

precision hydrometer
calibration temperature 59 F
reading in water at calibration temp 1.0025 SG
Plato

general hydrometer
calibration temperature 59 F
reading in water at calibration temp SG
0 Plato

precision hydrometer offset SG
0.00 Plato

general hydrometer offset 0 SG
0 Plato

1.002708

Precision hydrometer (0.990 - 1.020 range) to Plato conversion

temperature in Celsius

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0.9900	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.7	-2.7	-2.7	-2.6	-2.6	-2.5	-2.5	-2.5	-2.4	-2.4	-2.3	-2.3	-2.2	-2.1	-2.1	-2.0	-1.9	-1.9	-1.8	-1.7	
0.9905	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-2.4	-2.4	-2.3	-2.3	-2.2	-2.2	-2.2	-2.1	-2.1	-2.0	-1.9	-1.9	-1.8	-1.7	-1.6	
0.9910	-2.5	-2.5	-2.5	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-2.5	-2.5	-2.4	-2.4	-2.4	-2.3	-2.3	-2.3	-2.2	-2.2	-2.1	-2.0	-2.0	-1.9	-1.9	-1.8	-1.7	-1.6	-1.5	-1.4	
0.9915	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.3	-2.3	-2.3	-2.2	-2.2	-2.2	-2.1	-2.1	-2.0	-2.0	-1.9	-1.9	-1.8	-1.7	-1.7	-1.6	-1.5	-1.5	-1.4	-1.3	
0.9920	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.2	-2.2	-2.2	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3	-1.3	-1.2	
0.9925	-2.1	-2.1	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.1	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.5	-1.4	-1.3	-1.3	-1.2	-1.1	
0.9930	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.6	-1.5	-1.5	-1.4	-1.3	-1.3	-1.2	-1.1	-1.1	-1.0	-0.9	
0.9935	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8	-1.8	-1.8	-1.7	-1.7	-1.6	-1.6	-1.6	-1.5	-1.5	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-1.0	-0.9	-0.9	-0.8	
0.9940	-1.7	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.7	-1.7	-1.7	-1.7	-1.6	-1.6	-1.6	-1.5	-1.5	-1.4	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.7		
0.9945	-1.6	-1.6	-1.6	-1.6	-1.7	-1.7	-1.6	-1.6	-1.6	-1.6	-1.5	-1.5	-1.4	-1.4	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-1.1	-1.0	-1.0	-0.9	-0.8	-0.8	-0.7	-0.6	-0.5		
0.9950	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.3	-1.2	-1.2	-1.1	-1.1	-1.0	-1.0	-0.9	-0.8	-0.8	-0.7	-0.6	-0.6	-0.5	-0.4	
0.9955	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-1.1	-1.1	-1.0	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.6	-0.6	-0.5	-0.4	-0.3	-0.3		
0.9960	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-1.2	-1.1	-1.1	-1.1	-1.1	-1.0	-1.0	-0.9	-0.9	-0.9	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.4	-0.4	-0.3	-0.2	-0.1	
0.9965	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	0.0	
0.9970	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.1	
0.9975	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.2	0.2	
0.9980	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.1	0.2	0.2	0.3	0.4	
0.9985	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5	
0.9990	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.6	
0.9995	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.8
1.0000	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	
1.0005	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0		
1.0010	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.1		
1.0015	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.1	1.2	1.3		
1.0020	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.4		
1.0025	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.5	
1.0030	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.6	1.7		
1.0035	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7		
1.0040	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.8		
1.0045	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.0		
1.0050	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.1	2.2				
1.0055	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3			
1.0060	1.4	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.4				
1.0065	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.5				
1.0070	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7			
1.0075	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.8			
1.0080	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.8	2.9					
1.0085	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.8	2.8	2.9	3.0			
1.0090	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.2			
1.0095	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.2	3.3		
1.0100	2.4	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.4			
1.0105	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9	3.0	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6		
1.0110	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.3	3.4	3.5	3.5				

Precision hydrometer (0.990 - 1.020 range) to Plato conversion

temperature in Fahrenheit

	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	
0.9900	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.7	-2.7	-2.7	-2.6	-2.6	-2.5	-2.5	-2.4	-2.4	-2.3	-2.2	-2.2	-2.1	-2.0	-1.9	-1.9	-1.8	-1.7	-1.6	-1.5	-1.4		
0.9905	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.6	-2.6	-2.6	-2.5	-2.5	-2.4	-2.4	-2.4	-2.3	-2.3	-2.2	-2.2	-2.1	-2.0	-2.0	-1.9	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3	
0.9910	-2.5	-2.5	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-2.5	-2.5	-2.4	-2.4	-2.4	-2.3	-2.3	-2.2	-2.2	-2.1	-2.0	-2.0	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3	-1.2	
0.9915	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.3	-2.3	-2.3	-2.2	-2.2	-2.1	-2.1	-2.1	-2.0	-2.0	-1.9	-1.8	-1.8	-1.7	-1.6	-1.5	-1.4	-1.3	-1.2	-1.1	-1.0		
0.9920	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.2	-2.2	-2.2	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3	-1.2	-1.1	-1.0		
0.9925	-2.1	-2.1	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.4	-1.3	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6
0.9930	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-1.9	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.6	-1.5	-1.5	-1.4	-1.3	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5		
0.9935	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8	-1.8	-1.7	-1.7	-1.7	-1.6	-1.6	-1.5	-1.5	-1.4	-1.3	-1.3	-1.2	-1.1	-1.0	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5		
0.9940	-1.7	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.7	-1.7	-1.7	-1.6	-1.6	-1.6	-1.5	-1.5	-1.4	-1.4	-1.3	-1.3	-1.2	-1.1	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5	-0.4		
0.9945	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.5	-1.5	-1.5	-1.4	-1.4	-1.4	-1.3	-1.2	-1.2	-1.1	-1.1	-1.0	-0.9	-0.9	-0.8	-0.7	-0.6	-0.5	-0.4	-0.3	-0.3		
0.9950	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-1.1	-1.0	-0.9	-0.9	-0.8	-0.7	-0.6	-0.6	-0.5	-0.4	-0.3	-0.2	-0.1		
0.9955	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.3	-1.2	-1.2	-1.1	-1.1	-1.0	-1.0	-0.9	-0.9	-0.8	-0.7	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3	-0.2	-0.1	0.0		
0.9960	-1.2	-1.2	-1.2	-1.3	-1.3	-1.2	-1.2	-1.2	-1.2	-1.1	-1.1	-1.1	-1.0	-1.0	-0.9	-0.9	-0.8	-0.7	-0.7	-0.6	-0.5	-0.5	-0.4	-0.3	-0.2	-0.1	0.0	0.1	0.2	0.3	0.4	
0.9965	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0	-1.0	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.5	-0.4	-0.3	-0.3	-0.2	-0.1	0.0	0.1	0.2	0.3	0.4		
0.9970	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.2	-0.1	-0.1	0.0	0.1	0.2	0.3	0.4		
0.9975	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	-0.7	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	0.0	0.1	0.2	0.2	0.3	0.4	0.5		
0.9980	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.6		
0.9985	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8		
0.9990	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.9		
0.9995	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.0		
1.0000	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2		
1.0005	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	
1.0010	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4			
1.0015	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.5	
1.0020	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7		
1.0025	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.8		
1.0030	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9			
1.0035	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.1		
1.0040	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.1	2.2				
1.0045	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3			
1.0050	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.4			
1.0055	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.5			
1.0060	1.4	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.7			
1.0065	1.5	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8			
1.0070	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.8	2.9	2.9			
1.0075	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.1			
1.0080	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.2		
1.0085	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.3			
1.0090	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.1	3.2	3.3	3.4			
1.0095	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.5			
1.0100	2.4	2.4	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.6	3.7				
1.0105	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.6				

Precision hydrometer (0.990 - 1.020 range) to gravity points conversion
temperature in Celsius

