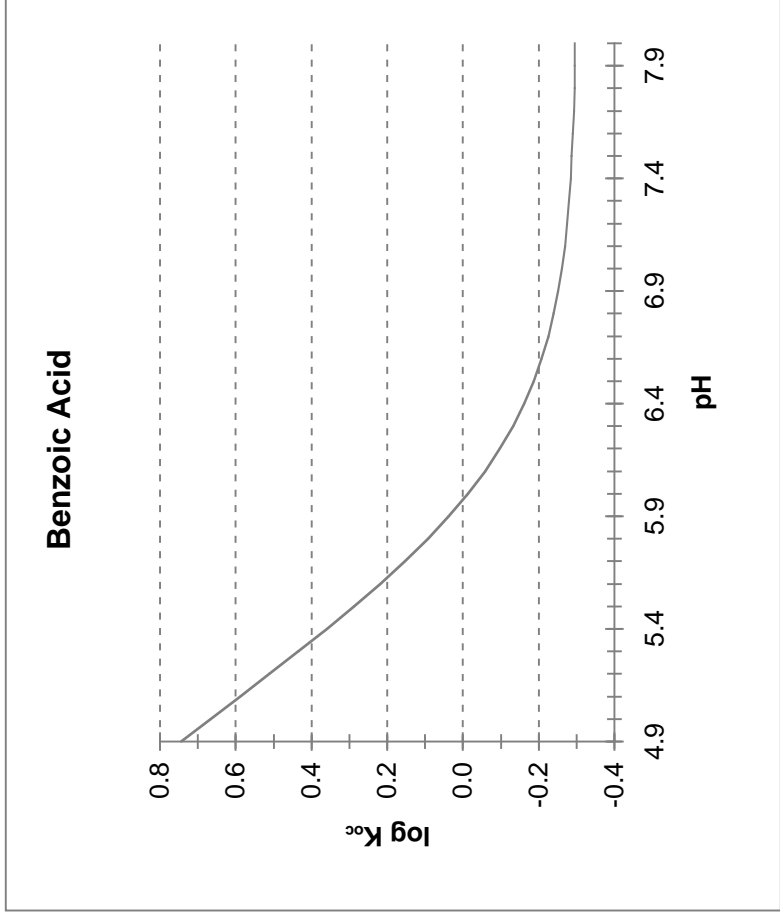

APPENDIX L

**K_{oc} Values for Ionizing Organics
as a Function of pH**

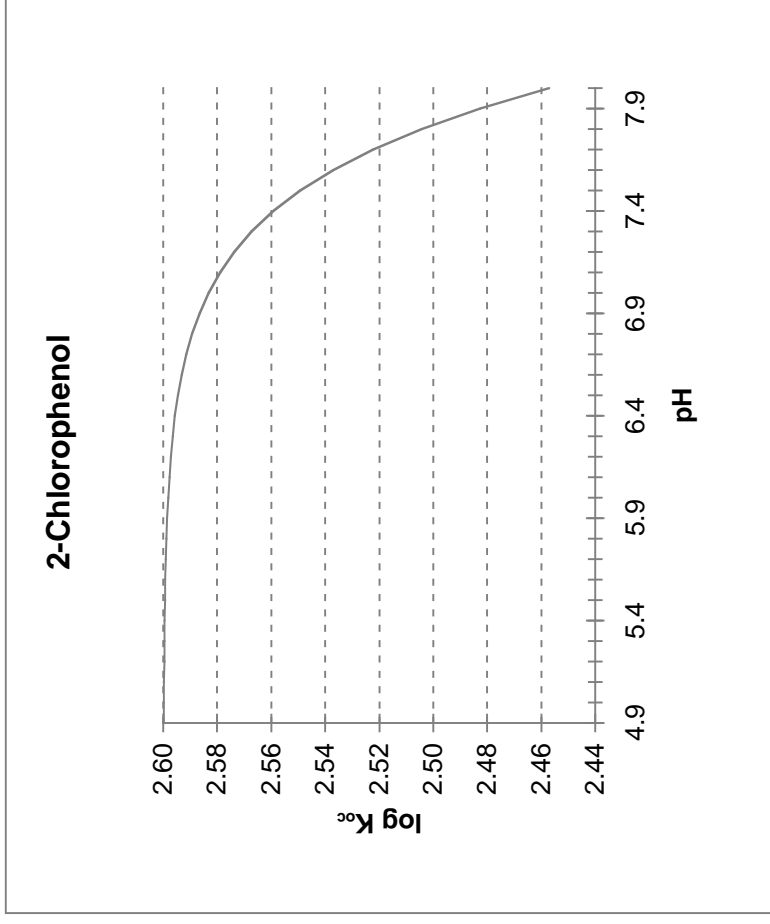
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
32	4.9	4.18	0.1600	0.5	5.5	0.74
32	5.0	4.18	0.1315	0.5	4.6	0.67
32	5.1	4.18	0.1073	0.5	3.9	0.59
32	5.2	4.18	0.0872	0.5	3.2	0.51
32	5.3	4.18	0.0705	0.5	2.7	0.43
32	5.4	4.18	0.0568	0.5	2.3	0.36
32	5.5	4.18	0.0457	0.5	1.9	0.29
32	5.6	4.18	0.0366	0.5	1.7	0.22
32	5.7	4.18	0.0293	0.5	1.4	0.15
32	5.8	4.18	0.0234	0.5	1.2	0.09
32	5.9	4.18	0.0187	0.5	1.1	0.04
32	6.0	4.18	0.0149	0.5	1.0	-0.01
32	6.1	4.18	0.0119	0.5	0.9	-0.06
32	6.2	4.18	0.0095	0.5	0.8	-0.10
32	6.3	4.18	0.0075	0.5	0.7	-0.13
32	6.4	4.18	0.0060	0.5	0.7	-0.16
32	6.5	4.18	0.0048	0.5	0.7	-0.19
32	6.6	4.18	0.0038	0.5	0.6	-0.21
32	6.7	4.18	0.0030	0.5	0.6	-0.23
32	6.8	4.18	0.0024	0.5	0.6	-0.24
32	6.9	4.18	0.0019	0.5	0.6	-0.25
32	7.0	4.18	0.0015	0.5	0.5	-0.26
32	7.1	4.18	0.0012	0.5	0.5	-0.27
32	7.2	4.18	0.0010	0.5	0.5	-0.27
32	7.3	4.18	0.0008	0.5	0.5	-0.28
32	7.4	4.18	0.0006	0.5	0.5	-0.28
32	7.5	4.18	0.0005	0.5	0.5	-0.29
32	7.6	4.18	0.0004	0.5	0.5	-0.29
32	7.7	4.18	0.0003	0.5	0.5	-0.29
32	7.8	4.18	0.0002	0.5	0.5	-0.30
32	7.9	4.18	0.0002	0.5	0.5	-0.30
32	8.0	4.18	0.0002	0.5	0.5	-0.30



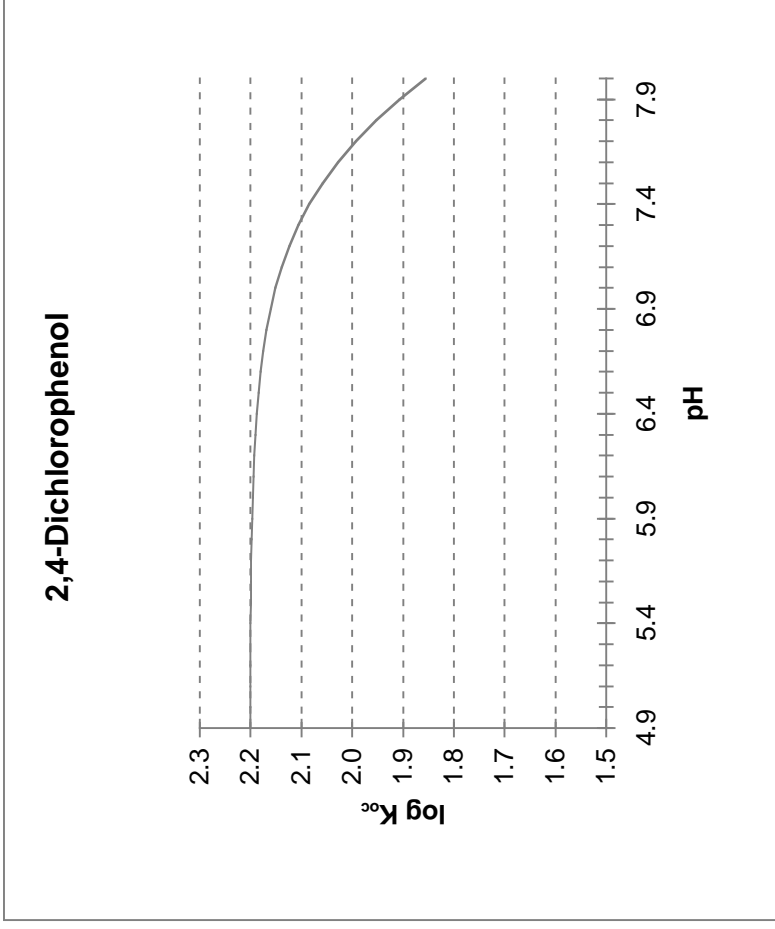
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
