126	25.0
2.6000	0.1000	706.8	-1.4	1.60	131	25.0
2.7000	0.1000	708.4	1.6	0.73	136	25.0
2.8000	0.1000	707.8	-0.6	2.27	141	25.0
2.9000	0.1000	708.1	0.3	-0.22	146	25.0
3.0000	0.1000	708.1	0.0	0.63	151	25.0
3.1000	0.1000	707.6	-0.5	-3.44	156	25.0
3.2000	0.1000	708.4	0.8	-5.05	161	25.0
3.3000	0.1000	706.3	-2.1	-7.76	166	25.0
3.4000	0.1000	707.2	0.9	-6.89	171	25.0
3.5000	0.1000	704.3	-2.9	-7.05	176	25.0
3.6000	0.1000	704.9	0.6	-3.81	181	25.0
3.7000	0.1000	704.7	-0.2	-0.05	186	25.0
3.8000	0.1000	705.4	0.7	3.41	191	25.0
3.9000	0.1000	704.3	-1.1	5.70	196	25.0
4.0000	0.1000	706.7	2.4	6.15	201	25.0
4.1000	0.1000	706.3	-0.4	7.25	206	25.0
4.2000	0.1000	708.1	1.8	9.62	211	25.0
4.3000	0.1000	707.5	-0.6	10.35	216	25.0
4.4000	0.1000	710.2	2.7	13.09	221	25.0
4.5000	0.1000	710.4	0.2	16.23	226	25.0
4.6000	0.1000	713.3	2.9	16.83	231	25.0
4.7000	0.1000	713.8	0.5	21.04	236	25.0
4.8000	0.1000	717.6	3.8	15.82	241	25.0
4.9000	0.1000	717.4	-0.2	14.31	246	25.0
5.0000	0.1000	720.2	2.8	17.76	251	25.0
5.1000	0.1000	722.6	2.4	21.47	256	25.0
5.2000	0.1000	720.5	-2.1	26.35	261	25.0
5.3000	0.1000	727.2	6.7	30.53	266	25.0
5.4000	0.1000	732.2	5.0	31.80	271	25.0
5.5000	0.1000	732.2	0.0	32.82	276	25.0
5.6000	0.1000	737.1	4.9	32.76	282	25.0
5.7000	0.1000	738.6	1.5	30.55	287	25.0
5.8000	0.1000	743.6	5.0	40.22	292	25.0
5.9000	0.1000	746.9	3.3	47.48	297	25.0
6.0000	0.1000	752.6	5.7	52.10	302	25.0
6.1000	0.1000	758.2	5.6	62.34	307	25.0
6.2000	0.1000	765.7	7.5	69.08	312	25.0
6.3000	0.1000	771.3	5.6	79.81	317	25.0
6.4000	0.1000	781.5	10.2	81.91	322	25.0
6.5000	0.1000	792.5	11.0	53.74	327	25.0
6.6000	0.1000	804.0	11.5	165.04	332	25.0
6.7000	0.1000	821.5	17.5	380.96	337	25.0
6.8000	0.1000	844.0	22.5	571.52	342	25.0
6.9000	0.1000	893.3	49.3	662.16	347	25.0
EQP1 6.931220	NaN	938.5	NaN	662.16	NaN	NaN
7.0000	0.1000	1038.0	144.7	618.31	352	25.0
7.1000	0.1000	1091.6	53.6	451.72	357	25.0
7.2000	0.1000	1089.2	-2.4	218.24	362	25.0
7.3000	0.1000	1085.7	-3.5	-3.36	367	25.0
7.4000	0.1000	1082.6	-3.1	-114.04	372	25.0
7.5000	0.1000	1079.8	-2.8	NaN	377	25.0
7.6000	0.1000	1078.2	-1.6	NaN	382	25.0
7.7000	0.1000	1076.2	-2.0	NaN	387	25.0
7.8000	0.1000	1074.0	-2.2	NaN	392	25.0
7.9000	0.1000	1072.7	-1.3	NaN	397	25.0

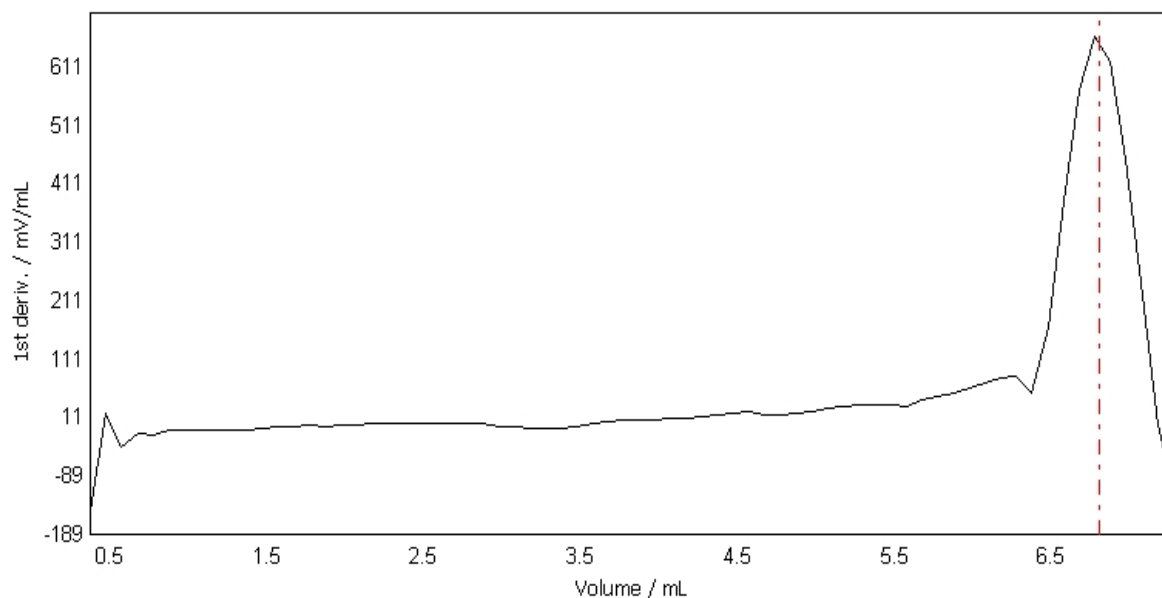
Method: Potassiumpermag
Pot. permaganate 01
Start time: 9/20/2012 5:18:44
PM