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
0.9900	-10.7	-10.8	-10.8	-10.8	-10.9	-10.9	-10.8	-10.8	-10.7	-10.7	-10.6	-10.5	-10.4	-10.3	-10.1	-10.0	-9.8	-9.7	-9.5	-9.3	-9.1	-8.9	-8.7	-8.4	-8.2	-7.9	-7.7	-7.4	-7.1	-6.8	-6.5		
0.9905	-10.2	-10.3	-10.3	-10.3	-10.4	-10.4	-10.3	-10.3	-10.2	-10.1	-10.0	-9.9	-9.8	-9.7	-9.6	-9.5	-9.4	-9.3	-9.2	-9.0	-8.8	-8.6	-8.4	-8.2	-7.9	-7.7	-7.4	-7.2	-6.9	-6.6	-6.3	-6.0	
0.9910	-9.7	-9.8	-9.8	-9.8	-9.9	-9.9	-9.8	-9.8	-9.7	-9.7	-9.6	-9.5	-9.4	-9.3	-9.1	-9.0	-8.8	-8.7	-8.5	-8.3	-8.1	-7.9	-7.7	-7.4	-7.2	-6.9	-6.7	-6.4	-6.1	-5.8	-5.5		
0.9915	-9.2	-9.3	-9.3	-9.3	-9.4	-9.4	-9.3	-9.3	-9.2	-9.1	-9.0	-8.9	-8.8	-8.6	-8.5	-8.3	-8.2	-8.0	-7.8	-7.6	-7.4	-7.2	-6.9	-6.7	-6.4	-6.2	-5.9	-5.6	-5.3	-5.0			
0.9920	-8.7	-8.8	-8.8	-8.8	-8.9	-8.9	-8.8	-8.8	-8.7	-8.7	-8.6	-8.5	-8.4	-8.3	-8.1	-8.0	-7.8	-7.7	-7.5	-7.3	-7.1	-6.9	-6.7	-6.4	-6.2	-5.9	-5.7	-5.4	-5.2	-4.9	-4.6	-4.3	-4.0
0.9925	-8.2	-8.3	-8.3	-8.3	-8.4	-8.4	-8.3	-8.3	-8.2	-8.1	-8.0	-7.9	-7.8	-7.6	-7.5	-7.3	-7.2	-7.0	-6.8	-6.6	-6.4	-6.2	-5.9	-5.7	-5.4	-5.2	-4.9	-4.6	-4.3	-4.0			
0.9930	-7.7	-7.8	-7.8	-7.8	-7.9	-7.9	-7.8	-7.8	-7.7	-7.7	-7.6	-7.5	-7.4	-7.3	-7.1	-7.0	-6.8	-6.7	-6.5	-6.3	-6.1	-5.9	-5.7	-5.4	-5.2	-4.9	-4.7	-4.4	-4.1	-3.8	-3.5		
0.9935	-7.2	-7.3	-7.3	-7.3	-7.4	-7.4	-7.3	-7.3	-7.2	-7.2	-7.1	-7.0	-6.9	-6.8	-6.6	-6.5	-6.3	-6.2	-6.0	-5.8	-5.6	-5.4	-5.2	-4.9	-4.7	-4.4	-4.2	-3.9	-3.6	-3.3	-3.0		
0.9940	-6.7	-6.8	-6.8	-6.9	-6.9	-6.8	-6.8	-6.7	-6.7	-6.6	-6.5	-6.4	-6.3	-6.1	-6.0	-5.8	-5.7	-5.5	-5.3	-5.1	-4.9	-4.7	-4.4	-4.2	-3.9	-3.7	-3.4	-3.1	-2.8	-2.5			
0.9945	-6.2	-6.3	-6.3	-6.3	-6.4	-6.4	-6.3	-6.3	-6.2	-6.1	-6.0	-5.9	-5.8	-5.6	-5.5	-5.3	-5.2	-5.0	-4.8	-4.6	-4.4	-4.2	-3.9	-3.7	-3.4	-3.2	-2.9	-2.6	-2.3	-2.0			
0.9950	-5.7	-5.8	-5.8	-5.9	-5.9	-5.8	-5.8	-5.7	-5.7	-5.6	-5.5	-5.4	-5.3	-5.1	-5.0	-4.8	-4.7	-4.5	-4.3	-4.1	-3.9	-3.7	-3.4	-3.2	-2.9	-2.7	-2.4	-2.1	-1.8	-1.5			
0.9955	-5.2	-5.3	-5.3	-5.3	-5.4	-5.4	-5.3	-5.3	-5.2	-5.2	-5.1	-5.0	-4.9	-4.8	-4.6	-4.5	-4.3	-4.2	-4.0	-3.8	-3.6	-3.4	-3.2	-2.9	-2.7	-2.4	-2.2	-1.9	-1.6	-1.3	-1.0		
0.9960	-4.7	-4.8	-4.8	-4.8	-4.9	-4.9	-4.8	-4.8	-4.7	-4.7	-4.6	-4.5	-4.4	-4.3	-4.1	-4.0	-3.8	-3.7	-3.5	-3.3	-3.1	-2.9	-2.7	-2.4	-2.2	-1.9	-1.7	-1.4	-1.1	-0.8	-0.5		
0.9965	-4.2	-4.3	-4.3	-4.3	-4.4	-4.4	-4.3	-4.3	-4.2	-4.2	-4.1	-4.0	-3.9	-3.8	-3.6	-3.5	-3.3	-3.2	-3.0	-2.8	-2.6	-2.4	-2.2	-1.9	-1.7	-1.4	-1.2	-0.9	-0.6	0.0			
0.9970	-3.7	-3.8	-3.8	-3.8	-3.9	-3.9	-3.8	-3.8	-3.7	-3.7	-3.6	-3.5	-3.4	-3.3	-3.1	-3.0	-2.8	-2.7	-2.5	-2.3	-2.1	-1.9	-1.7	-1.4	-1.2	-0.9	-0.7	-0.4	-0.1	0.2	0.5		
0.9975	-3.2	-3.3	-3.3	-3.3	-3.4	-3.4	-3.3	-3.3	-3.2	-3.2	-3.1	-3.0	-2.9	-2.8	-2.6	-2.5	-2.3	-2.2	-2.0	-1.8	-1.6	-1.4	-1.2	-0.9	-0.7	-0.4	-0.2	0.1	0.4	0.7	1.0		
0.9980	-2.7	-2.8	-2.8	-2.9	-2.9	-2.8	-2.8	-2.7	-2.7	-2.6	-2.5	-2.4	-2.3	-2.1	-2.0	-1.8	-1.7	-1.5	-1.3	-1.1	-0.9	-0.7	-0.4	-0.2	0.1	0.3	0.6	0.9	1.2	1.5			
0.9985	-2.2	-2.3	-2.3	-2.3	-2.4	-2.4	-2.3	-2.3	-2.2	-2.1	-2.0	-1.9	-1.8	-1.6	-1.5	-1.3	-1.2	-1.0	-0.8	-0.6	-0.4	-0.2	0.1	0.3	0.6	0.8	1.1	1.4	1.7	2.0			
0.9990	-1.7	-1.8	-1.8	-1.8	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3	-1.1	-1.0	-0.8	-0.7	-0.5	-0.3	-0.1	0.1	0.3	0.6	0.8	1.1	1.3	1.6	1.9	2.2	2.5		
0.9995	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-1.0	-0.9	-0.8	-0.6	-0.5	-0.3	-0.2	0.0	0.2	0.4	0.6	0.8	1.1	1.3	1.6	1.8	2.1	2.4	2.7	3.0		
1.0000	-0.7	-0.8	-0.8	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.4	-0.3	-0.1	0.0	0.2	0.3	0.5	0.7	0.9	1.1	1.3	1.6	1.8	2.1	2.3	2.6	2.9	3.2	3.5			
1.0005	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.1	0.2	0.4	0.5	0.7	0.8	1.0	1.2	1.4	1.6	1.8	2.1	2.3	2.6	2.8	3.1	3.4	3.7	4.0		
1.0010	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.2	1.3	1.5	1.7	1.9	2.1	2.3	2.6	2.8	3.1	3.3	3.6	3.9	4.2	4.5		
1.0015	0.8	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.6	3.8	4.1	4.4	4.7	5.0		
1.0020	1.3	1.2	1.2	1.2	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.7	2.9	3.1	3.3	3.6	3.8	4.1	4.3	4.6	4.9	5.2	5.5		
1.0025	1.8	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.7	2.8	3.0	3.2	3.4	3.6	3.8	4.1	4.3	4.6	4.8	5.1	5.4	5.7	6.0		
1.0030	2.3	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.2	3.3	3.5	3.7	3.9	4.1	4.3	4.6	4.8	5.1	5.3	5.6	5.9	6.2	6.5		
1.0035	2.8	2.7	2.7	2.7	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.2	4.4	4.6	4.8	5.1	5.3	5.6	5.8	6.1	6.4	6.7	7.0			
1.0040	3.3	3.2	3.2	3.2	3.1	3.1	3.2	3.2	3.3	3.3	3.4	3.5	3.6	3.7	3.9	4.0	4.2	4.3	4.5	4.7	4.9	5.1	5.3	5.6	5.8	6.1	6.3	6.6	6.9	7.2	7.5		
1.0045	3.8	3.7	3.7	3.7	3.6	3.6	3.7	3.7	3.8	3.8	3.9	4.0	4.1	4.2	4.4	4.5	4.7	4.8	5.0	5.2	5.4	5.6	5.8	6.1	6.3	6.6	6.8	7.1	7.4	7.7	8.0		
1.0050	4.3	4.2	4.2	4.2	4.1	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.6	4.7	4.9	5.0	5.2	5.3	5.5	5.7	5.9	6.1	6.3	6.6	6.8	7.1	7.3	7.6	7.9	8.2	8.5		
1.0055	4.8	4.7	4.7	4.7	4.6	4.6	4.7	4.7	4.8	4.8	4.9	5.0	5.1	5.2	5.4	5.5	5.7	5.8	6.0	6.2	6.4	6.6	6.8	7.1	7.3	7.6	7.8	8.1	8.4	8.7	9.0		
1.0060	5.3	5.2	5.2	5.2	5.1	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.6	5.7	5.9	6.0	6.2	6.3	6.5	6.7	6.9	7.1	7.3	7.6	7.8	8.1	8.3	8.6	8.9	9.2	9.5		
1.0065	5.8	5.7	5.7	5.7	5.6	5.6	5.7	5.7	5.8	5.8	5.9	6.0	6.1	6.2	6.4	6.5	6.7	6.8	7.0	7.2	7.4	7.6	7.8	8.1	8.3	8.6	8.8	9.1	9.4	9.7	10.0		
1.0070	6.3	6.2	6.2	6.2	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.5	6.6	6.7	6.9	7.0	7.2	7.3	7.5	7.7	7.9	8.1	8.3	8.6	8.8	9.1	9.3	9.6	9.9	10.2	10.5		
1.0075	6.8	6.7	6.7	6.7	6.6	6.6	6.7	6.7	6.8	6.8	6.9	7.0	7.1	7.2	7.4	7.5	7.7	7.8	8.0	8.2	8.4	8.6	8.8	9.1	9.3	9.6	9.8	10.1	10.4	10.7	11.0		
1.0080	7.3	7.2	7.2	7.2	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.5	7.6	7.7	7.9	8.0	8.2	8.3	8.5	8.7	8.9	9.1	9.3	9.6	9.8	10.1	10.3	10.6	10.9	11.2	11.5		
1.0085	7.8	7.7	7.7	7.7	7.6	7.6	7.7	7.7	7.8	7.8	7.9	8.0	8.1	8.2	8.4	8.5	8.7	8.8	9.0	9.2	9.4	9.6	9.8	10.1	10.3	10.6	10.8	11.1	11.4	12.0			
1.0090	8.3	8.2	8.2	8.2	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.6	8.7	8.9	9.0	9.2	9.3	9.5	9.7	9.9	10.1	10.3	10.6	10.8	11.1	11.3	11.6	11.9	12.2	12.5		
1.0095	8.8	8.7	8.7	8.7	8.6	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.1	9.2	9.4	9.5	9.7	9.8	10.0	10.2	10.4	10.6	10.8	11.1	11.3	11.6	11.8	12.1	12.4	12.7	13.0		
1.0100	9.3	9.2	9.2	9.2	9.1	9.1	9.2	9.2	9.3	9.3	9.4	9.5	9.6	9.7	9.9	10.0	1																

Precision hydrometer (0.990 - 1.020 range) to gravity points conversion
temperature in Fahrenheit