398	4.9	8.40	0.9997	6	398	2.60
398	5.0	8.40	0.9996	6	398	2.60
398	5.1	8.40	0.9995	6	398	2.60
398	5.2	8.40	0.9994	6	398	2.60
398	5.3	8.40	0.9992	6	398	2.60
398	5.4	8.40	0.9990	6	398	2.60
398	5.5	8.40	0.9987	6	397	2.60
398	5.6	8.40	0.9984	6	397	2.60
398	5.7	8.40	0.9980	6	397	2.60
398	5.8	8.40	0.9975	6	397	2.60
398	5.9	8.40	0.9968	6	397	2.60
398	6.0	8.40	0.9960	6	396	2.60
398	6.1	8.40	0.9950	6	396	2.60
398	6.2	8.40	0.9937	6	396	2.60
398	6.3	8.40	0.9921	6	395	2.60
398	6.4	8.40	0.9901	6	394	2.60
398	6.5	8.40	0.9876	6	393	2.59
398	6.6	8.40	0.9844	6	392	2.59
398	6.7	8.40	0.9804	6	390	2.59
398	6.8	8.40	0.9755	6	388	2.59
398	6.9	8.40	0.9693	6	386	2.59
398	7.0	8.40	0.9617	6	383	2.58
398	7.1	8.40	0.9523	6	379	2.58
398	7.2	8.40	0.9406	6	375	2.57
398	7.3	8.40	0.9264	6	369	2.57
398	7.4	8.40	0.9091	6	362	2.56
398	7.5	8.40	0.8882	6	354	2.55
398	7.6	8.40	0.8632	6	344	2.54
398	7.7	8.40	0.8337	6	333	2.52
398	7.8	8.40	0.7992	6	319	2.50
398	7.9	8.40	0.7597	6	304	2.48
398	8.0	8.40	0.7153	6	286	2.46



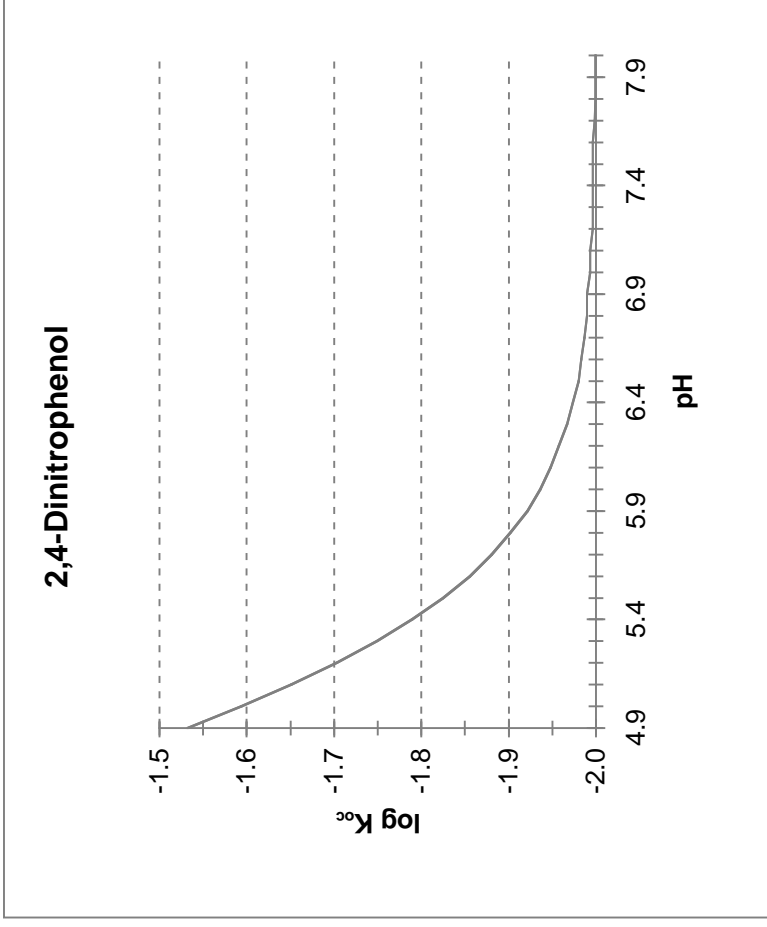
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
159	4.9	7.90	0.9990	2.4	159	2.20
159	5.0	7.90	0.9987	2.4	159	2.20
159	5.1	7.90	0.9984	2.4	159	2.20
159	5.2	7.90	0.9980	2.4	159	2.20
159	5.3	7.90	0.9975	2.4	159	2.20
159	5.4	7.90	0.9968	2.4	158	2.20
159	5.5	7.90	0.9960	2.4	158	2.20