9/20/2012 10:40:58 AM

E - V curve EQP titration [1]
Sample 3/6



dE/dV - V curve EQP titration [1]
Sample 3/6



Raw data

Sample

No.	4/6
Standard	Disodium oxalat
Type of standard	solid
Comment	
Titration stand	Rondo60/1A
Weight	m = 0.0463 g
Correction factor	f = 1.0

Method: Potassiumpermaga Pot. permaganate 01 **9/20/2012 10:40:58 AM**
Start time: 9/20/2012 5:18:44 PM

Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 9/20/2012 6:00:21 PM
Sample end 9/20/2012 6:14:22 PM

Measure (normal) [1]

Sensor Pt1000
Temperature DH 100 49.6 oC
Measured value
Time tMe = 0:30 min

EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Start potential EST = 654.3 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.877985 mL
Q1 = 0.688926 mmol
EEQ1 = 950.9 mV
EHN1 = 713.1 mV
Excess VEX = 0.922015 mL
QEX = 0.092353 mmol
End VEND = 7.8000 mL
QEND = 0.781279 mmol
Termination at EQPs
Time t = 6:50 min

Calculation

Result R1 = 1.00464 -- Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.067005
Molar mass M[Disodium oxalat] = 134.01 g/mol
Equivalent number z[Disodium oxalat] = 2
Duration tUSE = 13:04 min

Measured values EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Sample 4/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	654.3	NaN	NaN	0	25.0
0.1000	0.1000	855.6	201.3	NaN	5	25.0
0.2000	0.1000	737.0	-118.6	NaN	10	25.0
0.3000	0.1000	754.8	17.8	NaN	15	25.0
0.4000	0.1000	734.3	-20.5	NaN	20	25.0
0.5000	0.1000	734.5	0.2	-160.93	25	25.0
0.6000	0.1000	728.3	-6.2	18.14	30	25.0
0.7000	0.1000	725.8	-2.5	-43.15	35	25.0
0.8000	0.1000	722.0	-3.8	-16.89	40	25.0
0.9000	0.1000	721.5	-0.5	-21.68	45	25.0
1.0000	0.1000	717.9	-3.6	-11.80	50	25.0
1.1000	0.1000	717.5	-0.4	-11.52	55	25.0
1.2000	0.1000	717.4	-0.1	-9.95	60	25.0
1.3000	0.1000	715.4	-2.0	-12.10	65	25.0
1.4000	0.1000	715.5	0.1	-10.88	70	25.0
1.5000	0.1000	712.1	-3.4	-12.85	75	25.0
1.6000	0.1000	712.4	0.3	-9.14	80	25.0
1.7000	0.1000	710.7	-1.7	-5.73	86	25.0
1.8000	0.1000	711.5	0.8	-2.74	90	25.0
1.9000	0.1000	710.2	-1.3	-1.29	96	25.0