	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90
0.9900	-10.7	-10.7	-10.8	-10.8	-10.9	-10.8	-10.8	-10.7	-10.7	-10.6	-10.5	-10.4	-10.2	-10.1	-9.9	-9.7	-9.5	-9.3	-9.1	-8.9	-8.6	-8.4	-8.1	-7.8	-7.5	-7.2	-6.9	-6.5	-6.2	-5.9	
0.9905	-10.2	-10.2	-10.3	-10.3	-10.4	-10.3	-10.3	-10.3	-10.2	-10.1	-10.0	-9.9	-9.7	-9.6	-9.4	-9.2	-9.0	-8.8	-8.6	-8.4	-8.1	-7.9	-7.6	-7.3	-7.0	-6.7	-6.4	-6.0	-5.7	-5.4	
0.9910	-9.7	-9.7	-9.8	-9.8	-9.8	-9.9	-9.8	-9.8	-9.7	-9.6	-9.5	-9.4	-9.2	-9.1	-8.9	-8.7	-8.6	-8.4	-8.2	-8.0	-7.8	-7.6	-7.4	-7.1	-6.8	-6.5	-6.2	-5.9	-5.5	-5.2	
0.9915	-9.2	-9.2	-9.3	-9.3	-9.3	-9.4	-9.3	-9.3	-9.2	-9.1	-9.0	-8.9	-8.7	-8.6	-8.4	-8.2	-8.1	-7.9	-7.6	-7.4	-7.1	-6.9	-6.6	-6.3	-6.0	-5.7	-5.4	-5.0	-4.7	-4.4	
0.9920	-8.7	-8.7	-8.8	-8.8	-8.9	-8.8	-8.8	-8.7	-8.7	-8.6	-8.5	-8.4	-8.2	-8.1	-7.9	-7.7	-7.5	-7.3	-7.1	-6.9	-6.6	-6.4	-6.1	-5.8	-5.5	-5.2	-4.9	-4.5	-4.2	-3.9	
0.9925	-8.2	-8.2	-8.3	-8.3	-8.3	-8.4	-8.3	-8.3	-8.2	-8.1	-8.0	-7.9	-7.7	-7.6	-7.4	-7.2	-7.0	-6.8	-6.6	-6.4	-6.1	-5.9	-5.6	-5.3	-5.0	-4.7	-4.4	-4.0	-3.7	-3.4	
0.9930	-7.7	-7.7	-7.8	-7.8	-7.9	-7.8	-7.8	-7.7	-7.7	-7.6	-7.5	-7.4	-7.2	-7.1	-6.9	-6.7	-6.5	-6.3	-6.1	-5.9	-5.6	-5.4	-5.1	-4.8	-4.5	-4.2	-3.9	-3.5	-3.2	-2.9	
0.9935	-7.2	-7.2	-7.3	-7.3	-7.4	-7.3	-7.3	-7.2	-7.2	-7.1	-7.0	-6.9	-6.7	-6.6	-6.4	-6.2	-6.0	-5.8	-5.6	-5.4	-5.1	-4.9	-4.6	-4.3	-4.0	-3.7	-3.4	-3.0	-2.7	-2.4	
0.9940	-6.7	-6.7	-6.8	-6.8	-6.9	-6.8	-6.8	-6.7	-6.7	-6.6	-6.5	-6.4	-6.2	-6.1	-5.9	-5.7	-5.5	-5.3	-5.1	-4.9	-4.6	-4.4	-4.1	-3.8	-3.5	-3.2	-2.9	-2.5	-2.2	-1.9	
0.9945	-6.2	-6.2	-6.3	-6.3	-6.3	-6.4	-6.3	-6.3	-6.2	-6.1	-6.0	-5.9	-5.7	-5.6	-5.4	-5.2	-5.0	-4.8	-4.6	-4.4	-4.1	-3.9	-3.6	-3.3	-3.0	-2.7	-2.4	-2.0	-1.7	-1.4	
0.9950	-5.7	-5.7	-5.8	-5.8	-5.9	-5.8	-5.8	-5.7	-5.7	-5.6	-5.5	-5.4	-5.2	-5.1	-4.9	-4.7	-4.5	-4.3	-4.1	-3.9	-3.6	-3.4	-3.1	-2.8	-2.5	-2.2	-1.9	-1.5	-1.2	-0.9	
0.9955	-5.2	-5.2	-5.3	-5.3	-5.3	-5.4	-5.3	-5.3	-5.2	-5.1	-5.0	-4.9	-4.7	-4.6	-4.4	-4.2	-4.0	-3.8	-3.6	-3.4	-3.1	-2.9	-2.6	-2.3	-2.0	-1.7	-1.4	-1.0	-0.7	-0.4	
0.9960	-4.7	-4.7	-4.8	-4.8	-4.8	-4.9	-4.8	-4.8	-4.7	-4.6	-4.5	-4.4	-4.2	-4.1	-3.9	-3.7	-3.5	-3.3	-3.1	-2.9	-2.6	-2.4	-2.1	-1.8	-1.5	-1.2	-0.9	-0.5	-0.2	0.1	
0.9965	-4.2	-4.2	-4.3	-4.3	-4.3	-4.4	-4.3	-4.3	-4.2	-4.2	-4.1	-4.0	-3.9	-3.7	-3.6	-3.4	-3.2	-3.0	-2.8	-2.6	-2.4	-2.1	-1.9	-1.6	-1.3	-1.0	-0.7	-0.4	0.0	0.3	0.6
0.9970	-3.7	-3.7	-3.8	-3.8	-3.9	-3.8	-3.8	-3.7	-3.7	-3.6	-3.5	-3.4	-3.2	-3.1	-2.9	-2.7	-2.5	-2.3	-2.1	-1.9	-1.6	-1.4	-1.1	-0.8	-0.5	-0.2	0.1	0.5	0.8	1.1	
0.9975	-3.2	-3.2	-3.3	-3.3	-3.4	-3.3	-3.3	-3.2	-3.2	-3.1	-3.0	-2.9	-2.7	-2.6	-2.4	-2.2	-2.0	-1.8	-1.6	-1.4	-1.1	-0.9	-0.6	-0.3	0.0	0.3	0.6	1.0	1.3	1.6	
0.9980	-2.7	-2.7	-2.8	-2.8	-2.8	-2.9	-2.8	-2.8	-2.7	-2.7	-2.6	-2.5	-2.4	-2.2	-2.1	-1.9	-1.7	-1.5	-1.3	-1.1	-0.9	-0.6	-0.4	-0.1	0.2	0.5	0.8	1.1	1.5	2.1	
0.9985	-2.2	-2.2	-2.3	-2.3	-2.3	-2.4	-2.3	-2.3	-2.2	-2.2	-2.1	-2.0	-1.9	-1.7	-1.6	-1.4	-1.2	-1.0	-0.8	-0.6	-0.4	-0.1	0.1	0.4	0.7	1.0	1.3	1.6	2.0	2.3	2.6
0.9990	-1.7	-1.7	-1.8	-1.8	-1.8	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.5	-1.4	-1.2	-1.1	-0.9	-0.7	-0.5	-0.3	-0.1	0.1	0.4	0.6	0.9	1.2	1.5	1.8	2.1	2.5	3.1	
0.9995	-1.2	-1.2	-1.3	-1.3	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-1.0	-0.9	-0.7	-0.6	-0.4	-0.2	0.0	0.2	0.4	0.6	0.9	1.1	1.4	1.7	2.0	2.3	2.6	3.0	3.3	3.6	
1.0000	-0.7	-0.7	-0.8	-0.8	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.4	-0.2	-0.1	0.1	0.3	0.5	0.7	0.9	1.1	1.4	1.6	1.9	2.2	2.5	2.8	3.1	3.5	3.8	4.1	
1.0005	-0.2	-0.2	-0.3	-0.3	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.1	0.3	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.9	2.1	2.4	2.7	3.0	3.3	3.6	4.0	4.3	4.6	
1.0010	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.3	1.5	1.7	1.9	2.1	2.4	2.6	2.9	3.2	3.5	3.8	4.1	4.5	4.8	5.1
1.0015	0.8	0.8	0.7	0.7	0.7	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.3	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.9	3.1	3.4	3.7	4.0	4.3	4.6	5.0	5.3	5.6
1.0020	1.3	1.3	1.2	1.2	1.2	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.4	3.6	3.9	4.2	4.5	4.8	5.1	5.5	5.8	6.1
1.0025	1.8	1.8	1.7	1.7	1.7	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.9	4.1	4.4	4.7	5.0	5.3	5.6	6.0	6.3	6.6
1.0030	2.3	2.3	2.2	2.2	2.2	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.8	2.9	3.1	3.3	3.5	3.7	3.9	4.1	4.4	4.6	4.9	5.2	5.5	5.8	6.1	6.5	6.8	7.1
1.0035	2.8	2.8	2.7	2.7	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.9	5.1	5.4	5.7	6.0	6.3	6.6	7.0	7.3	7.6	
1.0040	3.3	3.3	3.2	3.2	3.1	3.2	3.2	3.3	3.3	3.4	3.5	3.6	3.8	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.4	5.6	5.9	6.2	6.5	6.8	7.1	7.5	7.8	8.1	
1.0045	3.8	3.8	3.7	3.7	3.6	3.7	3.7	3.8	3.8	3.9	4.0	4.1	4.3	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.9	6.1	6.4	6.7	7.0	7.3	7.6	8.0	8.3	8.6	
1.0050	4.3	4.3	4.2	4.2	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.6	4.8	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.4	6.6	6.9	7.2	7.5	7.8	8.1	8.5	8.8	9.1	
1.0055	4.8	4.8	4.7	4.7	4.7	4.6	4.7	4.7	4.8	4.8	4.9	5.0	5.1	5.3	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.9	7.1	7.4	7.7	8.0	8.3	8.6	9.0	9.3	9.6
1.0060	5.3	5.3	5.2	5.2	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.6	5.8	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.4	7.6	7.9	8.2	8.5	8.8	9.1	9.5	9.8	10.1	
1.0065	5.8	5.8	5.7	5.7	5.7	5.6	5.7	5.7	5.8	5.8	5.9	6.0	6.1	6.3	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.9	8.1	8.4	8.7	9.0	9.3	9.6	10.0	10.3	10.6
1.0070	6.3	6.3	6.2	6.2	6.1	6.2	6.2	6.3	6.3	6.4	6.5	6.6	6.8	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.4	8.6	8.9	9.2	9.5	9.8	10.1	10.5	10.8	11.1	
1.0075	6.8	6.8	6.7	6.7	6.7	6.6	6.7	6.7	6.8	6.8	6.9	7.0	7.1	7.3	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.9	9.1	9.4	9.7	10.0	10.3	10.6	11.0	11.3	11.6
1.0080	7.3	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.3	7.4	7.5	7.6	7.8	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.4	9.6	9.9	10.2	10.5	10.8	11.1	11.5	11.8	12.1	
1.0085	7.8	7.8	7.7	7.7	7.6	7.7	7.7	7.8	7.8	7.9	8.0	8.1	8.3	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.9	10.1	10.4	11.0	11.3	11.6	12.0	12.3	12.6		
1.0090	8.3	8.3	8.2	8.2	8.1	8.2	8.2	8.3	8.4	8.5	8.6	8.8	8.9	9.1	9.3	9.5	9.7	9.9	10.1	10.4	10.6	10.9	11.2	11.5	11.8	12.1	12.5	12.8	13.1		
1.0095	8.8	8.8	8.7	8.7	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.1	9.3	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.9	11.1	11.4	11.7	12.0	12.3	12.6	13.0	13.3	13.6	
1.0100	9.3	9.3	9.2	9.2	9.1	9.2	9.2	9.3	9.4	9.5	9.6	9.8	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.4	11.6	11.9	12.2	12.5	12.8	13.1	13.5	13.8	14.1		
1.0105	9.8	9.8																													

Hydrometer (0-30 Plato/Brix/Balling) to Plato conversion

temperature in Celsius

	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	
0.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	
0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.4	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	
1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.9	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	
1.5	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.8	2.0	2.1	2.2	2.4	2.5	2.7	2.9	3.1	3.3	3.4	3.7	3.9	4.1	
2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.5	2.6	2.7	2.9	3.0	3.2	3.4	3.6	3.7	3.9	4.1	4.4	4.6	
2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.7	3.9	4.1	4.2	4.4	4.6	4.8	5.1
3.0	2.8	2.8	2.8	2.8	2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.5	3.6	3.7	3.9	4.0	4.2	4.4	4.5	4.7	4.9	5.1	5.3	5.6	
3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.9	4.1	4.2	4.4	4.5	4.7	4.9	5.0	5.2	5.4	5.6	5.8	6.0	
4.0	3.8	3.8	3.8	3.8	3.8	3.8	3.9	4.0	4.0	4.1	4.2	4.3	4.4	4.6	4.7	4.9	5.0	5.2	5.4	5.5	5.7	5.9	6.1	6.3	6.5	
4.5	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.5	4.5	4.6	4.7	4.8	4.9	5.1	5.2	5.4	5.5	5.7	5.9	6.0	6.2	6.4	6.6	6.8	7.0
5.0	4.8	4.8	4.8	4.8	4.8	4.8	4.9	5.0	5.0	5.1	5.2	5.3	5.4	5.6	5.7	5.9	6.0	6.2	6.3	6.5	6.7	6.9	7.1	7.3	7.5	
5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.5	5.5	5.6	5.7	5.8	5.9	6.1	6.2	6.4	6.5	6.7	6.8	7.0	7.2	7.4	7.6	7.8	8.0
6.0	5.8	5.8	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.1	6.2	6.3	6.4	6.6	6.7	6.9	7.0	7.2	7.3	7.5	7.7	7.9	8.1	8.3	8.5	
6.5	6.3	6.3	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.7	6.8	6.9	7.1	7.2	7.3	7.5	7.7	7.8	8.0	8.2	8.4	8.6	8.8	9.0	
7.0	6.8	6.8	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.2	7.3	7.4	7.6	7.7	7.8	8.0	8.2	8.3	8.5	8.7	8.9	9.1	9.3	9.5	
7.5	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.7	7.8	7.9	8.1	8.2	8.3	8.5	8.7	8.8	9.0	9.2	9.4	9.6	9.8	10.0	
8.0	7.8	7.8	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.1	8.2	8.3	8.4	8.6	8.7	8.8	9.0	9.2	9.3	9.5	9.7	9.9	10.1	10.3	10.5	
8.5	8.3	8.3	8.3	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.7	8.8	8.9	9.1	9.2	9.3	9.5	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0	
9.0	8.8	8.8	8.8	8.8	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.3	9.4	9.6	9.7	9.8	10.0	10.1	10.3	10.5	10.7	10.9	11.0	11.2	11.5	
9.5	9.3	9.3	9.3	9.3	9.3	9.4	9.4	9.5	9.5	9.6	9.7	9.8	9.9	10.1	10.2	10.3	10.5	10.6	10.8	11.0	11.2	11.3	11.5	11.7	11.9	
10.0	9.8	9.8	9.8	9.8	9.8	9.9	9.9	10.0	10.0	10.1	10.2	10.3	10.4	10.6	10.7	10.8	11.0	11.1	11.3	11.5	11.7	11.8	12.0	12.2	12.4	
10.5	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.5	10.5	10.6	10.7	10.8	10.9	11.1	11.2	11.3	11.5	11.6	11.8	12.0	12.2	12.3	12.5	12.7	12.9	
11.0	10.8	10.8	10.8	10.8	10.8	10.9	10.9	11.0	11.0	11.1	11.2	11.3	11.4	11.6	11.7	11.8	12.0	12.1	12.3	12.5	12.6	12.8	13.0	13.2	13.4	
11.5	11.3	11.3	11.3	11.3	11.3	11.4	11.4	11.5	11.5	11.6	11.7	11.8	11.9	12.1	12.2	12.3	12.5	12.6	12.8	13.0	13.1	13.3	13.5	13.7	13.9	
12.0	11.8	11.8	11.8	11.8	11.8	11.9	11.9	12.0	12.0	12.1	12.2	12.3	12.4	12.6	12.7	12.8	13.0	13.1	13.3	13.5	13.6	13.8	14.0	14.2	14.4	
12.5	12.3	12.3	12.3	12.3	12.3	12.4	12.4	12.5	12.5	12.6	12.7	12.8	13.0	13.2	13.3	13.5	13.6	13.8	14.0	14.1	14.3	14.5	14.7	14.9		
13.0	12.8	12.8	12.8	12.8	12.8	12.9	12.9	13.0	13.0	13.1	13.2	13.3	13.4	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.8	15.0	15.2	15.4	
13.5	13.3	13.3	13.3	13.3	13.3	13.4	13.4	13.5	13.5	13.6	13.7	13.8	13.9	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.3	15.5	15.7	15.9	
14.0	13.8	13.8	13.8	13.8	13.8	13.9	13.9	14.0	14.0	14.1	14.2	14.3	14.4	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.8	16.0	16.2	16.4	
14.5	14.3	14.3	14.3	14.3	14.3	14.4	14.4	14.4	14.5	14.5	14.6	14.7	14.8	14.9	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.3	16.5	16.7	
15.0	14.8	14.8	14.8	14.8	14.8	14.9	14.9	15.0	15.0	15.1	15.2	15.3	15.4	15.5	15.7	15.8	15.9	16.1	16.3	16.4	16.6	16.8	17.0	17.2	17.4	
15.5	15.3	15.3	15.3	15.3	15.3	15.4	15.4	15.4	15.5	15.5	15.6	15.7	15.8	15.9	16.0	16.2	16.3	16.4	16.6	16.8	16.9	17.1	17.3	17.5	17.6	
16.0	15.8	15.8	15.8	15.8	15.8	15.9	15.9	16.0	16.0	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9	17.1	17.3	17.4	17.6	17.8	18.0	18.1	18.3	
16.5	16.3	16.3	16.3	16.3	16.3	16.4	16.4	16.5	16.5	16.6	16.7	16.8	16.9	17.0	17.2	17.3	17.4	17.6	17.7	17.9	18.1	18.3	18.4	18.6	18.8	
17.0	16.8	16.8	16.8	16.8	16.8	16.9	16.9	17.0	17.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9	18.1	18.2	18.4	18.6	18.8	18.9	19.1	19.3	
17.5	17.3	17.3	17.3	17.3	17.3	17.4	17.4	17.5	17.5	17.6	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.6	18.7	18.9	19.1	19.2	19.4	19.6	19.8	
18.0	17.8	17.8	17.8	17.8	17.8	17.9	17.9	18.0	18.0	18.1	18.2	18.3	18.4	18.5	18.7	18.8	18.9	19.1	19.2	19.4	19.6	19.7	19.9	20.1	20.3	
18.5	18.3	18.3	18.3	18.3	18.3	18.4	18.4	18.5	18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.3	19.4	19.6	19.7	19.9	20.1	20.2	20.4	20.6	20.8	
19.0	18.8	18.8	18.8	18.8	18.8	18.9	18.9	19.0	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.8	19.9	20.1	20.2	20.4	20.5	20.7	20.9	21.1	21.3	
19.5	19.3	19.3	19.3	19.3	19.3	19.4	19.4	19.5	19.5	19.6	19.7	19.8	19.9	20.0	20.1	20.3	20.4	20.6	20.7	20.9	21.0	21.2	21.4	21.6	21.8	
20.0	19.8	19.8	19.8	19.8	19.8	19.9	19.9	20.0	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.8	20.9	21.1	21.2	21.4	21.5	21.7	21.9	22.1	22.3	
20.5	20.3	20.3	20.3	20.3	20.3	20.4	20.4	20.5	20.5	20.6	20.7	20.8	20.9	21.0	21.1	21.3	21.4	21.5	21.7	21.9	22.0	22.2	22.4	22.6	22.7	
21.0	20.8	20.8	20.8	20.8	20.8	20.9	20.9	21.0	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.8	21.9	22.0	22.2	22.4	22.5	22.7	22.9	23.0	23.2	
21.5	21.3	21.3	21.3	21.3	21.3	21.4	21.4	21.5	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.3	22.4	22.5	22.7	22.8	23.0	23.2	23.4	23.5	23.7	
22.0	21.8	21.8	21.8	21.8	21.8	21.9	21.9	22.0	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.9	23.0	23.2	23.3	23.5	23.7	23.8	24.0	24.2	
22.5	22.3	22.3	22.3	22.3	22.3	22.4	22.4	22.5	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.4	23.5	23.7	23.8	24.0	24.2	24.3	24.5	24.7	
23.0	22.8	22.8	22.8	22.8	22.8	22.9	22.9	23.0	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.9	24.0	24.2	24.3	24.5	24.6	24.8	25.0	25.2	