159	5.6	7.90	0.9950	2.4	158	2.20
159	5.7	7.90	0.9937	2.4	158	2.20
159	5.8	7.90	0.9921	2.4	158	2.20
159	5.9	7.90	0.9901	2.4	157	2.20
159	6.0	7.90	0.9876	2.4	157	2.20
159	6.1	7.90	0.9844	2.4	157	2.19
159	6.2	7.90	0.9804	2.4	156	2.19
159	6.3	7.90	0.9755	2.4	155	2.19
159	6.4	7.90	0.9693	2.4	154	2.19
159	6.5	7.90	0.9617	2.4	153	2.18
159	6.6	7.90	0.9523	2.4	152	2.18
159	6.7	7.90	0.9406	2.4	150	2.18
159	6.8	7.90	0.9264	2.4	147	2.17
159	6.9	7.90	0.9091	2.4	145	2.16
159	7.0	7.90	0.8882	2.4	141	2.15
159	7.1	7.90	0.8632	2.4	138	2.14
159	7.2	7.90	0.8337	2.4	133	2.12
159	7.3	7.90	0.7992	2.4	128	2.11
159	7.4	7.90	0.7597	2.4	121	2.08
159	7.5	7.90	0.7153	2.4	114	2.06
159	7.6	7.90	0.6661	2.4	107	2.03
159	7.7	7.90	0.6131	2.4	98	1.99
159	7.8	7.90	0.5573	2.4	90	1.95
159	7.9	7.90	0.5000	2.4	81	1.91
159	8.0	7.90	0.4427	2.4	72	1.86



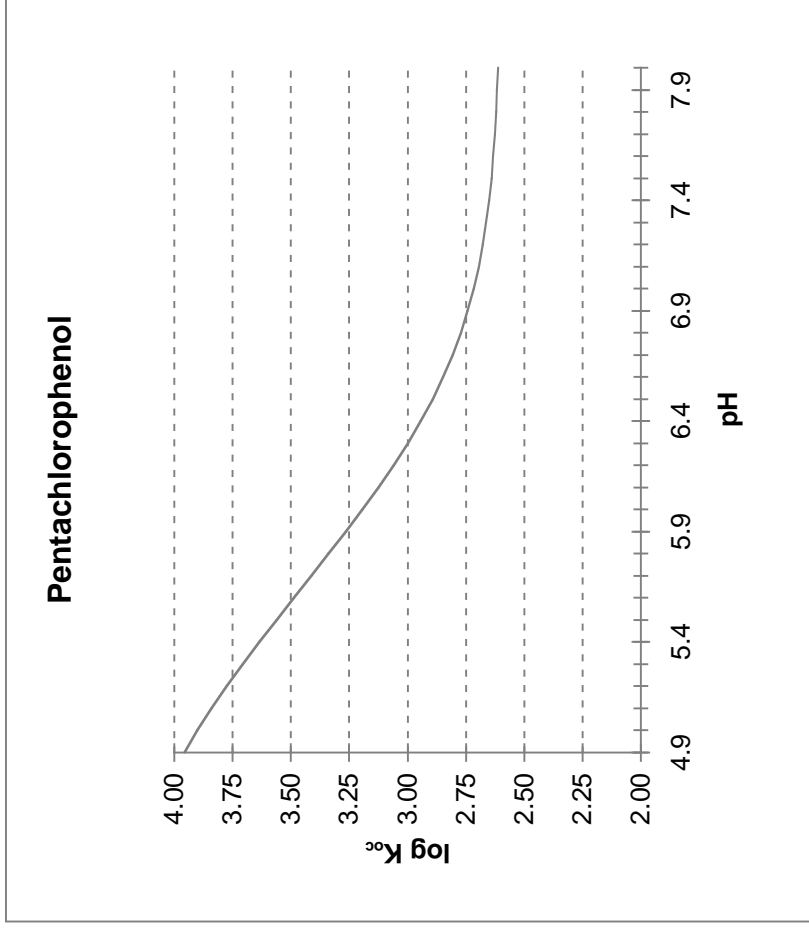
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
0.8	4.9	3.30	0.0245	0.01	0.03	-1.53
0.8	5.0	3.30	0.0196	0.01	0.03	-1.59
0.8	5.1	3.30	0.0156	0.01	0.02	-1.65
0.8	5.2	3.30	0.0124	0.01	0.02	-1.70
0.8	5.3	3.30	0.0099	0.01	0.02	-1.75
0.8	5.4	3.30	0.0079	0.01	0.02	-1.79
0.8	5.5	3.30	0.0063	0.01	0.01	-1.82
0.8	5.6	3.30	0.0050	0.01	0.01	-1.86
0.8	5.7	3.30	0.0040	0.01	0.01	-1.88
0.8	5.8	3.30	0.0032	0.01	0.01	-1.90
0.8	5.9	3.30	0.0025	0.01	0.01	-1.92
0.8	6.0	3.30	0.0020	0.01	0.01	-1.94