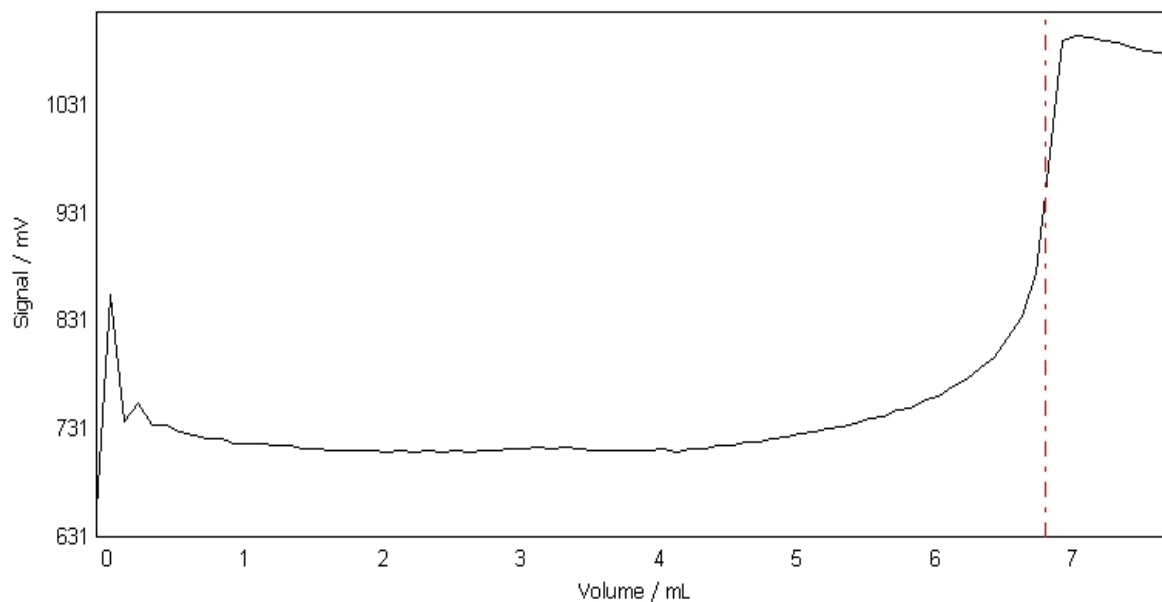
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM
9/20/2012 10:40:58 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.0000	0.1000	711.4	1.2	-1.50	100	25.0
2.1000	0.1000	710.0	-1.4	-2.15	106	25.0
2.2000	0.1000	710.6	0.6	-2.34	111	25.0
2.3000	0.1000	709.4	-1.2	-2.19	116	25.0
2.4000	0.1000	710.6	1.2	-0.88	121	25.0
2.5000	0.1000	708.9	-1.7	1.02	126	25.0
2.6000	0.1000	710.6	1.7	1.49	131	25.0
2.7000	0.1000	709.6	-1.0	3.56	136	25.0
2.8000	0.1000	711.4	1.8	5.16	141	25.0
2.9000	0.1000	710.5	-0.9	7.02	146	25.0
3.0000	0.1000	711.9	1.4	6.83	151	25.0
3.1000	0.1000	712.7	0.8	7.55	156	25.0
3.2000	0.1000	713.5	0.8	2.03	161	25.0
3.3000	0.1000	713.2	-0.3	-1.09	166	25.0
3.4000	0.1000	713.6	0.4	-6.39	171	25.0
3.5000	0.1000	712.2	-1.4	-7.21	176	25.0
3.6000	0.1000	710.2	-2.0	-7.54	181	25.0
3.7000	0.1000	711.3	1.1	-3.33	186	25.0
3.8000	0.1000	710.3	-1.0	-1.93	191	25.0
3.9000	0.1000	710.9	0.6	1.39	196	25.0
4.0000	0.1000	710.3	-0.6	1.18	201	25.0
4.1000	0.1000	712.0	1.7	3.03	206	25.0
4.2000	0.1000	710.1	-1.9	5.64	211	25.0
4.3000	0.1000	712.5	2.4	8.87	216	25.0
4.4000	0.1000	712.5	0.0	12.14	221	25.0
4.5000	0.1000	715.3	2.8	14.53	226	25.0
4.6000	0.1000	715.3	0.0	17.39	231	25.0
4.7000	0.1000	718.5	3.2	18.34	236	25.0
4.8000	0.1000	719.3	0.8	20.84	241	25.0
4.9000	0.1000	721.9	2.6	23.32	246	25.0
5.0000	0.1000	724.2	2.3	24.09	251	25.0
5.1000	0.1000	727.2	3.0	20.89	256	25.0
5.2000	0.1000	728.8	1.6	24.13	261	25.0
5.3000	0.1000	732.1	3.3	22.60	266	25.0
5.4000	0.1000	732.3	0.2	26.43	272	25.0
5.5000	0.1000	735.9	3.6	28.08	276	25.0
5.6000	0.1000	741.2	5.3	34.92	281	25.0
5.7000	0.1000	741.8	0.6	37.36	286	25.0
5.8000	0.1000	748.2	6.4	43.66	292	25.0
5.9000	0.1000	750.5	2.3	46.58	297	25.0
6.0000	0.1000	758.3	7.8	55.82	302	25.0
6.1000	0.1000	761.3	3.0	62.16	307	25.0
6.2000	0.1000	770.8	9.5	71.22	312	25.0
6.3000	0.1000	777.2	6.4	79.44	317	25.0
6.4000	0.1000	788.0	10.8	70.31	322	25.0
6.5000	0.1000	797.3	9.3	107.84	327	25.0
6.6000	0.1000	816.6	19.3	297.32	332	25.0
6.7000	0.1000	835.1	18.5	511.34	337	25.0
6.8000	0.1000	875.5	40.4	645.28	342	25.0
EQP1 6.877985	NaN	950.9	NaN	661.91	NaN	NaN
6.9000	0.1000	972.2	96.7	655.78	347	25.0
7.0000	0.1000	1090.9	118.7	535.27	352	25.0
7.1000	0.1000	1094.6	3.7	325.54	357	25.0
7.2000	0.1000	1092.9	-1.7	85.92	362	25.0
7.3000	0.1000	1091.1	-1.8	-78.14	367	25.0
7.4000	0.1000	1088.2	-2.9	NaN	372	25.0
7.5000	0.1000	1084.2	-4.0	NaN	377	25.0
7.6000	0.1000	1080.6	-3.6	NaN	382	25.0
7.7000	0.1000	1079.3	-1.3	NaN	387	25.0
7.8000	0.1000	1074.2	-5.1	NaN	392	25.0