Hydrometer (0-30 Plato/Brix/Balling) to Plato conversion

temperature in Fahrenheit

	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78
0.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6		
0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1		
1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.6		
1.5	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.1		
2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6		
2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.1		
3.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.3	3.4	3.5	3.6		
3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.5	3.5	3.6	3.6	3.7	3.7	3.8	3.8	3.9	4.0	4.0		
4.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.9	3.9	3.9	4.0	4.0	4.1	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.5		
4.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.9	5.0	5.0		
5.0	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.9	4.9	4.9	5.0	5.0	5.1	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.5		
5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.9	6.0	6.0		
6.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.5	6.5		
6.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	7.0	7.0		
7.0	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.5	7.5		
7.5	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	8.0	8.0		
8.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5		
8.5	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.5	8.6	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0		
9.0	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.9	8.9	8.9	9.0	9.0	9.1	9.1	9.2	9.2	9.3	9.3	9.4	9.5	9.5		
9.5	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9	10.0	10.0		
10.0	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.9	9.9	9.9	10.0	10.0	10.1	10.1	10.2	10.2	10.3	10.3	10.4	10.5	10.5		
10.5	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.5	10.5	10.6	10.6	10.7	10.7	10.8	10.8	10.9	11.0	11.0		
11.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.9	10.9	10.9	11.0	11.0	11.1	11.1	11.2	11.2	11.3	11.3	11.4	11.5	11.5		
11.5	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.4	11.4	11.4	11.5	11.5	11.6	11.6	11.7	11.7	11.8	11.8	11.9	12.0	12.0		
12.0	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.9	11.9	11.9	12.0	12.0	12.1	12.1	12.2	12.2	12.3	12.3	12.4	12.5	12.5		
12.5	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.4	12.4	12.4	12.5	12.5	12.6	12.6	12.7	12.7	12.8	12.8	12.9	13.0	13.0		
13.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.9	12.9	12.9	13.0	13.0	13.1	13.1	13.2	13.2	13.3	13.3	13.4	13.5	13.5		
13.5	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.4	13.4	13.4	13.5	13.5	13.6	13.6	13.7	13.7	13.8	13.8	13.9	14.0	14.0		
14.0	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.9	13.9	13.9	14.0	14.0	14.1	14.1	14.2	14.2	14.3	14.3	14.4	14.5	14.5		
14.5	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.4	14.4	14.4	14.5	14.5	14.6	14.6	14.7	14.7	14.8	14.8	14.9	14.9	15.0		
15.0	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.9	14.9	14.9	15.0	15.0	15.1	15.1	15.2	15.2	15.3	15.3	15.4	15.4	15.5		
15.5	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.4	15.4	15.4	15.5	15.5	15.6	15.6	15.7	15.7	15.8	15.8	15.9	15.9	16.0		
16.0	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.9	15.9	15.9	16.0	16.0	16.1	16.1	16.2	16.2	16.3	16.3	16.4	16.4	16.5		
16.5	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.4	16.4	16.4	16.5	16.5	16.6	16.6	16.7	16.7	16.8	16.8	16.9	16.9	17.0		
17.0	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.9	16.9	16.9	17.0	17.0	17.1	17.1	17.2	17.2	17.3	17.3	17.4	17.4	17.5		
17.5	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.4	17.4	17.4	17.5	17.5	17.6	17.6	17.7	17.7	17.8	17.8	17.9	17.9	18.0		
18.0	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.9	17.9	17.9	18.0	18.0	18.1	18.1	18.2	18.2	18.3	18.3	18.4	18.4	18.5		
18.5	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.4	18.4	18.4	18.5	18.5	18.6	18.6	18.7	18.7	18.8	18.8	18.9	18.9	19.0		
19.0	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.9	18.9	18.9	19.0	19.0	19.1	19.1	19.2	19.2	19.3	19.3	19.4	19.4	19.5		
19.5	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.4	19.4	19.4	19.5	19.5	19.6	19.6	19.7	19.7	19.8	19.8	19.9	19.9	20.0		
20.0	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.9	19.9	19.9	20.0	20.0	20.1	20.1	20.2	20.2	20.3	20.3	20.4	20.4	20.5		
20.5	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.4	20.4	20.4	20.5	20.5	20.6	20.6	20.7	20.7	20.8	20.8	20.9	20.9	21.0		
21.0	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.9	20.9	20.9	21.0	21.0	21.1	21.1	21.2	21.2	21.3	21.3	21.4	21.4	21.5		
21.5	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.4	21.4	21.4	21.5	21.5	21.6	21.6	21.7	21.7	21.8	21.8	21.9	21.9	22.0		
22.0	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.9	21.9	21.9	22.0	22.0	22.1	22.1	22.2	22.2	22.3	22.3	22.4	22.4	22.5		
22.5	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.4	22.4	22.4	22.5	22.5	22.6	22.6	22.7	22.7	22.8	22.8	22.9	22.9	23.0		
23.0	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.9	22.9	22.9	23.0	23.0	23.1	23.1	23.2	23.2	23.3	23.3	23.4	23.4	23.5		
23.5	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.4	23.4	23.4	23.5	23.5	23.6	23.6	23.7	23.7	23.8	23.8	23.9	23.9	24.0		
24.0	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.9	23.9	23.9	24.0	24.0	24.1	24.1	24.2	24.2	24.3	24.3	24.4	24.4	24.5		
24.5	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.4	24.4	24.4	24.5	24.5	24.6	24.6	24.7	24.7	24.8	24.8	24.9	24.9	25.0		
25.0	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.9	24.9	24.9	25.0	25.0	25.1	25.1	25.2	25.2	25.3	25.					

