

<i>P</i> = 40.0 MPa					<i>P</i> = 50.0 MPa				<i>P</i> = 60.0 MPa			
<i>T</i> , °C	<i>v</i> , m ³ /kg	<i>u</i> , kJ/kg	<i>h</i> , kJ/kg	<i>s</i> , kJ/kgK	<i>v</i> , m ³ /kg	<i>u</i> , kJ/kg	<i>h</i> , kJ/kg	<i>s</i> , kJ/kgK	<i>v</i> , m ³ /kg	<i>u</i> , kJ/kg	<i>h</i> , kJ/kg	<i>s</i> , kJ/kgK
375	0.0016407	1677.1	1742.8	3.8290	0.0015594	1638.6	1716.6	3.7639	0.0015028	1609.4	1699.5	3.7141
400	0.0019077	1854.6	1930.9	4.1135	0.0017309	1788.1	1874.6	4.0031	0.0016335	1745.4	1843.4	3.9318
425	0.002532	2096.9	2198.1	4.5029	0.002007	1959.7	2060.0	4.2734	0.0018165	1892.7	2001.7	4.1626
450	0.003693	2365.1	2512.8	4.9459	0.002486	2159.6	2284.0	4.5884	0.002085	2053.9	2179.0	4.4121
500	0.005622	2678.4	2903.3	5.4700	0.003892	2525.5	2720.1	5.1726	0.002956	2390.6	2567.9	4.9321
550	0.006984	2869.7	3149.1	5.7785	0.005118	2763.6	3019.5	5.5485	0.003956	2658.8	2896.2	5.3441
600	0.008094	3022.6	3346.4	6.0144	0.006112	2942.0	3247.6	5.8178	0.004834	2861.1	3151.2	5.6452
650	0.009063	3158.0	3520.6	6.2054	0.006966	3093.5	3441.8	6.0342	0.005595	3028.8	3364.5	5.8829
700	0.009941	3283.6	3681.2	6.3750	0.007727	3230.5	3616.8	6.2189	0.006272	3177.2	3553.5	6.0824
800	0.011523	3517.8	3978.7	6.6662	0.009076	3479.8	3933.6	6.5290	0.007459	3441.5	3889.1	6.4109
900	0.012962	3739.4	4257.9	6.9150	0.010283	3710.3	4224.4	6.7882	0.008505	3681.0	4191.5	6.6805
1000	0.014324	3954.6	4527.6	7.1356	0.011411	3930.5	4501.1	7.0146	0.009480	3906.4	4475.2	6.9127
1100	0.015642	4167.4	4793.1	7.3364	0.012496	4145.7	4770.5	7.2184	0.010409	4124.1	4748.6	7.1195
1200	0.016940	4380.1	5057.7	7.5224	0.013561	4359.1	5037.2	7.4058	0.011317	4338.2	5017.2	7.3083
1300	0.018229	4594.3	5323.5	7.6969	0.014616	4572.8	5303.6	7.5808	0.012215	4551.4	5284.3	7.483

Appendix 8d: Properties of Subcooled Water

<i>P</i> = 5.0 MPa (<i>T</i> _{sat} = 263.99 °C)					<i>P</i> = 10.0 MPa (<i>T</i> _{sat} = 311.06 °C)				<i>P</i> = 15.0 MPa (<i>T</i> _{sat} = 342.24 °C)			
<i>T</i> , °C	<i>v</i> , m ³ /kg	<i>u</i> , kJ/kg	<i>h</i> , kJ/kg	<i>s</i> , kJ/kgK	<i>v</i> , m ³ /kg	<i>u</i> , kJ/kg	<i>h</i> , kJ/kg	<i>s</i> , kJ/kgK	<i>v</i> , m ³ /kg	<i>u</i> , kJ/kg	<i>h</i> , kJ/kg	<i>s</i> , kJ/kgK
Sat.	0.0012859	1147.8	1154.2	2.9202	0.0014524	1393.0	1407.6	3.3596	0.0016581	1585.60	1610.5	3.6848
0	0.0009977	0.0	5.0	0.0001	0.0009952	0.1	10.0	0.0002	0.0009928	0.15	15.1	0.0004
20	0.0009995	83.7	88.7	0.2956	0.0009972	83.4	93.3	0.2945	0.0009950	83.06	98.0	0.2934
40	0.0010056	167.0	172.0	0.5705	0.0010034	166.4	176.4	0.5686	0.0010013	165.76	180.8	0.5666
60	0.0010149	250.2	255.3	0.8285	0.0010127	249.4	259.5	0.8258	0.0010105	248.51	263.7	0.8232
80	0.0010268	333.7	338.9	1.0720	0.0010245	332.6	342.8	1.0688	0.0010222	331.48	346.8	1.0656
100	0.0010410	417.5	422.7	1.3030	0.0010385	416.1	426.5	1.2992	0.0010361	414.74	430.3	1.2955
120	0.0010576	501.8	507.1	1.5233	0.0010549	500.1	510.6	1.5189	0.0010522	498.40	514.2	1.5145
140	0.0010768	586.8	592.2	1.7343	0.0010737	584.7	595.4	1.7292	0.0010707	582.66	598.7	1.7242
160	0.0010988	672.6	678.1	1.9375	0.0010953	670.1	681.1	1.9317	0.0010918	667.71	684.1	1.9260
180	0.0011240	759.6	765.3	2.1341	0.0011199	756.7	767.8	2.1275	0.0011159	753.76	770.5	2.1210
200	0.0011530	848.1	853.9	2.3255	0.0011480	844.5	856.0	2.3178	0.0011433	841.00	858.2	2.3104

(Continued)