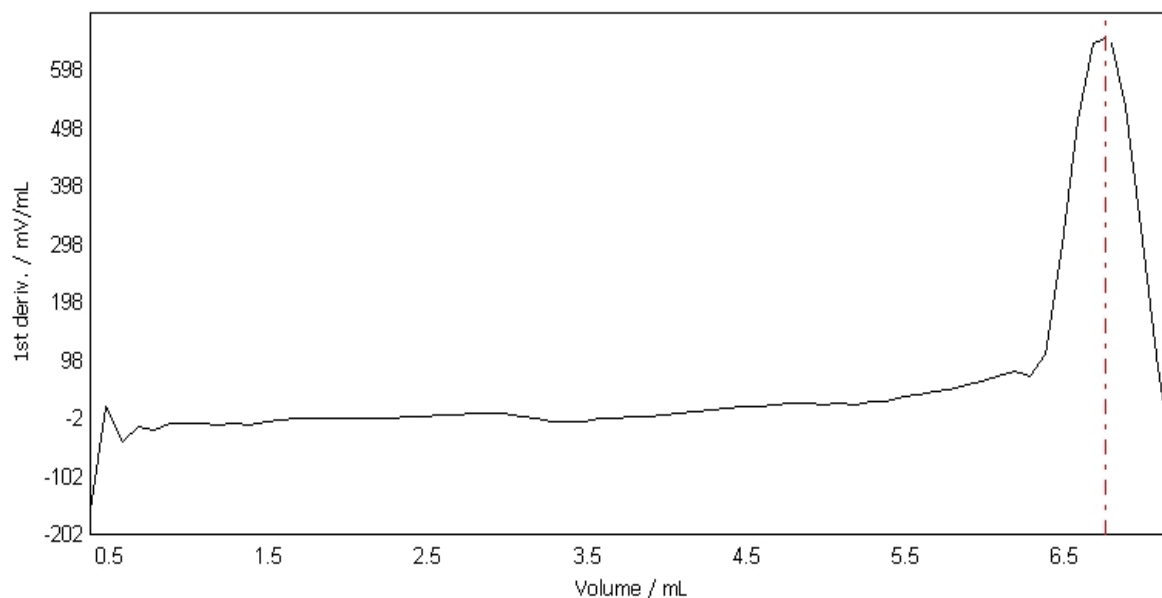
Method: Potassiumpermag
Start time: 9/20/2012 5:18:44 PM

Pot. permaganate 01
9/20/2012 10:40:58 AM

E - V curve EQP titration [1]
Sample 4/6



dE/dV - V curve EQP titration [1]
Sample 4/6



Raw data

Sample

No.	5/6
Standard	Disodium oxalat
Type of standard	solid
Comment	
Titration stand	Rondo60/1A
Weight	m = 0.0436 g
Correction factor	f = 1.0

Method: Potassiumpermaga Pot. permaganate 01 **9/20/2012 10:40:58 AM**
Start time: 9/20/2012 5:18:44 PM

Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 9/20/2012 6:14:23 PM
Sample end 9/20/2012 6:28:04 PM

Measure (normal) [1]

Sensor Pt1000
Temperature DH 100 49.3 oC
Measured value
Time tMe = 0:30 min

EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Start potential EST = 648.2 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.513175 mL
Q1 = 0.652386 mmol
EEQ1 = 939.9 mV
EHN1 = 707.0 mV
Excess VEX = 0.886825 mL
QEX = 0.088828 mmol
End VEND = 7.4000 mL
QEND = 0.741214 mmol
Termination at EQPs
Time t = 6:30 min

Calculation

Result R1 = 0.99905 -- Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.067005
Molar mass M[Disodium oxalat] = 134.01 g/mol
Equivalent number z[Disodium oxalat] = 2
Duration tUSE = 12:44 min

Measured values EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Sample 5/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	648.2	NaN	NaN	0	25.0
0.1000	0.1000	930.0	281.8	NaN	5	25.0
0.2000	0.1000	753.5	-176.5	NaN	10	25.0
0.3000	0.1000	753.6	0.1	NaN	15	25.0
0.4000	0.1000	735.3	-18.3	NaN	20	25.0
0.5000	0.1000	732.4	-2.9	-234.70	25	25.0
0.6000	0.1000	724.5	-7.9	41.96	30	25.0
0.7000	0.1000	721.7	-2.8	-43.04	35	25.0
0.8000	0.1000	718.3	-3.4	-25.92	40	25.0
0.9000	0.1000	714.5	-3.8	-27.94	45	25.0
1.0000	0.1000	713.2	-1.3	-20.52	50	25.0
1.1000	0.1000	710.1	-3.1	-19.24	55	25.0
1.2000	0.1000	709.4	-0.7	-14.47	60	25.0
1.3000	0.1000	707.1	-2.3	-11.73	65	25.0
1.4000	0.1000	707.2	0.1	-7.69	70	25.0
1.5000	0.1000	705.5	-1.7	-4.32	76	25.0
1.6000	0.1000	705.8	0.3	-1.26	80	25.0
1.7000	0.1000	705.3	-0.5	-0.94	86	25.0
1.8000	0.1000	706.4	1.1	-2.12	90	25.0
1.9000	0.1000	704.9	-1.5	-2.97	96	25.0