Hydrometer (0-30 Plato/Brix/Balling) to Gravity Points conversion

temperature in Celsius

	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
0.0	-0.7	-0.8	-0.9	-0.8	-0.7	-0.6	-0.4	-0.1	0.2	0.5	0.9	1.3	1.8	2.3	2.9	3.5	4.1	4.7	5.4	6.1	6.9	7.7	8.5	9.3	10.2
0.5	1.2	1.1	1.1	1.1	1.2	1.4	1.6	1.8	2.1	2.4	2.8	3.3	3.7	4.2	4.8	5.4	6.0	6.7	7.4	8.1	8.8	9.6	10.4	11.3	12.1
1.0	3.1	3.1	3.0	3.0	3.1	3.3	3.5	3.7	4.0	4.4	4.8	5.2	5.7	6.2	6.7	7.3	8.0	8.6	9.3	10.0	10.8	11.6	12.4	13.2	14.1
1.5	5.1	5.0	5.0	5.0	5.1	5.2	5.4	5.7	6.0	6.3	6.7	7.2	7.6	8.1	8.7	9.3	9.9	10.6	11.3	12.0	12.7	13.5	14.3	15.2	16.0
2.0	7.0	7.0	6.9	7.0	7.1	7.2	7.4	7.7	8.0	8.3	8.7	9.1	9.6	10.1	10.7	11.2	11.9	12.5	13.2	13.9	14.7	15.5	16.3	17.1	18.0
2.5	9.0	8.9	8.9	8.9	9.0	9.2	9.4	9.6	9.9	10.3	10.6	11.1	11.5	12.1	12.6	13.2	13.8	14.5	15.2	15.9	16.7	17.4	18.2	19.1	19.9
3.0	11.0	10.9	10.8	10.9	11.0	11.1	11.3	11.6	11.9	12.2	12.6	13.0	13.5	14.0	14.6	15.2	15.8	16.5	17.1	17.9	18.6	19.4	20.2	21.0	21.9
3.5	13.0	12.9	12.8	12.9	13.0	13.1	13.3	13.6	13.9	14.2	14.6	15.0	15.5	16.0	16.6	17.1	17.8	18.4	19.1	19.8	20.6	21.4	22.2	23.0	23.9
4.0	14.9	14.9	14.8	14.8	14.9	15.1	15.3	15.5	15.8	16.2	16.6	17.0	17.5	18.0	18.5	19.1	19.8	20.4	21.1	21.8	22.6	23.4	24.2	25.0	25.9
4.5	16.9	16.9	16.8	16.8	16.9	17.1	17.3	17.5	17.8	18.2	18.6	19.0	19.5	20.0	20.5	21.1	21.7	22.4	23.1	23.8	24.6	25.4	26.2	27.0	27.9
5.0	18.9	18.9	18.8	18.8	18.9	19.1	19.3	19.5	19.8	20.2	20.6	21.0	21.5	22.0	22.5	23.1	23.7	24.4	25.1	25.8	26.6	27.4	28.2	29.0	29.8
5.5	20.9	20.9	20.8	20.8	20.9	21.1	21.3	21.5	21.8	22.2	22.6	23.0	23.5	24.0	24.5	25.1	25.8	26.4	27.1	27.8	28.6	29.4	30.2	31.0	31.9
6.0	22.9	22.9	22.8	22.9	23.0	23.1	23.3	23.6	23.8	24.2	24.6	25.0	25.5	26.0	26.5	27.1	27.8	28.4	29.1	29.8	30.6	31.4	32.2	33.0	33.9
6.5	25.0	24.9	24.8	24.9	25.0	25.1	25.3	25.6	25.9	26.2	26.6	27.0	27.5	28.0	28.6	29.2	29.8	30.4	31.1	31.9	32.6	33.4	34.2	35.0	35.9
7.0	27.0	26.9	26.9	26.9	27.0	27.1	27.3	27.6	27.9	28.2	28.6	29.1	29.5	30.0	30.6	31.2	31.8	32.5	33.2	33.9	34.6	35.4	36.2	37.1	37.9
7.5	29.0	29.0	28.9	28.9	29.0	29.2	29.4	29.6	29.9	30.3	30.7	31.1	31.6	32.1	32.6	33.2	33.8	34.5	35.2	35.9	36.7	37.4	38.3	39.1	39.9
8.0	31.1	31.0	30.9	31.0	31.1	31.2	31.4	31.7	32.0	32.3	32.7	33.1	33.6	34.1	34.7	35.3	35.9	36.5	37.2	38.0	38.7	39.5	40.3	41.1	42.0
8.5	33.1	33.0	33.0	33.0	33.1	33.3	33.5	33.7	34.0	34.4	34.7	35.2	35.6	36.2	36.7	37.3	37.9	38.6	39.3	40.0	40.7	41.5	42.3	43.2	44.0
9.0	35.2	35.1	35.0	35.1	35.2	35.3	35.5	35.8	36.1	36.4	36.8	37.2	37.7	38.2	38.8	39.4	40.0	40.6	41.3	42.1	42.8	43.6	44.4	45.2	46.1
9.5	37.2	37.2	37.1	37.1	37.2	37.4	37.6	37.8	38.1	38.5	38.9	39.3	39.8	40.3	40.8	41.4	42.0	42.7	43.4	44.1	44.9	45.6	46.5	47.3	48.1
10.0	39.3	39.2	39.2	39.3	39.3	39.4	39.6	39.9	40.2	40.5	40.9	41.4	41.8	42.3	42.9	43.5	44.1	44.8	45.5	46.2	46.9	47.7	48.5	49.4	50.2
10.5	41.4	41.3	41.2	41.3	41.4	41.5	41.7	42.0	42.3	42.6	43.0	43.4	43.9	44.4	45.0	45.6	46.2	46.8	47.5	48.3	49.0	49.8	50.6	51.4	52.3
11.0	43.4	43.4	43.3	43.4	43.5	43.6	43.8	44.1	44.4	44.7	45.1	45.5	46.0	46.5	47.1	47.6	48.3	48.9	49.6	50.3	51.1	51.9	52.7	53.5	54.4
11.5	45.5	45.5	45.4	45.4	45.5	45.7	45.9	46.1	46.4	46.8	47.2	47.6	48.1	48.6	49.1	49.7	50.4	51.0	51.7	52.4	53.2	54.0	54.8	55.6	56.5
12.0	47.6	47.6	47.5	47.5	47.6	47.8	48.0	48.2	48.5	48.9	49.3	49.7	50.2	50.7	51.2	51.8	52.5	53.1	53.8	54.5	55.3	56.1	56.9	57.7	58.6
12.5	49.7	49.7	49.6	49.6	49.7	49.9	50.1	50.3	50.6	51.0	51.4	51.8	52.3	52.8	53.3	53.9	54.6	55.2	55.9	56.6	57.4	58.2	59.0	59.8	60.7
13.0	51.9	51.8	51.7	51.8	51.9	52.0	52.2	52.5	52.8	53.1	53.5	53.9	54.4	54.9	55.5	56.0	56.7	57.3	58.0	58.7	59.5	60.3	61.1	61.9	62.8
13.5	54.0	53.9	53.8	53.9	54.0	54.1	54.3	54.6	54.9	55.2	55.6	56.0	56.5	57.0	57.6	58.2	58.8	59.5	60.1	60.9	61.6	62.4	63.2	64.0	64.9
14.0	56.1	56.0	56.0	56.0	56.1	56.3	56.5	56.7	57.0	57.4	57.7	58.2	58.6	59.2	59.7	60.3	60.9	61.6	62.3	63.0	63.7	64.5	65.3	66.2	67.0
14.5	58.2	58.2	58.1	58.1	58.2	58.4	58.6	58.8	59.1	59.5	59.9	60.3	60.8	61.3	61.8	62.4	63.1	63.7	64.4	65.1	65.9	66.7	67.5	68.3	69.2
15.0	60.4	60.3	60.2	60.3	60.4	60.5	60.7	61.0	61.3	61.6	62.0	62.4	62.9	63.4	64.0	64.6	65.2	65.9	66.5	67.3	68.0	68.8	69.6	70.4	71.3
15.5	62.5	62.5	62.4	62.4	62.5	62.7	62.9	63.1	63.4	63.8	64.2	64.6	65.1	65.6	66.1	66.7	67.4	68.0	68.7	69.4	70.2	71.0	71.8	72.6	73.5
16.0	64.7	64.6	64.6	64.6	64.7	64.8	65.0	65.3	65.6	65.9	66.3	66.8	67.2	67.7	68.3	68.9	69.5	70.2	70.9	71.6	72.3	73.1	73.9	74.8	75.6
16.5	66.9	66.8	66.7	66.8	66.9	67.0	67.2	67.5	67.8	68.1	68.5	68.9	69.4	69.9	70.5	71.1	71.7	72.3	73.0	73.7	74.5	75.3	76.1	76.9	77.8
17.0	69.0	69.0	68.9	68.9	69.0	69.2	69.4	69.6	69.9	70.3	70.7	71.1	71.6	72.1	72.6	73.2	73.8	74.5	75.2	75.9	76.7	77.5	78.3	79.1	80.0
17.5	71.2	71.1	71.1	71.1	71.2	71.4	71.6	71.8	72.1	72.5	72.9	73.3	73.8	74.3	74.8	75.4	76.0	76.7	77.4	78.1	78.9	79.6	80.4	81.3	82.1
18.0	73.4	73.3	73.3	73.3	73.4	73.6	73.8	74.0	74.3	74.7	75.0	75.5	75.9	76.5	77.0	77.6	78.2	78.9	79.6	80.3	81.0	81.8	82.6	83.5	84.3
18.5	75.6	75.5	75.5	75.5	75.6	75.8	76.0	76.2	76.5	76.9	77.2	77.7	78.1	78.7	79.2	79.8	80.4	81.1	81.8	82.5	83.2	84.0	84.8	85.7	86.5
19.0	77.8	77.7	77.7	77.7	77.8	78.0	78.2	78.4	78.7	79.1	79.4	79.9	80.3	80.9	81.4	82.0	82.6	83.3	84.0	84.7	85.5	86.2	87.0	87.9	88.7
19.5	80.0	80.0	79.9	79.9	80.0	80.2	80.4	80.6	80.9	81.3	81.7	82.1	82.6	83.1	83.6	84.2	84.8	85.5	86.2	86.9	87.7	88.4	89.3	90.1	90.9
20.0	82.2	82.2	82.1	82.2	82.2	82.4	82.6	82.9	83.1	83.5	83.9	84.3	84.8	85.3	85.8	86.4	87.1	87.7	88.4	89.1	89.9	90.7	91.5	92.3	93.2
20.5	84.5	84.4	84.3	84.4	84.5	84.6	84.8	85.1	85.4	85.7	86.1	86.5	87.0	87.5	88.1	88.7	89.3	89.9	90.6	91.4	92.1	92.9	93.7	94.5	95.4
21.0	86.7	86.6	86.6	86.6	86.7	86.9	87.1	87.3	87.6	88.0	88.3	88.8	89.3	89.8	90.3	90.9	91.5	92.2	92.9	93.6	94.4	95.1	95.9	96.8	97.6
21.5	89.0	88.9	88.8	88.9	89.0	89.1	89.3	89.6	89.9	90.2	90.6	91.0	91.5	92.0	92.6	93.2	93.8	94.4	95.1	95.8	96.6	97.4	98.2	99.0	99.9
22.0	91.2	91.1	91.1	91.2	91.4	91.6	91.8	92.1	92.5	92.8	93.3	93.8	94.3	94.8	95.4	96.0	96.7	97.4	98.1	98.9	99.6	100.4	101.3	102.1	
22.5	93.5	93.4	93.3	93.4	93.5	93.6	93.8	94.1	94.4	94.7	95.1	95.5	96.0	96.5	97.1	9									