0.8	6.1	3.30	0.0016	0.01	0.01	-1.95
0.8	6.2	3.30	0.0013	0.01	0.01	-1.96
0.8	6.3	3.30	0.0010	0.01	0.01	-1.97
0.8	6.4	3.30	0.0008	0.01	0.01	-1.97
0.8	6.5	3.30	0.0006	0.01	0.01	-1.98
0.8	6.6	3.30	0.0005	0.01	0.01	-1.98
0.8	6.7	3.30	0.0004	0.01	0.01	-1.99
0.8	6.8	3.30	0.0003	0.01	0.01	-1.99
0.8	6.9	3.30	0.0003	0.01	0.01	-1.99
0.8	7.0	3.30	0.0002	0.01	0.01	-1.99
0.8	7.1	3.30	0.0002	0.01	0.01	-1.99
0.8	7.2	3.30	0.0001	0.01	0.01	-2.00
0.8	7.3	3.30	0.0001	0.01	0.01	-2.00
0.8	7.4	3.30	0.0001	0.01	0.01	-2.00
0.8	7.5	3.30	0.0001	0.01	0.01	-2.00
0.8	7.6	3.30	0.0001	0.01	0.01	-2.00
0.8	7.7	3.30	0.00004	0.01	0.01	-2.00
0.8	7.8	3.30	0.00003	0.01	0.01	-2.00
0.8	7.9	3.30	0.00003	0.01	0.01	-2.00
0.8	8.0	3.30	0.00002	0.01	0.01	-2.00



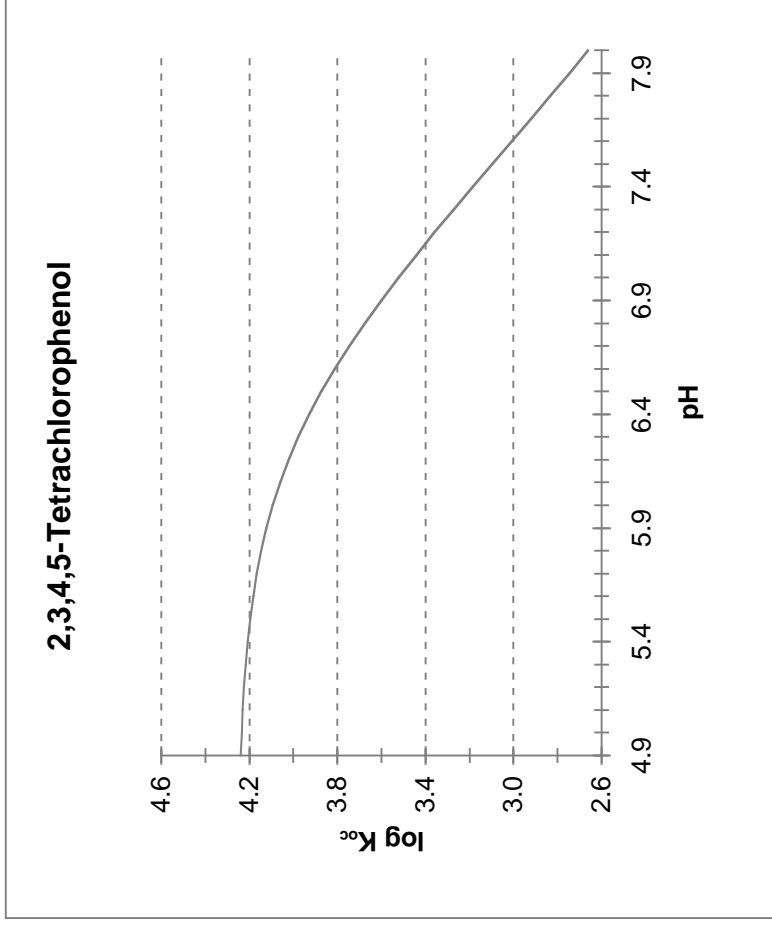
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
19953	4.9	4.80	0.4427	398	9055	3.96
19953	5.0	4.80	0.3869	398	7964	3.90
19953	5.1	4.80	0.3339	398	6927	3.84
19953	5.2	4.80	0.2847	398	5965	3.78
19953	5.3	4.80	0.2403	398	5097	3.71
19953	5.4	4.80	0.2008	398	4325	3.64
19953	5.5	4.80	0.1663	398	3650	3.56
19953	5.6	4.80	0.1368	398	3073	3.49
19953	5.7	4.80	0.1118	398	2584	3.41
19953	5.8	4.80	0.0909	398	2176	3.34
19953	5.9	4.80	0.0736	398	1837	3.26
19953	6.0	4.80	0.0594	398	1560	3.19
19953	6.1	4.80	0.0477	398	1331	3.12
19953	6.2	4.80	0.0383	398	1147	3.06