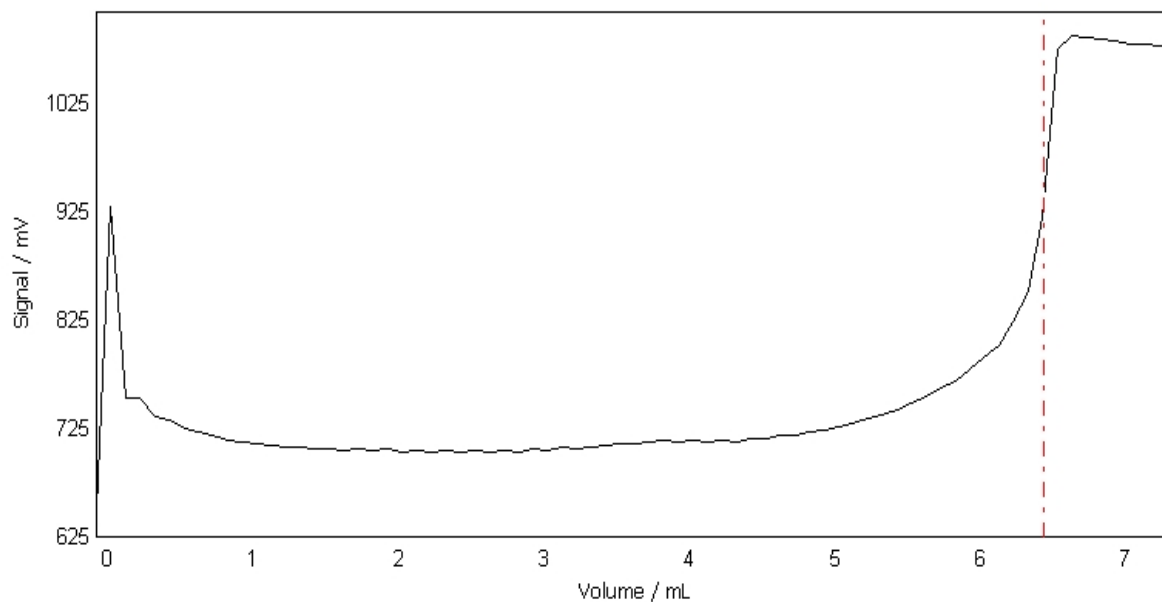
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM
9/20/2012 10:40:58 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.0000	0.1000	705.8	0.9	-4.45	100	25.0
2.1000	0.1000	703.3	-2.5	-4.69	106	25.0
2.2000	0.1000	704.4	1.1	-2.42	111	25.0
2.3000	0.1000	703.7	-0.7	-0.80	116	25.0
2.4000	0.1000	704.1	0.4	0.46	121	25.0
2.5000	0.1000	703.7	-0.4	0.54	126	25.0
2.6000	0.1000	704.8	1.1	0.30	131	25.0
2.7000	0.1000	703.3	-1.5	1.45	136	25.0
2.8000	0.1000	704.8	1.5	3.39	141	25.0
2.9000	0.1000	703.8	-1.0	4.53	146	25.0
3.0000	0.1000	706.1	2.3	5.84	151	25.0
3.1000	0.1000	705.4	-0.7	7.16	156	25.0
3.2000	0.1000	707.3	1.9	7.39	161	25.0
3.3000	0.1000	706.7	-0.6	8.73	166	25.0
3.4000	0.1000	708.5	1.8	8.73	171	25.0
3.5000	0.1000	709.1	0.6	12.82	176	25.0
3.6000	0.1000	710.8	1.7	10.93	181	25.0
3.7000	0.1000	711.2	0.4	10.37	186	25.0
3.8000	0.1000	712.8	1.6	4.87	191	25.0
3.9000	0.1000	713.9	1.1	3.27	196	25.0
4.0000	0.1000	712.0	-1.9	-0.47	201	25.0
4.1000	0.1000	713.3	1.3	-0.06	206	25.0
4.2000	0.1000	712.2	-1.1	0.88	211	25.0
4.3000	0.1000	714.1	1.9	5.78	216	25.0
4.4000	0.1000	713.0	-1.1	9.22	221	25.0
4.5000	0.1000	715.6	2.6	11.95	226	25.0
4.6000	0.1000	716.1	0.5	14.05	231	25.0
4.7000	0.1000	718.4	2.3	15.51	236	25.0
4.8000	0.1000	719.2	0.8	18.93	241	25.0
4.9000	0.1000	722.2	3.0	21.60	246	25.0
5.0000	0.1000	722.9	0.7	26.24	251	25.0
5.1000	0.1000	727.2	4.3	29.12	256	25.0
5.2000	0.1000	730.1	2.9	34.31	261	25.0
5.3000	0.1000	734.1	4.0	39.37	266	25.0
5.4000	0.1000	737.3	3.2	47.72	272	25.0
5.5000	0.1000	742.4	5.1	51.63	277	25.0
5.6000	0.1000	748.8	6.4	59.46	282	25.0
5.7000	0.1000	755.3	6.5	67.01	287	25.0
5.8000	0.1000	762.6	7.3	71.32	292	25.0
5.9000	0.1000	768.6	6.0	78.36	297	25.0
6.0000	0.1000	779.4	10.8	76.17	302	25.0
6.1000	0.1000	789.8	10.4	62.09	307	25.0
6.2000	0.1000	801.9	12.1	229.60	312	25.0
6.3000	0.1000	823.5	21.6	453.18	317	25.0
6.4000	0.1000	850.9	27.4	619.64	322	25.0
6.5000	0.1000	919.5	68.6	670.47	327	25.0
EQP1 6.513175	NaN	939.9	NaN	671.94	NaN	NaN
6.6000	0.1000	1074.0	154.5	585.15	332	25.0
6.7000	0.1000	1087.2	13.2	390.20	337	25.0
6.8000	0.1000	1085.4	-1.8	152.80	342	25.0
6.9000	0.1000	1083.5	-1.9	-45.31	347	25.0
7.0000	0.1000	1081.7	-1.8	NaN	352	25.0
7.1000	0.1000	1079.6	-2.1	NaN	357	25.0
7.2000	0.1000	1078.8	-0.8	NaN	362	25.0
7.3000	0.1000	1077.8	-1.0	NaN	367	25.0
7.4000	0.1000	1075.9	-1.9	NaN	372	25.0