Hydrometer (0-30 Plato/Brix/Balling) to Gravity Points conversion

temperature in Fahrenheit

	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78
0.0	-0.7	-0.7	-0.8	-0.8	-0.8	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.4	-0.2	-0.1	0.1	0.3	0.5	0.7	0.9	1.1	1.4	1.6	1.9	2.2
0.5	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.6	3.8	4.1
1.0	3.2	3.1	3.1	3.1	3.0	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.5	3.7	3.8	4.0	4.2	4.3	4.6	4.8	5.0	5.3	5.5	5.8	6.1
1.5	5.1	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.1	5.2	5.2	5.4	5.5	5.6	5.8	5.9	6.1	6.3	6.5	6.7	7.0	7.2	7.5	7.7	8.0
2.0	7.1	7.0	7.0	7.0	6.9	6.9	6.9	7.0	7.0	7.1	7.2	7.3	7.4	7.6	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.2	9.4	9.7	10.0
2.5	9.0	9.0	9.0	8.9	8.9	8.9	8.9	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.7	9.8	10.0	10.2	10.4	10.6	10.9	11.1	11.4	11.7	11.9
3.0	11.0	11.0	10.9	10.9	10.9	10.8	10.9	10.9	11.0	11.0	11.1	11.2	11.4	11.5	11.6	11.8	12.0	12.2	12.4	12.6	12.9	13.1	13.4	13.6	13.9
3.5	13.0	13.0	12.9	12.9	12.8	12.8	12.8	12.9	13.0	13.1	13.2	13.3	13.5	13.6	13.8	14.0	14.2	14.4	14.6	14.8	15.1	15.3	15.6	15.9	
4.0	15.0	14.9	14.9	14.9	14.8	14.8	14.8	14.9	14.9	15.0	15.1	15.2	15.3	15.5	15.6	15.8	16.0	16.1	16.4	16.6	16.8	17.1	17.3	17.6	17.9
4.5	17.0	16.9	16.9	16.9	16.8	16.8	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.6	17.8	17.9	18.1	18.3	18.6	18.8	19.0	19.3	19.6	19.9	
5.0	19.0	18.9	18.9	18.9	18.8	18.8	18.8	18.9	18.9	19.0	19.1	19.2	19.3	19.4	19.6	19.8	19.9	20.1	20.3	20.6	20.8	21.0	21.3	21.6	21.9
5.5	21.0	20.9	20.9	20.9	20.8	20.8	20.8	20.9	20.9	21.0	21.1	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.3	22.6	22.8	23.1	23.3	23.6	23.9
6.0	23.0	22.9	22.9	22.9	22.8	22.8	22.8	22.9	22.9	23.0	23.1	23.2	23.3	23.5	23.6	23.8	24.0	24.2	24.4	24.6	24.8	25.1	25.3	25.6	25.9
6.5	25.0	25.0	24.9	24.9	24.9	24.8	24.9	24.9	25.0	25.0	25.1	25.2	25.3	25.5	25.6	25.8	26.0	26.2	26.4	26.6	26.8	27.1	27.3	27.6	27.9
7.0	27.0	27.0	27.0	26.9	26.9	26.9	26.9	27.0	27.1	27.1	27.2	27.4	27.5	27.7	27.8	28.0	28.2	28.4	28.6	28.9	29.1	29.4	29.6	29.9	
7.5	29.1	29.0	29.0	28.9	28.9	28.9	29.0	29.0	29.1	29.2	29.3	29.4	29.5	29.7	29.9	30.0	30.2	30.4	30.7	30.9	31.1	31.4	31.7	32.0	
8.0	31.1	31.1	31.0	31.0	31.0	30.9	31.0	31.0	31.1	31.1	31.2	31.3	31.4	31.6	31.7	31.9	32.1	32.3	32.5	32.7	32.9	33.2	33.4	33.7	34.0
8.5	33.1	33.1	33.1	33.0	33.0	33.0	33.0	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.8	33.9	34.1	34.3	34.5	34.7	35.0	35.2	35.5	35.8	36.0
9.0	35.2	35.2	35.1	35.1	35.1	35.0	35.1	35.1	35.2	35.2	35.3	35.4	35.5	35.7	35.8	36.0	36.2	36.4	36.6	36.8	37.0	37.3	37.5	37.8	38.1
9.5	37.3	37.2	37.2	37.1	37.1	37.1	37.2	37.2	37.3	37.4	37.5	37.6	37.7	37.9	38.1	38.2	38.4	38.6	38.9	39.1	39.3	39.6	39.9	40.2	
10.0	39.3	39.3	39.3	39.2	39.2	39.2	39.2	39.3	39.4	39.4	39.6	39.7	39.8	40.0	40.1	40.3	40.5	40.7	40.9	41.2	41.4	41.7	41.9	42.2	
10.5	41.4	41.4	41.3	41.3	41.3	41.2	41.3	41.3	41.4	41.4	41.5	41.6	41.7	41.9	42.0	42.2	42.4	42.6	42.8	43.0	43.2	43.5	43.7	44.0	44.3
11.0	43.5	43.4	43.4	43.4	43.3	43.3	43.4	43.4	43.5	43.6	43.7	43.8	44.0	44.1	44.3	44.5	44.7	44.9	45.1	45.3	45.6	45.8	46.1	46.4	
11.5	45.6	45.5	45.5	45.4	45.4	45.4	45.5	45.5	45.6	45.7	45.8	45.9	46.1	46.2	46.4	46.6	46.7	47.0	47.2	47.4	47.7	47.9	48.2	48.5	
12.0	47.7	47.6	47.6	47.6	47.5	47.5	47.6	47.6	47.7	47.8	47.9	48.0	48.2	48.3	48.5	48.7	48.8	49.1	49.3	49.5	49.8	50.0	50.3	50.6	
12.5	49.8	49.7	49.7	49.7	49.6	49.6	49.6	49.7	49.7	49.8	49.9	50.0	50.1	50.3	50.4	50.6	50.8	51.0	51.2	51.4	51.6	51.9	52.1	52.4	
13.0	51.9	51.8	51.8	51.7	51.7	51.8	51.8	51.8	51.9	52.0	52.1	52.2	52.4	52.5	52.7	52.9	53.1	53.3	53.5	53.7	54.0	54.2	54.5	54.8	
13.5	54.0	54.0	53.9	53.9	53.9	53.8	53.9	53.9	54.0	54.0	54.1	54.2	54.4	54.5	54.6	54.8	55.0	55.2	55.4	55.6	55.8	56.1	56.4	56.6	56.9
14.0	56.1	56.1	56.1	56.0	56.0	56.0	56.0	56.0	56.1	56.2	56.3	56.4	56.5	56.6	56.8	56.9	57.1	57.3	57.5	57.7	58.0	58.2	58.5	58.8	59.0
14.5	58.3	58.2	58.2	58.2	58.1	58.1	58.2	58.2	58.3	58.4	58.5	58.6	58.8	58.9	59.1	59.3	59.4	59.7	59.9	60.1	60.4	60.6	60.9	61.2	
15.0	60.4	60.4	60.3	60.3	60.3	60.2	60.3	60.3	60.4	60.4	60.5	60.6	60.8	60.9	61.1	61.2	61.4	61.6	61.8	62.0	62.3	62.5	62.8	63.0	63.3
15.5	62.6	62.5	62.5	62.5	62.4	62.4	62.4	62.5	62.5	62.6	62.7	62.8	62.9	63.1	63.2	63.4	63.5	63.7	63.9	64.2	64.4	64.7	64.9	65.2	65.5
16.0	64.7	64.7	64.7	64.6	64.6	64.6	64.6	64.6	64.7	64.8	64.8	65.0	65.1	65.2	65.4	65.5	65.7	65.9	66.1	66.3	66.6	66.8	67.1	67.3	67.6
16.5	66.9	66.9	66.8	66.8	66.7	66.7	66.8	66.8	66.9	66.9	67.0	67.1	67.2	67.4	67.5	67.7	67.9	68.1	68.3	68.5	68.7	69.0	69.2	69.5	69.8
17.0	69.1	69.0	69.0	69.0	68.9	68.9	68.9	68.9	69.0	69.1	69.2	69.3	69.4	69.6	69.7	69.9	70.0	70.2	70.4	70.7	70.9	71.2	71.4	71.7	72.0
17.5	71.3	71.2	71.2	71.1	71.1	71.1	71.1	71.2	71.3	71.4	71.5	71.6	71.7	71.9	72.0	72.2	72.4	72.6	72.9	73.1	73.3	73.6	73.9	74.1	
18.0	73.4	73.4	73.4	73.3	73.3	73.3	73.3	73.4	73.5	73.6	73.7	73.8	73.9	74.1	74.2	74.4	74.6	74.8	75.0	75.3	75.5	75.8	76.1	76.3	
18.5	75.6	75.6	75.6	75.5	75.5	75.5	75.5	75.6	75.7	75.8	75.9	76.0	76.1	76.3	76.4	76.6	76.8	77.0	77.2	77.5	77.7	78.0	78.3	78.5	
19.0	77.8	77.8	77.8	77.7	77.7	77.7	77.7	77.8	77.9	78.0	78.1	78.2	78.3	78.5	78.6	78.8	79.0	79.2	79.4	79.7	79.9	80.2	80.5	80.7	
19.5	80.1	80.0	80.0	79.9	79.9	79.9	79.9	80.0	80.0	80.1	80.2	80.3	80.4	80.5	80.7	80.9	81.0	81.2	81.4	81.7	81.9	82.1	82.4	82.7	83.0
20.0	82.3	82.2	82.2	82.2	82.1	82.1	82.2	82.2	82.3	82.4	82.5	82.6	82.8	82.9	83.1	83.3	83.5	83.7	83.9	84.1	84.4	84.6	84.9	85.2	
20.5	84.5	84.5	84.4	84.4	84.4	84.3	84.4	84.4	84.5	84.5	84.6	84.7	84.9	85.0	85.1	85.3	85.5	85.7	85.9	86.1	86.3	86.6	86.9	87.1	87.4
21.0	86.7	86.7	86.6	86.6	86.6	86.6	86.6	86.7	86.8	86.9	87.0	87.1	87.2	87.4	87.5	87.7	87.9	88.1	88.3	88.6	88.8	89.1	89.4	89.6	
21.5	89.0	89.0	88.9	88.9	88.8	88.8	88.9	89.0	89.0	89.1	89.2	89.3	89.5	89.6	89.8	90.0	90.2	90.4	90.6	90.8	91.1	91.3	91.6	91.9	
22.0	91.2	91.2	91.1	91.1	91.1	91.1	91.2	91.3	91.4	91.5	91.6	91.7	91.9	92.0	92.2	92.4	92.6	92.8	93.1	93.3	93.6	93.9	94.1		
22.5	93.5	93.5	93.4	93.4	93.4	93.3	93.4	93.4	93.5	93.5	93.6	93.7	93.9	94.0	94.1	94.3	94.5	94.7	94.9	95.1	95.3	95.6	95.9	96.1	96.4
23.0	95.8	95.7	95.7	95.6	95.6	95.6	95.7	95.7	95.8	95.9	96.0</td														

Hydrometer (1.000 - 1.120 range) to Plato conversion
 temperature in Celsius

	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1.0000	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6
1.0020	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.9	1.0	1.1	1.3	1.4	1.6	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1
1.0040	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6
1.0060	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1
1.0080	1.9	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.8	2.9	3.1	3.3	3.4	3.6	3.8	4.0	4.2	4.4	4.6
1.0100	2.4	2.4	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8	3.9	4.1	4.3	4.5	4.7	4.9	5.1
1.0120	2.9	2.9	2.8	2.9	2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.7	3.8	3.9	4.1	4.3	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8
1.0140	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.6	3.7	3.8	3.9	4.0	4.2	4.3	4.4	4.6	4.8	4.9	5.1	5.3	5.5	5.7	5.9	6.1
1.0160	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.0	4.1	4.2	4.3	4.4	4.5	4.7	4.8	4.9	5.1	5.3	5.4	5.6	5.8	6.0	6.2	6.4	6.6
1.0180	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.6	4.7	4.8	4.9	5.0	5.2	5.3	5.4	5.6	5.8	5.9	6.1	6.3	6.5	6.7	6.9	7.1
1.0200	4.9	4.9	4.9	4.9	4.9	4.9	5.0	5.0	5.1	5.2	5.3	5.4	5.5	5.7	5.8	5.9	6.1	6.3	6.4	6.6	6.8	7.0	7.2	7.4	7.6
1.0220	5.4	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.6	5.7	5.8	5.9	6.0	6.2	6.3	6.4	6.6	6.8	6.9	7.1	7.3	7.5	7.7	7.9	8.1
1.0240	5.9	5.9	5.9	5.9	5.9	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.8	6.9	7.1	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8
1.0260	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.3	7.4	7.6	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1
1.0280	6.9	6.9	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.8	7.9	8.1	8.2	8.4	8.6	8.8	8.9	9.1	9.3	9.6
1.0300	7.4	7.4	7.3	7.4	7.4	7.4	7.5	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.3	8.4	8.6	8.7	8.9	9.1	9.2	9.4	9.6	9.8	10.0
1.0320	7.9	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.9	9.0	9.2	9.4	9.5	9.7	9.9	10.1	10.3	10.5
1.0340	8.4	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.4	9.5	9.7	9.9	10.0	10.2	10.4	10.6	10.8	11.0
1.0360	8.8	8.8	8.8	8.8	8.8	8.9	8.9	9.0	9.1	9.2	9.3	9.5	9.6	9.7	9.9	10.0	10.2	10.3	10.5	10.7	10.9	11.1	11.3	11.5	
1.0380	9.3	9.3	9.3	9.3	9.3	9.4	9.4	9.5	9.5	9.6	9.7	9.8	9.9	10.1	10.2	10.3	10.5	10.7	10.8	11.0	11.2	11.4	11.6	11.8	12.0
1.0400	9.8	9.8	9.8	9.8	9.8	9.9	9.9	10.0	10.0	10.1	10.2	10.3	10.4	10.5	10.7	10.8	11.0	11.1	11.3	11.5	11.6	11.8	12.0	12.2	12.4
1.0420	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.3	12.5	12.7	12.9
1.0440	10.8	10.8	10.7	10.8	10.8	10.8	10.9	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.8	11.9	12.1	12.3	12.4	12.6	12.8	13.0	13.2	13.4
1.0460	11.3	11.2	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.8	11.9	12.0	12.1	12.3	12.4	12.6	12.7	12.9	13.1	13.3	13.4	13.6	13.8		
1.0480	11.7	11.7	11.7	11.7	11.7	11.8	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.5	12.6	12.7	12.9	13.0	13.2	13.4	13.5	13.7	13.9	14.1	14.3
1.0500	12.2	12.2	12.2	12.2	12.2	12.2	12.3	12.4	12.4	12.5	12.6	12.7	12.8	12.9	13.1	13.2	13.4	13.5	13.7	13.8	14.0	14.2	14.4	14.6	14.8
1.0520	12.7	12.7	12.7	12.7	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.7	13.8	14.0	14.1	14.3	14.5	14.7	14.9	15.1	15.2	
1.0540	13.2	13.1	13.1	13.1	13.2	13.2	13.3	13.4	13.5	13.5	13.6	13.8	13.9	14.0	14.1	14.3	14.4	14.6	14.8	15.0	15.1	15.3	15.5	15.7	
1.0560	13.6	13.6	13.6	13.6	13.6	13.7	13.7	13.8	13.8	13.9	14.0	14.1	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	15.6	15.8	16.0	
1.0580	14.1	14.1	14.1	14.1	14.1	14.1	14.2	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.1	15.2	15.4	15.5	15.7	15.9	16.1	16.2	16.4	
1.0600	14.6	14.6	14.5	14.5	14.6	14.6	14.7	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.7	15.8	16.0	16.2	16.3	16.5	16.7	16.9	
1.0620	15.0	15.0	15.0	15.0	15.0	15.1	15.1	15.2	15.2	15.3	15.4	15.5	15.6	15.7	15.9	16.0	16.2	16.3	16.5	16.6	16.8	17.0	17.2	17.4	
1.0640	15.5	15.5	15.5	15.5	15.5	15.5	15.6	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.3	17.4	17.6	17.8	
1.0660	16.0	15.9	15.9	15.9	16.0	16.0	16.0	16.1	16.2	16.3	16.3	16.4	16.5	16.7	16.8	16.9	17.1	17.2	17.4	17.5	17.7	17.9	18.1	18.3	
1.0680	16.4	16.4	16.4	16.4	16.4	16.5	16.5	16.6	16.6	16.7	16.8	16.9	17.0	17.1	17.3	17.4	17.5	17.7	17.8	18.0	18.2	18.4	18.5	18.9	
1.0700	16.9	16.9	16.9	16.9	16.9	17.0	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	18.0	18.1	18.3	18.5	18.6	18.8	19.0	19.2	19.4	
1.0720	17.3	17.3	17.3	17.3	17.3	17.4	17.4	17.5	17.6	17.6	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.6	18.7	18.9	19.1	19.3	19.4	19.6	
1.0740	17.8	17.8	17.8	17.8	17.8	17.8	17.9	17.9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.8	18.9	19.0	19.2	19.4	19.5	19.7	19.9	20.1	
1.0760	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.5	18.5	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.5	19.6	19.8	20.0	20.2	20.3	20.5	
1.0780	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.9	19.0	19.1	19.2	19.3	19.4	19.5	19.7	19.8	19.9	20.1	20.3	20.4	20.6	20.8	21.2	
1.0800	19.2	19.1	19.1	19.1	19.2	19.2	19.3	19.4	19.4	19.5	19.6	19.7	19.8	20.0	20.1	20.2	20.4	20.5	20.7	20.9	21.0	21.2	21.4	21.6	
1.0820	19.6	19.6	19.6	19.6	19.6	19.6	19.7	19.7	19.8	19.9	20.0	20.1	20.2	20.3	20.4	20.5	20.7	20.8	21.0	21.1	21.3	21.5	21.7	21.9	
1.0840	20.1	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.9	21.0	21.1	21.3	21.4	21.6	21.8	21.9	22.1	22.3	22.5	
1.0860	20.5	20.5	20.5	20.5	20.5	20.6	20.6	20.7	20.8	20.9	21.0	21.1	21.2	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.4	22.5	22.7	22.9	
1.0880	21.0	20.9	20.9	21.0	21.0	21.1	21.2	21.2	21.3	21.4	21.5	21.6	21.7	21.9	22.0	22.2	22.3	22.5	22.6	22.8	23.0	23.2	23.4	23.6	
1.0900	21.4	21.4	21.4	21.4	21.4	21.5	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	23.6	23.8	
1.0920	21.8	21.8	21.8	21.8	21.9	21.9	22.0	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.8	22.9	23.0	23.2	23.3	23.5	23.7	23.9	24.0	24.2	
1.0940	22.3	22.3	22.2	22.3	22.3	22.4	22.4	22.5	22.6	22.6	22.7	22.8	22.9	23.1	2										