19953	6.3	4.80	0.0307	398	998	3.00
19953	6.4	4.80	0.0245	398	877	2.94
19953	6.5	4.80	0.0196	398	781	2.89
19953	6.6	4.80	0.0156	398	703	2.85
19953	6.7	4.80	0.0124	398	640	2.81
19953	6.8	4.80	0.0099	398	592	2.77
19953	6.9	4.80	0.0079	398	552	2.74
19953	7.0	4.80	0.0063	398	521	2.72
19953	7.1	4.80	0.0050	398	496	2.70
19953	7.2	4.80	0.0040	398	476	2.68
19953	7.3	4.80	0.0032	398	461	2.66
19953	7.4	4.80	0.0025	398	447	2.65
19953	7.5	4.80	0.0020	398	437	2.64
19953	7.6	4.80	0.0016	398	429	2.63
19953	7.7	4.80	0.0013	398	423	2.63
19953	7.8	4.80	0.0010	398	418	2.62
19953	7.9	4.80	0.0008	398	414	2.62
19953	8.0	4.80	0.0006	398	410	2.61



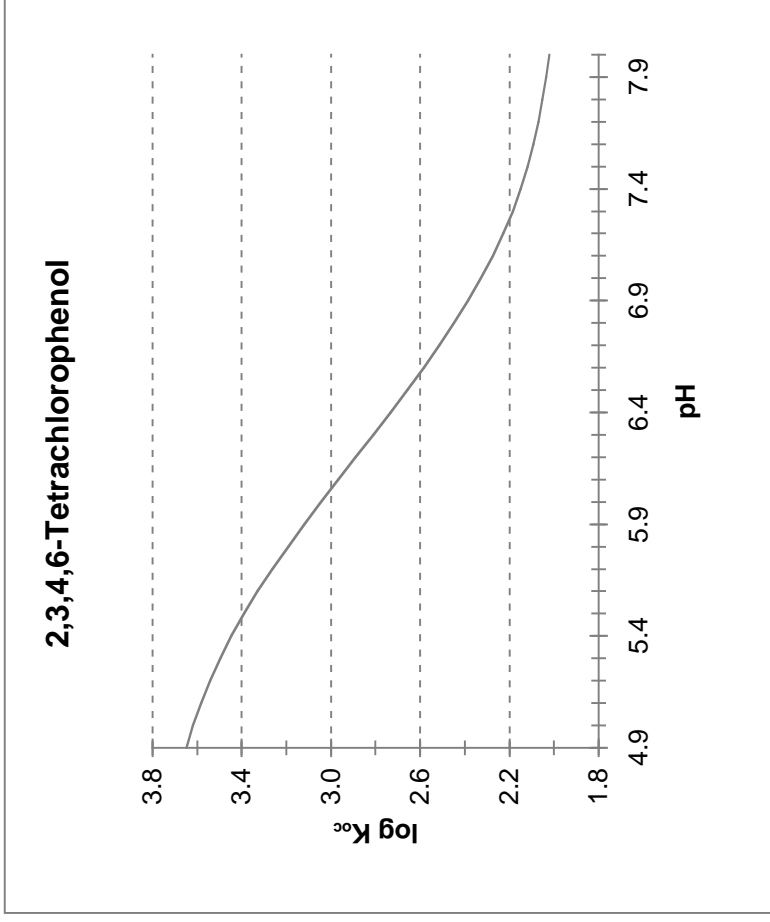
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
17916	4.9	6.35	0.9657	67	17304	4.24
17916	5.0	6.35	0.9572	67	17152	4.23
17916	5.1	6.35	0.9468	67	16966	4.23
17916	5.2	6.35	0.9339	67	16736	4.22
17916	5.3	6.35	0.9182	67	16456	4.22
17916	5.4	6.35	0.8991	67	16115	4.21
17916	5.5	6.35	0.8762	67	15706	4.20
17916	5.6	6.35	0.8490	67	15221	4.18
17916	5.7	6.35	0.8171	67	14651	4.17
17916	5.8	6.35	0.7801	67	13991	4.15
17916	5.9	6.35	0.7381	67	13241	4.12
17916	6.0	6.35	0.6912	67	12404	4.09
17916	6.1	6.35	0.6401	67	11492	4.06
17916	6.2	6.35	0.5855	67	10518	4.02
17916	6.3	6.35	0.5288	67	9506	3.98
17916	6.4	6.35	0.4712	67	8477	3.93
17916	6.5	6.35	0.4145	67	7465	3.87
17916	6.6	6.35	0.3599	67	6491	3.81