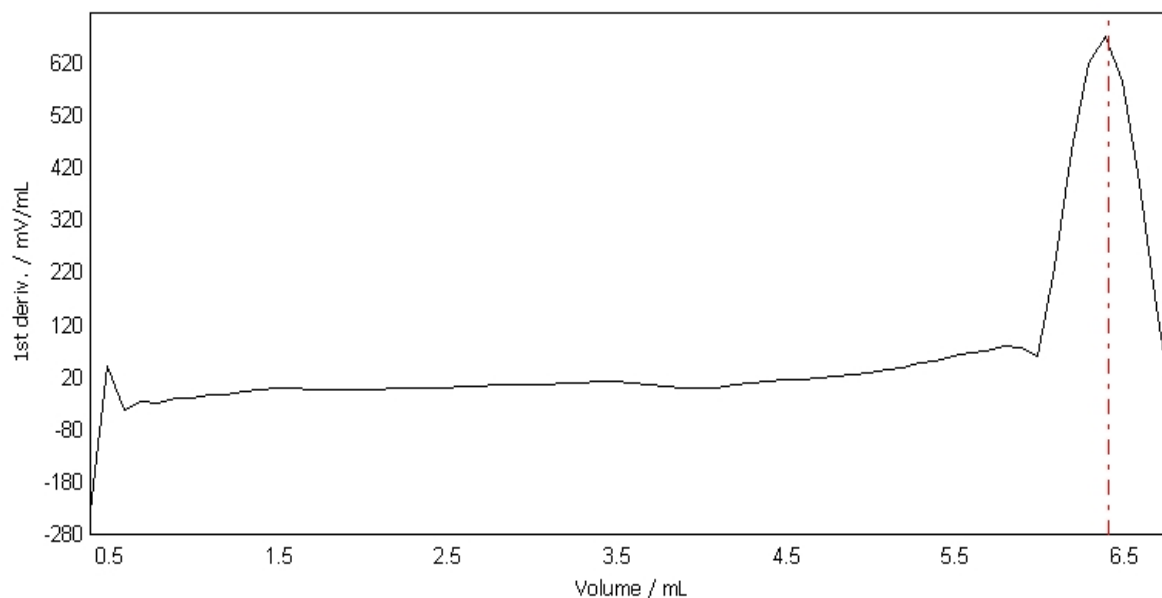
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM

9/20/2012 10:40:58 AM

E - V curve EQP titration [1]
Sample 5/6



dE/dV - V curve EQP titration [1]
Sample 5/6



Raw data

Sample

No.	6/6
Standard	Disodium oxalat
Type of standard	solid
Comment	
Titration stand	Rondo60/1A
Weight	m = 0.0442 g
Correction factor	f = 1.0

Method: Potassiumpermaga Pot. permaganate 01 **9/20/2012 10:40:58 AM**
Start time: 9/20/2012 5:18:44 PM

Purity p = 100.00 %
Temperature T = 25.0 oC
Sample start 9/20/2012 6:28:04 PM
Sample end 9/20/2012 6:41:52 PM

Measure (normal) [1]

Sensor Pt1000
Temperature DH 100 49.4 oC
Measured value
Time tMe = 0:30 min

EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Start potential EST = 658.7 mV
No. of EQPs and cand. nEQ = 1
Consumption EQP1 VEQ1 = 6.589366 mL
Q1 = 0.660017 mmol
EEQ1 = 949.5 mV
EHN1 = 704.3 mV
Excess VEX = 0.910634 mL
QEX = 0.091213 mmol
End VEND = 7.5000 mL
QEND = 0.751230 mmol
Termination at EQPs
Time t = 6:35 min

Calculation

Result R1 = 1.00109 -- Titer
Formula $R1 = m / (VEQ * c * C)$
Constant $M / (10 * p * z)$
C = 0.067005
Molar mass M[Disodium oxalat] = 134.01 g/mol
Equivalent number z[Disodium oxalat] = 2
Duration tUSE = 12:50 min

Measured values EQP titration [1]

Titrant 1/5 KMnO4 c = 0.1 mol/L TITER = 1.00164
Sensor DM140-SC
Sample 6/6

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
0.0000	NaN	658.7	NaN	NaN	0	25.0
0.1000	0.1000	958.7	300.0	NaN	5	25.0
0.2000	0.1000	992.5	33.8	NaN	10	25.0
0.3000	0.1000	973.9	-18.6	NaN	15	25.0
0.4000	0.1000	747.5	-226.4	NaN	20	25.0
0.5000	0.1000	742.9	-4.6	-706.61	25	25.0
0.6000	0.1000	729.1	-13.8	-319.66	30	25.0
0.7000	0.1000	725.0	-4.1	-54.13	35	25.0
0.8000	0.1000	719.6	-5.4	77.17	40	25.0
0.9000	0.1000	714.9	-4.7	-36.91	45	25.0
1.0000	0.1000	712.9	-2.0	-22.87	50	25.0
1.1000	0.1000	709.5	-3.4	-21.36	55	25.0
1.2000	0.1000	708.6	-0.9	-12.95	60	25.0
1.3000	0.1000	707.0	-1.6	-11.23	66	25.0
1.4000	0.1000	706.7	-0.3	-10.00	70	25.0
1.5000	0.1000	704.5	-2.2	-10.69	76	25.0
1.6000	0.1000	705.3	0.8	-11.31	80	25.0
1.7000	0.1000	701.9	-3.4	-10.92	86	25.0
1.8000	0.1000	702.4	0.5	-8.38	90	25.0
1.9000	0.1000	700.3	-2.1	-6.04	96	25.0