Hydrometer (1.000 - 1.120 range) to Plato conversion
 temperature in Fahrenheit

	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78
1.0000	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6		
1.0020	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1		
1.0040	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.6		
1.0060	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.0		
1.0080	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6		
1.0100	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.1		
1.0120	2.9	2.9	2.9	2.9	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.4	3.4	3.5	3.6		
1.0140	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.8	3.9	3.9	4.0		
1.0160	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.4	4.5	4.6	4.6		
1.0180	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.9	4.9	5.0		
1.0200	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.3	5.4	5.4	5.5	5.6	5.6		
1.0220	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.9	5.9	6.0	6.1	6.1			
1.0240	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	6.0	6.0	6.0	6.1	6.1	6.2	6.2	6.3	6.4	6.4	6.5	6.5	6.6			
1.0260	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	7.0	7.0	7.1			
1.0280	6.9	6.9	6.9	6.9	6.9	6.8	6.9	6.9	6.9	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.5			
1.0300	7.4	7.4	7.4	7.3	7.3	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	8.0	8.0	8.1			
1.0320	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5			
1.0340	8.4	8.4	8.3	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.5	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0			
1.0360	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.9	8.9	8.9	9.0	9.0	9.1	9.1	9.2	9.2	9.3	9.4	9.4	9.5	9.6			
1.0380	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9	10.0	10.0			
1.0400	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.9	9.9	9.9	10.0	10.0	10.1	10.1	10.2	10.2	10.3	10.3	10.4	10.5			
1.0420	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.5	10.5	10.5	10.6	10.6	10.7	10.7	10.8	10.9	10.9			
1.0440	10.8	10.8	10.8	10.8	10.7	10.8	10.8	10.8	10.8	10.9	10.9	10.9	11.0	11.0	11.1	11.1	11.2	11.2	11.3	11.3	11.4	11.5			
1.0460	11.3	11.3	11.2	11.2	11.2	11.2	11.2	11.3	11.3	11.3	11.3	11.4	11.4	11.5	11.5	11.5	11.6	11.6	11.7	11.8	11.8	11.9			
1.0480	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.8	11.8	11.8	11.8	11.9	11.9	11.9	12.0	12.0	12.1	12.1	12.2	12.2	12.3			
1.0500	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.3	12.3	12.3	12.4	12.4	12.5	12.5	12.5	12.6	12.7	12.7	12.8	12.9			
1.0520	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.8	12.8	12.8	12.9	13.0	13.1	13.1	13.2	13.2	13.3	13.4					
1.0540	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.2	13.2	13.2	13.2	13.3	13.3	13.4	13.4	13.4	13.5	13.5	13.6	13.7	13.7	13.8			
1.0560	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.7	13.7	13.7	13.8	13.8	13.9	13.9	14.0	14.0	14.1	14.1	14.2	14.3				
1.0580	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.2	14.2	14.2	14.3	14.3	14.4	14.4	14.5	14.5	14.6	14.7	14.7				
1.0600	14.6	14.6	14.6	14.6	14.5	14.5	14.6	14.6	14.6	14.7	14.7	14.7	14.8	14.8	14.9	14.9	15.0	15.0	15.1	15.1	15.2				
1.0620	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.1	15.1	15.1	15.2	15.2	15.3	15.3	15.4	15.4	15.5	15.5	15.6	15.7				
1.0640	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.6	15.6	15.6	15.7	15.7	15.8	15.8	15.9	15.9	16.0	16.1	16.1				
1.0660	16.0	16.0	16.0	15.9	15.9	15.9	15.9	16.0	16.0	16.0	16.1	16.1	16.1	16.2	16.2	16.3	16.3	16.4	16.5	16.5	16.6				
1.0680	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.5	16.5	16.5	16.5	16.6	16.6	16.7	16.7	16.8	16.8	16.9	17.0	17.0				
1.0700	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	17.0	17.0	17.0	17.1	17.1	17.2	17.2	17.3	17.3	17.4	17.4	17.5				
1.0720	17.4	17.3	17.3	17.3	17.3	17.3	17.3	17.4	17.4	17.4	17.4	17.5	17.5	17.5	17.6	17.6	17.7	17.7	17.8	17.8	17.9				
1.0740	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.9	17.9	17.9	18.0	18.0	18.1	18.1	18.2	18.2	18.3	18.3	18.4				
1.0760	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.4	18.4	18.5	18.5	18.6	18.6	18.7	18.7	18.8	18.9				
1.0780	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8	18.9	18.9	19.0	19.0	19.1	19.1	19.2	19.2	19.3				
1.0800	19.2	19.2	19.1	19.1	19.1	19.1	19.2	19.2	19.2	19.2	19.3	19.3	19.4	19.4	19.5	19.5	19.6	19.6	19.7	19.8					
1.0820	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.7	19.7	19.7	19.8	19.8	19.9	19.9	20.0	20.0	20.1	20.1	20.2				
1.0840	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.1	20.1	20.1	20.1	20.2	20.2	20.3	20.3	20.4	20.4	20.5	20.5	20.6	20.7				
1.0860	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.6	20.6	20.6	20.7	20.7	20.8	20.8	20.9	20.9	21.0	21.0	21.1				
1.0880	21.0	20.9	20.9	20.9	20.9	20.9	21.0	21.0	21.0	21.1	21.1	21.2	21.2	21.3	21.3	21.4	21.4	21.5	21.5	21.6					
1.0900	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.5	21.5	21.5	21.6	21.6	21.7	21.7	21.8	21.8	21.9	21.9	22.0				
1.0920	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.9	21.9	21.9	22.0	22.0	22.1	22.1	22.2	22.2	22.3	22.4	22.4	22.5					
1.0940	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.4	22.4	22.4	22.5	22.5	22.6	22.6	22.7	22.7	22.8	22.8	22.9				
1.0960	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.8	22.8	22.8	22.9	22.9	23.0	23.0	23.1	23.1	23.2	23.2	23.3					
1.0980	23.2	23.2	23.1	23.1	23.1	23.1	23.2	23.2	23.2	23.3	23.3	23.4	23.4	23.5	23.5	23.6	23.6	23.7	23.7	23.8					
1.1000	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.7	23.7	23.7	23.8	23.8	23.9	23.9	24.0	24.0	24.1	24.2					
1.1020	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.1	24.1	24.1	24.1	24.2	24.2	24.3	24.3	24.4	24.4	24.5	24.5	24.6					
1.1040	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.5	24.5	24.5	24.5	24.6	24.6	24.7	24.7	24.8	24.8	24.9	24.9	25.0					
1.1060	24.9	24.9	24.9	24.9	24																				