17916	6.7	6.35	0.3088	67	5579	3.75
17916	6.8	6.35	0.2619	67	4742	3.68
17916	6.9	6.35	0.2199	67	3992	3.60
17916	7.0	6.35	0.1829	67	3332	3.52
17916	7.1	6.35	0.1510	67	2762	3.44
17916	7.2	6.35	0.1238	67	2277	3.36
17916	7.3	6.35	0.1009	67	1868	3.27
17916	7.4	6.35	0.0818	67	1527	3.18
17916	7.5	6.35	0.0661	67	1247	3.10
17916	7.6	6.35	0.0532	67	1017	3.01
17916	7.7	6.35	0.0428	67	831	2.92
17916	7.8	6.35	0.0343	67	679	2.83
17916	7.9	6.35	0.0274	67	556	2.75
17916	8.0	6.35	0.0219	67	458	2.66



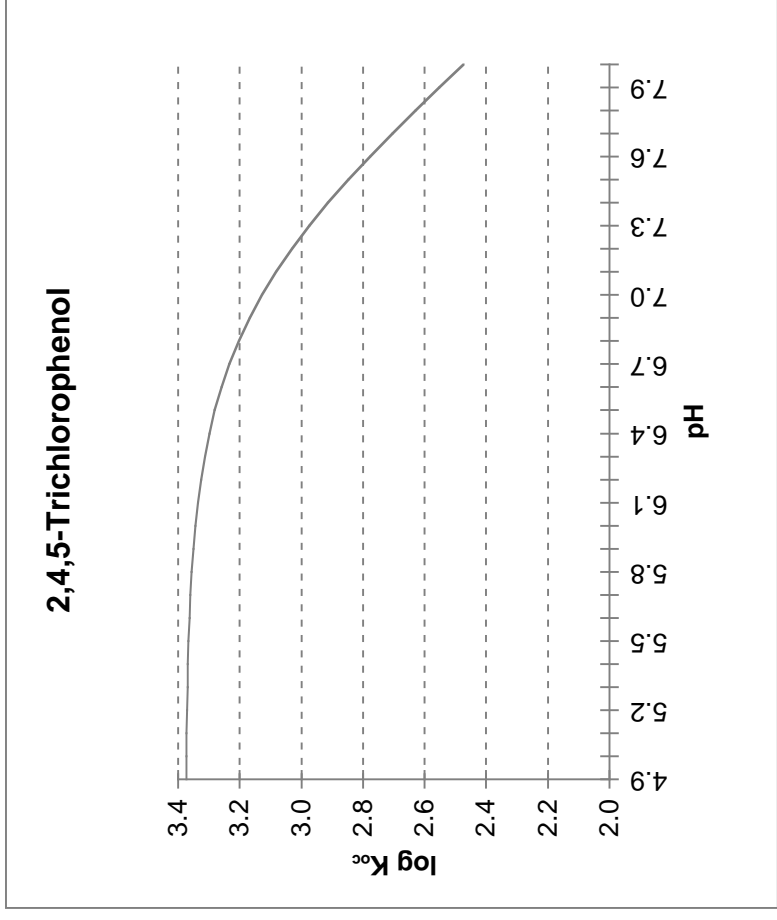
Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
6190	4.9	5.30	0.7153	93	4454	3.65
6190	5.0	5.30	0.6661	93	4154	3.62
6190	5.1	5.30	0.6131	93	3831	3.58
6190	5.2	5.30	0.5573	93	3491	3.54
6190	5.3	5.30	0.5000	93	3142	3.50
6190	5.4	5.30	0.4427	93	2792	3.45
6190	5.5	5.30	0.3869	93	2452	3.39
6190	5.6	5.30	0.3339	93	2129	3.33
6190	5.7	5.30	0.2847	93	1829	3.26
6190	5.8	5.30	0.2403	93	1558	3.19
6190	5.9	5.30	0.2008	93	1317	3.12
6190	6.0	5.30	0.1663	93	1107	3.04
6190	6.1	5.30	0.1368	93	927	2.97
6190	6.2	5.30	0.1118	93	775	2.89
6190	6.3	5.30	0.0909	93	647	2.81
6190	6.4	5.30	0.0736	93	542	2.73
6190	6.5	5.30	0.0594	93	455	2.66
6190	6.6	5.30	0.0477	93	384	2.58
6190	6.7	5.30	0.0383	93	327	2.51
6190	6.8	5.30	0.0307	93	280	2.45
6190	6.9	5.30	0.0245	93	242	2.38
6190	7.0	5.30	0.0196	93	213	2.33