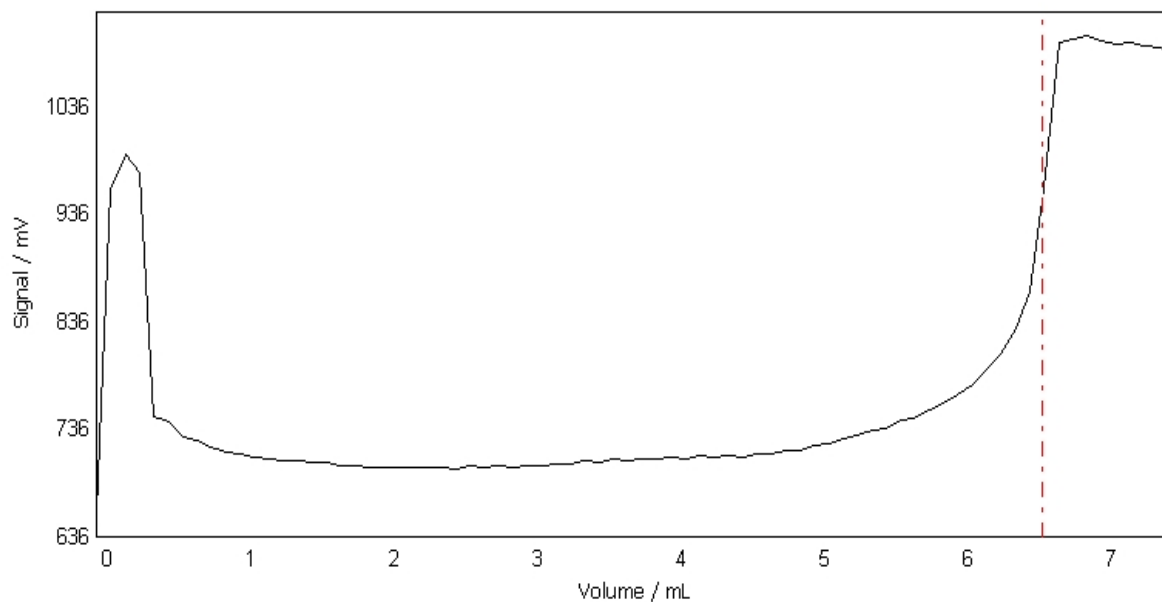
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM
9/20/2012 10:40:58 AM

Volume mL	Increment mL	Signal mV	Change mV	1st deriv. mV/mL	Time s	Temperature oC
2.0000	0.1000	701.3	1.0	-3.27	100	25.0
2.1000	0.1000	700.1	-1.2	-1.25	106	25.0
2.2000	0.1000	701.1	1.0	-1.06	111	25.0
2.3000	0.1000	699.8	-1.3	0.03	116	25.0
2.4000	0.1000	700.9	1.1	1.65	121	25.0
2.5000	0.1000	699.7	-1.2	2.55	126	25.0
2.6000	0.1000	701.6	1.9	3.47	131	25.0
2.7000	0.1000	700.9	-0.7	3.50	136	25.0
2.8000	0.1000	702.6	1.7	2.52	141	25.0
2.9000	0.1000	700.9	-1.7	2.39	146	25.0
3.0000	0.1000	702.9	2.0	4.69	151	25.0
3.1000	0.1000	701.9	-1.0	7.28	156	25.0
3.2000	0.1000	703.7	1.8	10.38	161	25.0
3.3000	0.1000	704.3	0.6	10.83	166	25.0
3.4000	0.1000	707.0	2.7	8.90	171	25.0
3.5000	0.1000	705.8	-1.2	7.64	176	25.0
3.6000	0.1000	708.2	2.4	5.75	181	25.0
3.7000	0.1000	706.5	-1.7	4.51	186	25.0
3.8000	0.1000	708.7	2.2	5.50	191	25.0
3.9000	0.1000	708.5	-0.2	5.99	196	25.0
4.0000	0.1000	710.0	1.5	5.46	201	25.0
4.1000	0.1000	709.2	-0.8	4.99	206	25.0
4.2000	0.1000	711.1	1.9	2.68	211	25.0
4.3000	0.1000	709.9	-1.2	2.10	216	25.0
4.4000	0.1000	711.7	1.8	4.73	221	25.0
4.5000	0.1000	710.6	-1.1	6.41	226	25.0
4.6000	0.1000	712.4	1.8	10.28	231	25.0
4.7000	0.1000	712.8	0.4	14.91	236	25.0
4.8000	0.1000	716.5	3.7	18.96	241	25.0
4.9000	0.1000	716.0	-0.5	23.43	246	25.0
5.0000	0.1000	720.8	4.8	28.51	251	25.0
5.1000	0.1000	722.1	1.3	31.30	256	25.0
5.2000	0.1000	726.7	4.6	37.69	262	25.0
5.3000	0.1000	729.7	3.0	40.26	267	25.0
5.4000	0.1000	735.4	5.7	39.31	272	25.0
5.5000	0.1000	737.3	1.9	43.88	277	25.0
5.6000	0.1000	745.0	7.7	45.98	282	25.0
5.7000	0.1000	745.8	0.8	50.34	287	25.0
5.8000	0.1000	753.6	7.8	60.24	292	25.0
5.9000	0.1000	760.9	7.3	72.99	297	25.0
6.0000	0.1000	767.7	6.8	84.99	302	25.0
6.1000	0.1000	777.6	9.9	80.86	307	25.0
6.2000	0.1000	792.6	15.0	98.51	312	25.0
6.3000	0.1000	806.8	14.2	294.84	317	25.0
6.4000	0.1000	829.9	23.1	516.07	322	25.0
6.5000	0.1000	864.7	34.8	666.49	327	25.0
EQP1 6.589366	NaN	949.5	NaN	694.47	NaN	NaN
6.6000	0.1000	959.6	94.9	689.65	332	25.0
6.7000	0.1000	1095.8	136.2	575.10	337	25.0
6.8000	0.1000	1099.0	3.2	360.07	342	25.0
6.9000	0.1000	1101.4	2.4	116.93	347	25.0
7.0000	0.1000	1097.2	-4.2	-64.62	352	25.0
7.1000	0.1000	1094.3	-2.9	NaN	357	25.0
7.2000	0.1000	1095.9	1.6	NaN	362	25.0
7.3000	0.1000	1093.0	-2.9	NaN	367	25.0
7.4000	0.1000	1090.4	-2.6	NaN	372	25.0
7.5000	0.1000	1086.6	-3.8	NaN	377	25.0