(continued)

$P=5.0\text{ MPa}$ ($T_{\text{sat}}=263.99\text{ }^{\circ}\text{C}$)					$P=10.0\text{ MPa}$ ($T_{\text{sat}}=311.06\text{ }^{\circ}\text{C}$)				$P=15.0\text{ MPa}$ ($T_{\text{sat}}=342.24\text{ }^{\circ}\text{C}$)			
$T, \text{ }^{\circ}\text{C}$	$v, \text{ m}^3/\text{kg}$	$u, \text{ kJ/kg}$	$h, \text{ kJ/kg}$	$s, \text{ kJ/kgK}$	$v, \text{ m}^3/\text{kg}$	$u, \text{ kJ/kg}$	$h, \text{ kJ/kg}$	$s, \text{ kJ/kgK}$	$v, \text{ m}^3/\text{kg}$	$u, \text{ kJ/kg}$	$h, \text{ kJ/kg}$	$s, \text{ kJ/kgK}$
220	0.0011866	938.4	944.4	2.5128	0.0011805	934.1	945.9	2.5039	0.0011748	929.90	947.5	2.4953
240	0.0012264	1031.4	1037.5	2.6979	0.0012187	1026.0	1038.1	2.6872	0.0012114	1020.80	1039.0	2.6771
260	0.0012749	1127.9	1134.3	2.8830	0.0012645	1121.1	1133.7	2.8699	0.0012550	1114.60	1133.4	2.8576
280					0.0013216	1220.9	1234.1	3.0548	0.0013084	1212.50	1232.1	3.0393
300					0.0013972	1328.4	1342.3	3.2469	0.0013770	1316.60	1337.3	3.2260
320									0.0014724	1431.10	1453.2	3.4247
340									0.0016311	1567.50	1591.9	3.6546

$P=20.0\text{ MPa}$ ($T_{\text{sat}}=365.81\text{ }^{\circ}\text{C}$)					$P=30.0\text{ MPa}$				$P=50.0\text{ MPa}$			
$T, \text{ }^{\circ}\text{C}$	$v, \text{ m}^3/\text{kg}$	$u, \text{ kJ/kg}$	$h, \text{ kJ/kg}$	$s, \text{ kJ/kgK}$	$v, \text{ m}^3/\text{kg}$	$u, \text{ kJ/kg}$	$h, \text{ kJ/kg}$	$s, \text{ kJ/kgK}$	$v, \text{ m}^3/\text{kg}$	$u, \text{ kJ/kg}$	$h, \text{ kJ/kg}$	$s, \text{ kJ/kgK}$
Sat.	0.002036	1785.6	1826.3	4.0139								
0	0.0009904	0.2	20.0	0.0004	0.0009856	0.3	29.8	0.0001	0.0009766	0.20	49.0	0.0014
20	0.0009928	82.8	102.6	0.2923	0.0009886	82.2	111.8	0.2899	0.0009804	81.00	130.0	0.2848
40	0.0009992	165.2	185.2	0.5646	0.0009951	164.0	193.9	0.5607	0.0009872	161.86	211.2	0.5527
60	0.0010084	247.7	267.9	0.8206	0.0010042	246.1	276.2	0.8154	0.0009962	242.98	292.8	0.8052
80	0.0010199	330.4	350.8	1.0624	0.0010156	328.3	358.8	1.0561	0.0010073	324.34	374.7	1.0440
100	0.0010337	413.4	434.1	1.2917	0.0010290	410.8	441.7	1.2844	0.0010201	405.88	456.9	1.2703
120	0.0010496	496.8	517.8	1.5102	0.0010445	493.6	524.9	1.5018	0.0010348	487.65	539.4	1.4857
140	0.0010678	580.7	602.0	1.7193	0.0010621	576.9	608.8	1.7098	0.0010515	569.77	622.4	1.6915
160	0.0010885	665.4	687.1	1.9204	0.0010821	660.8	693.3	1.9096	0.0010703	652.41	705.9	1.8891
180	0.0011120	751.0	773.2	2.1147	0.0011047	745.6	778.7	2.1024	0.0010912	735.69	790.3	2.0794
200	0.0011388	837.7	860.5	2.3031	0.0011302	831.4	865.3	2.2893	0.0011146	819.70	875.5	2.2634
220	0.0011695	925.9	949.3	2.4870	0.0011590	918.3	953.1	2.4711	0.0011408	904.70	961.7	2.4419
240	0.0012046	1016.0	1040.0	2.6674	0.0011920	1006.9	1042.6	2.6490	0.0011702	990.70	1049.2	2.6158
260	0.0012462	1108.6	1133.5	2.8459	0.0012303	1097.4	1134.3	2.8243	0.0012034	1078.10	1138.2	2.7860
280	0.0012965	1204.7	1230.6	3.0248	0.0012755	1190.7	1229.0	2.9986	0.0012415	1167.20	1229.3	2.9537
300	0.0013596	1306.1	1333.3	3.2071	0.0013307	1287.9	1327.8	3.1741	0.0012860	1258.70	1323.0	3.1200
320	0.0014437	1415.7	1444.6	3.3979	0.0013997	1390.7	1432.7	3.3539	0.0013388	1353.30	1420.2	3.2868
340	0.0015684	1539.7	1571.0	3.6075	0.0014920	1501.7	1546.5	3.5426	0.0014032	1452.00	1522.1	3.4557
360	0.0018226	1702.8	1739.3	3.8772	0.0016265	1626.6	1675.4	3.7494	0.0014838	1556.00	1630.2	3.6291
380					0.0018691	1781.4	1837.5	4.0012	0.0015884	1667.20	1746.6	3.8101