6190	7.1	5.30	0.0156	93	188	2.27
6190	7.2	5.30	0.0124	93	169	2.23
6190	7.3	5.30	0.0099	93	153	2.19
6190	7.4	5.30	0.0079	93	141	2.15
6190	7.5	5.30	0.0063	93	131	2.12
6190	7.6	5.30	0.0050	93	123	2.09
6190	7.7	5.30	0.0040	93	117	2.07
6190	7.8	5.30	0.0032	93	113	2.05
6190	7.9	5.30	0.0025	93	108	2.03
6190	8.0	5.30	0.0020	93	105	2.02



Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
2380	4.9	7.10	0.9937	36	2365	3.37
2380	5.0	7.10	0.9921	36	2361	3.37
2380	5.1	7.10	0.9901	36	2357	3.37
2380	5.2	7.10	0.9876	36	2351	3.37
2380	5.3	7.10	0.9844	36	2343	3.37
2380	5.4	7.10	0.9804	36	2334	3.37
2380	5.5	7.10	0.9755	36	2323	3.37
2380	5.6	7.10	0.9693	36	2308	3.36
2380	5.7	7.10	0.9617	36	2290	3.36
2380	5.8	7.10	0.9523	36	2268	3.36
2380	5.9	7.10	0.9406	36	2241	3.35
2380	6.0	7.10	0.9264	36	2207	3.34
2380	6.1	7.10	0.9091	36	2167	3.34
2380	6.2	7.10	0.8882	36	2118	3.33
2380	6.3	7.10	0.8632	36	2059	3.31
2380	6.4	7.10	0.8337	36	1990	3.30
2380	6.5	7.10	0.7992	36	1909	3.28
2380	6.6	7.10	0.7597	36	1817	3.26
2380	6.7	7.10	0.7153	36	1713	3.23
2380	6.8	7.10	0.6661	36	1597	3.20
2380	6.9	7.10	0.6131	36	1473	3.17
2380	7.0	7.10	0.5573	36	1342	3.13
2380	7.1	7.10	0.5000	36	1208	3.08
2380	7.2	7.10	0.4427	36	1074	3.03
2380	7.3	7.10	0.3869	36	943	2.97
2380	7.4	7.10	0.3339	36	819	2.91
2380	7.5	7.10	0.2847	36	703	2.85
2380	7.6	7.10	0.2403	36	599	2.78