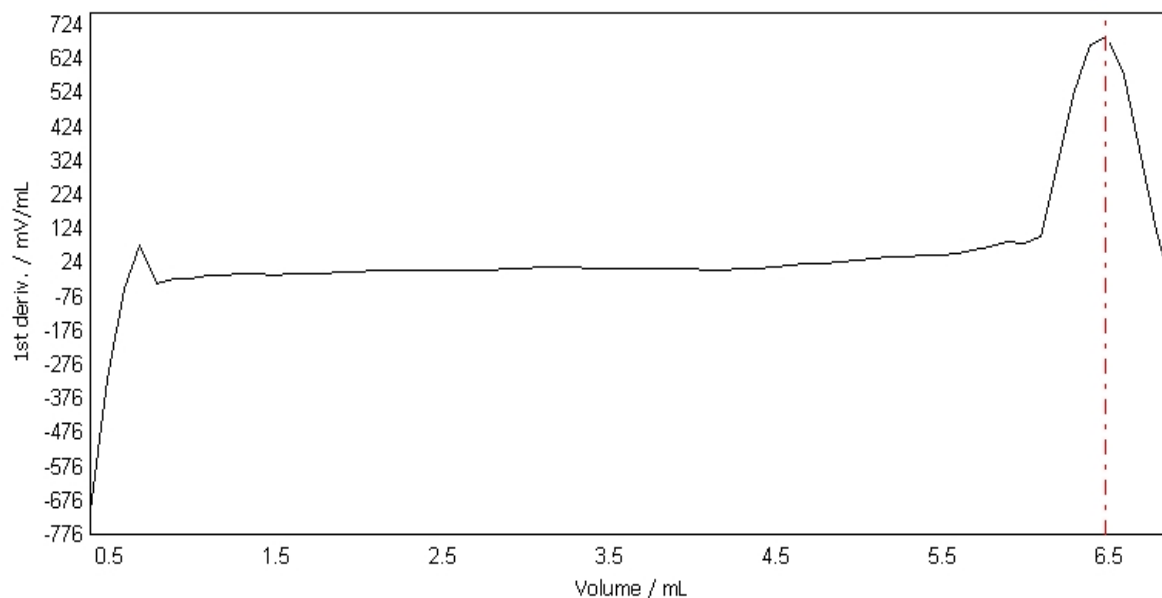
Method: Potassiumpermaga Pot. permaganate 01
Start time: 9/20/2012 5:18:44 PM

9/20/2012 10:40:58 AM

E - V curve EQP titration [1]
Sample 6/6



dE/dV - V curve EQP titration [1]
Sample 6/6



Raw data

Calculation

Result	R2 = 1.00166 -- Mean Titer
Formula	R2=Mean[R1]
Constant	1
	C = 1
Molar mass	M[Disodium oxalat] = 134.01 g/mol
Equivalent number	z[Disodium oxalat] = 2

Method:	Potassiumpermagana	Pot. permaganate 01	9/20/2012 10:40:58 AM
Start time:	9/20/2012 5:18:44		
	PM		

Titer

Titrant	1/5 KMnO ₄ c = 0.1 mol/L
Titer	1.00166

-
- (1) Modified
 - (2) Excluded
 - (3) Outside limits
 - (4) Resource expired
 - (5) srel above max srel
 - (6) srel above max srel for multiple determination
 - (7) Value outside limits, not saved in setup
 - (8) Sample data outside limits
 - (9) Standard evaluation used
 - (10) Result from buffer

Created: **Development Administrator (admin), 9/20/2012 5:32:19 PM**