

Q2: BOILING POINT OF WATER VS ATMOSPHERIC PRESSURE

p0 / kPa 101.325

T0 /K 373

R /J/mol/K 8.314

Lvap /kJ/mol 43.8

Tboil /degC	Tboil /K	pressure p /kPa
40.7	313.7	6.5
45.4	318.4	9.1
49.5	322.5	13.9
55.9	328.9	15.7
59.6	332.6	17.8
64.5	337.5	23.4
65.9	338.9	28.1
69.9	342.9	30.6
71.6	344.6	34.6
77.8	350.8	42
81.0	354	47.9
84.9	357.9	56.5
88.6	361.6	63.8
90.5	363.5	68.5
93.2	366.2	75.2

ln(p/p0)	1000/(R*Tboil)
-2.7465	0.3834
-2.4101	0.3778
-1.9864	0.3730
-1.8647	0.3657
-1.7391	0.3616
-1.4656	0.3564
-1.2826	0.3549
-1.1973	0.3508
-1.0745	0.3490
-0.8807	0.3429
-0.7492	0.3398
-0.5841	0.3361
-0.4626	0.3326
-0.3915	0.3309
-0.2982	0.3285

Model p /kPa
7.02
8.99
11.10
15.25
18.22
22.94
24.46
29.33
31.64
41.45
47.48
55.84
64.91
70.05
77.95