2380	7.7	7.10	0.2008	36	507	2.70
2380	7.8	7.10	0.1663	36	426	2.63
2380	7.9	7.10	0.1368	36	357	2.55
2380	8.0	7.10	0.1118	36	298	2.47



Appendix L. K_{oc} Values for Ionizing Organics as a Function of pH

$K_{oc,n}$	pH	pKa	Φ	$K_{oc,i}$	K_{oc}	$\log K_{oc}$
1070	4.9	6.40	0.9693	107	1040	3.02
1070	5.0	6.40	0.9617	107	1033	3.01
1070	5.1	6.40	0.9523	107	1024	3.01
1070	5.2	6.40	0.9406	107	1013	3.01
1070	5.3	6.40	0.9264	107	999	3.00
1070	5.4	6.40	0.9091	107	982	2.99
1070	5.5	6.40	0.8882	107	962	2.98
1070	5.6	6.40	0.8632	107	938	2.97
1070	5.7	6.40	0.8337	107	910	2.96
1070	5.8	6.40	0.7992	107	877	2.94
1070	5.9	6.40	0.7597	107	839	2.92
1070	6.0	6.40	0.7153	107	796	2.90
1070	6.1	6.40	0.6661	107	748	2.87
1070	6.2	6.40	0.6131	107	697	2.84
1070	6.3	6.40	0.5573	107	644	2.81
1070	6.4	6.40	0.5000	107	589	2.77
1070	6.5	6.40	0.4427	107	533	2.73
1070	6.6	6.40	0.3869	107	480	2.68
1070	6.7	6.40	0.3339	107	429	2.63
1070	6.8	6.40	0.2847	107	381	2.58
1070	6.9	6.40	0.2403	107	338	2.53
1070	7.0	6.40	0.2008	107	300	2.48
1070	7.1	6.40	0.1663	107	267	2.43
1070	7.2	6.40	0.1368	107	239	2.38
1070	7.3	6.40	0.1118	107	215	2.33
1070	7.4	6.40	0.0909	107	195	2.29
1070	7.5	6.40	0.0736	107	178	2.25
1070	7.6	6.40	0.0594	107	164	2.22
1070	7.7	6.40	0.0477	107	153	2.18
1070	7.8	6.40	0.0383	107	144	2.16
1070	7.9	6.40	0.0307	107	137	2.14
1070	8.0	6.40	0.0245	107	131	2.12