Hydrometer (1.000 - 1.120 range) to Gravity Units conversion

temperature in Celsius

	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1.0000	-0.7	-0.8	-0.9	-0.8	-0.7	-0.6	-0.4	-0.1	0.2	0.5	0.9	1.3	1.8	2.3	2.9	3.5	4.1	4.7	5.4	6.1	6.9	7.7	8.5	9.3	10.2
1.0020	1.3	1.2	1.1	1.2	1.3	1.4	1.6	1.9	2.2	2.5	2.9	3.3	3.8	4.3	4.9	5.5	6.1	6.7	7.4	8.1	8.9	9.7	10.5	11.3	12.2
1.0040	3.3	3.2	3.1	3.2	3.3	3.4	3.6	3.9	4.2	4.5	4.9	5.3	5.8	6.3	6.9	7.5	8.1	8.7	9.4	10.1	10.9	11.7	12.5	13.3	14.2
1.0060	5.3	5.2	5.1	5.2	5.3	5.4	5.6	5.9	6.2	6.5	6.9	7.3	7.8	8.3	8.9	9.5	10.1	10.7	11.4	12.1	12.9	13.7	14.5	15.3	16.2
1.0080	7.3	7.2	7.1	7.2	7.3	7.4	7.6	7.9	8.2	8.5	8.9	9.3	9.8	10.3	10.9	11.5	12.1	12.7	13.4	14.1	14.9	15.7	16.5	17.3	18.2
1.0100	9.3	9.2	9.1	9.2	9.3	9.4	9.6	9.9	10.2	10.5	10.9	11.3	11.8	12.3	12.9	13.5	14.1	14.7	15.4	16.1	16.9	17.7	18.5	19.3	20.2
1.0120	11.3	11.2	11.1	11.2	11.3	11.4	11.6	11.9	12.2	12.5	12.9	13.3	13.8	14.3	14.9	15.5	16.1	16.7	17.4	18.1	18.9	19.7	20.5	21.3	22.2
1.0140	13.3	13.2	13.1	13.2	13.3	13.4	13.6	13.9	14.2	14.5	14.9	15.3	15.8	16.3	16.9	17.5	18.1	18.7	19.4	20.1	20.9	21.7	22.5	23.3	24.2
1.0160	15.3	15.2	15.1	15.2	15.3	15.4	15.6	15.9	16.2	16.5	16.9	17.3	17.8	18.3	18.9	19.5	20.1	20.7	21.4	22.1	22.9	23.7	24.5	25.3	26.2
1.0180	17.3	17.2	17.1	17.2	17.3	17.4	17.6	17.9	18.2	18.5	18.9	19.3	19.8	20.3	20.9	21.5	22.1	22.7	23.4	24.1	24.9	25.7	26.5	27.3	28.2
1.0200	19.3	19.2	19.1	19.2	19.3	19.4	19.6	19.9	20.2	20.5	20.9	21.3	21.8	22.3	22.9	23.5	24.1	24.7	25.4	26.1	26.9	27.7	28.5	29.3	30.2
1.0220	21.3	21.2	21.1	21.2	21.3	21.4	21.6	21.9	22.2	22.5	22.9	23.3	23.8	24.3	24.9	25.5	26.1	26.7	27.4	28.1	28.9	29.7	30.5	31.3	32.2
1.0240	23.3	23.2	23.1	23.2	23.3	23.4	23.6	23.9	24.2	24.5	24.9	25.3	25.8	26.3	26.9	27.5	28.1	28.7	29.4	30.1	30.9	31.7	32.5	33.3	34.2
1.0260	25.3	25.2	25.1	25.2	25.3	25.4	25.6	25.9	26.2	26.5	26.9	27.3	27.8	28.3	28.9	29.5	30.1	30.7	31.4	32.1	32.9	33.7	34.5	35.3	36.2
1.0280	27.3	27.2	27.1	27.2	27.3	27.4	27.6	27.9	28.2	28.5	28.9	29.3	29.8	30.3	30.9	31.5	32.1	32.7	33.4	34.1	34.9	35.7	36.5	37.3	38.2
1.0300	29.3	29.2	29.1	29.2	29.3	29.4	29.6	29.9	30.2	30.5	30.9	31.3	31.8	32.3	32.9	33.5	34.1	34.7	35.4	36.1	36.9	37.7	38.5	39.3	40.2
1.0320	31.3	31.2	31.1	31.2	31.3	31.4	31.6	31.9	32.2	32.5	32.9	33.3	33.8	34.3	34.9	35.5	36.1	36.7	37.4	38.1	38.9	39.7	40.5	41.3	42.2
1.0340	33.3	33.2	33.1	33.2	33.3	33.4	33.6	33.9	34.2	34.5	34.9	35.3	35.8	36.3	36.9	37.5	38.1	38.7	39.4	40.1	40.9	41.7	42.5	43.3	44.2
1.0360	35.3	35.2	35.1	35.2	35.3	35.4	35.6	35.9	36.2	36.5	36.9	37.3	37.8	38.3	38.9	39.5	40.1	40.7	41.4	42.1	42.9	43.7	44.5	45.3	46.2
1.0380	37.3	37.2	37.1	37.2	37.3	37.4	37.6	37.9	38.2	38.5	38.9	39.3	39.8	40.3	40.9	41.5	42.1	42.7	43.4	44.1	44.9	45.7	46.5	47.3	48.2
1.0400	39.3	39.2	39.1	39.2	39.3	39.4	39.6	39.9	40.2	40.5	40.9	41.3	41.8	42.3	42.9	43.5	44.1	44.7	45.4	46.1	46.9	47.7	48.5	49.3	50.2
1.0420	41.3	41.2	41.1	41.2	41.3	41.4	41.6	41.9	42.2	42.5	42.9	43.3	43.8	44.3	44.9	45.5	46.1	46.7	47.4	48.1	48.9	49.7	50.5	51.3	52.2
1.0440	43.3	43.2	43.1	43.2	43.3	43.4	43.6	43.9	44.2	44.5	44.9	45.3	45.8	46.3	46.9	47.5	48.1	48.7	49.4	50.1	50.9	51.7	52.5	53.3	54.2
1.0460	45.3	45.2	45.1	45.2	45.3	45.4	45.6	45.9	46.2	46.5	46.9	47.3	47.8	48.3	48.9	49.5	50.1	50.7	51.4	52.1	52.9	53.7	54.5	55.3	56.2
1.0480	47.3	47.2	47.1	47.2	47.3	47.4	47.6	47.9	48.2	48.5	48.9	49.3	49.8	50.3	50.9	51.5	52.1	52.7	53.4	54.1	54.9	55.7	56.5	57.3	58.2
1.0500	49.3	49.2	49.1	49.2	49.3	49.4	49.6	49.9	50.2	50.5	50.9	51.3	51.8	52.3	52.9	53.5	54.1	54.7	55.4	56.1	56.9	57.7	58.5	59.3	60.2
1.0520	51.3	51.2	51.1	51.2	51.3	51.4	51.6	51.9	52.2	52.5	52.9	53.3	53.8	54.3	54.9	55.5	56.1	56.7	57.4	58.1	58.9	59.7	60.5	61.3	62.2
1.0540	53.3	53.2	53.1	53.2	53.3	53.4	53.6	53.9	54.2	54.5	54.9	55.3	55.8	56.3	56.9	57.5	58.1	58.7	59.4	60.1	60.9	61.7	62.5	63.3	64.2
1.0560	55.3	55.2	55.1	55.2	55.3	55.4	55.6	55.9	56.2	56.5	56.9	57.3	57.8	58.3	58.9	59.5	60.1	60.7	61.4	62.1	62.9	63.7	64.5	65.3	66.2
1.0580	57.3	57.2	57.1	57.2	57.3	57.4	57.6	57.9	58.2	58.5	58.9	59.3	59.8	60.3	60.9	61.5	62.1	62.7	63.4	64.1	64.9	65.7	66.5	67.3	68.2
1.0600	59.3	59.2	59.1	59.2	59.3	59.4	59.6	59.9	60.2	60.5	60.9	61.3	61.8	62.3	62.9	63.5	64.1	64.7	65.4	66.1	66.9	67.7	68.5	69.3	70.2
1.0620	61.3	61.2	61.1	61.2	61.3	61.4	61.6	61.9	62.2	62.5	62.9	63.3	63.8	64.3	64.9	65.5	66.1	66.7	67.4	68.1	68.9	69.7	70.5	71.3	72.2
1.0640	63.3	63.2	63.1	63.2	63.3	63.4	63.6	63.9	64.2	64.5	64.9	65.3	65.8	66.3	66.9	67.5	68.1	68.7	69.4	70.1	70.9	71.7	72.5	73.3	74.2
1.0660	65.3	65.2	65.1	65.2	65.3	65.4	65.6	65.9	66.2	66.5	66.9	67.3	67.8	68.3	68.9	69.5	70.1	70.7	71.4	72.1	72.9	73.7	74.5	75.3	76.2
1.0680	67.3	67.2	67.1	67.2	67.3	67.4	67.6	67.9	68.2	68.5	68.9	69.3	69.8	70.3	70.9	71.5	72.1	72.7	73.4	74.1	74.9	75.7	76.5	77.3	78.2
1.0700	69.3	69.2	69.1	69.2	69.3	69.4	69.6	69.9	70.2	70.5	70.9	71.3	71.8	72.3	72.9	73.5	74.1	74.7	75.4	76.1	76.9	77.7	78.5	79.3	80.2
1.0720	71.3	71.2	71.1	71.2	71.3	71.4	71.6	71.9	72.2	72.5	72.9	73.3	73.8	74.3	74.9	75.5	76.1	76.7	77.4	78.1	78.9	79.7	80.5	81.3	82.2
1.0740	73.3	73.2	73.1	73.2	73.3	73.4	73.6	73.9	74.2	74.5	74.9	75.3	75.8	76.3	76.9	77.5	78.1	78.7	79.4	80.1	80.9	81.7	82.5	83.3	84.2
1.0760	75.3	75.2	75.1	75.2	75.3	75.4	75.6	75.9	76.2	76.5	76.9	77.3	77.8	78.3	78.9	79.5	80.1	80.7	81.4	82.1	82.9	83.7	84.5	85.3	86.2
1.0780	77.3	77.2	77.1	77.2	77.3	77.4	77.6	77.9	78.2	78.5	78.9	79.3	79.8	80.3	80.9	81.5	82.1	82.7	83.4	84.1	84.9	85.7	86.5	87.3	88.2
1.0800	79.3	79.2	79.1	79.2	79.3	79.4	79.6	79.9	80.2	80.5	80.9	81.3	81.8	82.3	82.9	83.5	84.1	84.7	85.4	86.1	86.9	87.7	88.5	89.3	90.2
1.0820	81.3	81.2	81.1	81.2	81.3	81.4	81.6	81.9	82.2	82.5	82.9	83.3	83.8	84.3	84.9	85.5	86.1	86.7	87.4	88.1	88.9	89.7	90.5	91.3	92.2
1.0840	83.3	83.2	83.1	83.2	83.3	83.4	83.6	83.9	84.2	84.5	84.9	85.3	85.8	86.3	86.9	87.5	88.1	88.7	89.4	90.1	90.9	91.7	92.5	93.3	94.2
1.0860	85.3	85.2	85.1	85.2	85.3	85.4	85.6	85.9	86.2	86.5	86.9	87.3	87.8	88.3	88.9	89.5	90.1	90.7	91.4	92.1	92.9	93.7	94.5	95.3	96.2
1.0880	87.3	87.2	87.1	87.2	87.3	87.4	87.6	87.9	88.2	88.5	88.9	89.3	89.8	90.3	90.9	91.5	92.1	92.7	93.4	94.1	94.9	95.7	96.5	97.3	98.2

Hydrometer (1.000 - 1.120 range) to Gravity Units conversion

temperature in Fahrenheit

	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78
1.0000	-0.7	-0.7	-0.8	-0.8	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.4	-0.2	-0.1	0.1	0.3	0.5	0.7	0.9	1.1	1.4	1.6	1.9	2.2	
1.0020	1.3	1.3	1.2	1.2	1.2	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.4	3.6	3.9	4.2
1.0040	3.3	3.3	3.2	3.2	3.2	3.1	3.2	3.2	3.3	3.3	3.4	3.5	3.6	3.8	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.4	5.6	5.9	6.2
1.0060	5.3	5.3	5.2	5.2	5.2	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.6	5.8	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.4	7.6	7.9	8.2
1.0080	7.3	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.3	7.3	7.4	7.5	7.6	7.8	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.4	9.6	9.9	10.2
1.0100	9.3	9.3	9.2	9.2	9.2	9.1	9.2	9.2	9.3	9.3	9.4	9.5	9.6	9.8	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.4	11.6	11.9	12.2
1.0120	11.3	11.3	11.2	11.2	11.2	11.1	11.2	11.2	11.3	11.3	11.4	11.5	11.6	11.8	11.9	12.1	12.3	12.5	12.7	12.9	13.1	13.4	13.6	13.9	14.2
1.0140	13.3	13.3	13.2	13.2	13.2	13.1	13.2	13.2	13.3	13.3	13.4	13.5	13.6	13.8	13.9	14.1	14.3	14.5	14.7	14.9	15.1	15.4	15.6	15.9	16.2
1.0160	15.3	15.3	15.2	15.2	15.2	15.1	15.2	15.2	15.3	15.3	15.4	15.5	15.6	15.8	15.9	16.1	16.3	16.5	16.7	16.9	17.1	17.4	17.6	17.9	18.2
1.0180	17.3	17.3	17.2	17.2	17.2	17.1	17.2	17.2	17.3	17.3	17.4	17.5	17.6	17.8	17.9	18.1	18.3	18.5	18.7	18.9	19.1	19.4	19.6	19.9	20.2
1.0200	19.3	19.3	19.2	19.2	19.2	19.1	19.2	19.2	19.3	19.3	19.4	19.5	19.6	19.8	19.9	20.1	20.3	20.5	20.7	20.9	21.1	21.4	21.6	21.9	22.2
1.0220	21.3	21.3	21.2	21.2	21.2	21.1	21.2	21.2	21.3	21.3	21.4	21.5	21.6	21.8	21.9	22.1	22.3	22.5	22.7	22.9	23.1	23.4	23.6	23.9	24.2
1.0240	23.3	23.3	23.2	23.2	23.2	23.1	23.2	23.2	23.3	23.3	23.4	23.5	23.6	23.8	23.9	24.1	24.3	24.5	24.7	24.9	25.1	25.4	25.6	25.9	26.2
1.0260	25.3	25.3	25.2	25.2	25.2	25.1	25.2	25.2	25.3	25.3	25.4	25.5	25.6	25.8	25.9	26.1	26.3	26.5	26.7	26.9	27.1	27.4	27.6	27.9	28.2
1.0280	27.3	27.3	27.2	27.2	27.2	27.1	27.2	27.2	27.3	27.3	27.4	27.5	27.6	27.8	27.9	28.1	28.3	28.5	28.7	28.9	29.1	29.4	29.6	29.9	30.2
1.0300	29.3	29.3	29.2	29.2	29.2	29.1	29.2	29.2	29.3	29.3	29.4	29.5	29.6	29.8	29.9	30.1	30.3	30.5	30.7	30.9	31.1	31.4	31.6	31.9	32.2
1.0320	31.3	31.3	31.2	31.2	31.2	31.1	31.2	31.2	31.3	31.3	31.4	31.5	31.6	31.8	31.9	32.1	32.3	32.5	32.7	32.9	33.1	33.4	33.6	33.9	34.2
1.0340	33.3	33.3	33.2	33.2	33.2	33.1	33.2	33.2	33.3	33.3	33.4	33.5	33.6	33.8	33.9	34.1	34.3	34.5	34.7	34.9	35.1	35.4	35.6	35.9	36.2
1.0360	35.3	35.3	35.2	35.2	35.2	35.1	35.2	35.2	35.3	35.3	35.4	35.5	35.6	35.8	35.9	36.1	36.3	36.5	36.7	36.9	37.1	37.4	37.6	37.9	38.2
1.0380	37.3	37.3	37.2	37.2	37.2	37.1	37.2	37.2	37.3	37.3	37.4	37.5	37.6	37.8	37.9	38.1	38.3	38.5	38.7	38.9	39.1	39.4	39.6	39.9	40.2
1.0400	39.3	39.3	39.2	39.2	39.2	39.1	39.2	39.2	39.3	39.3	39.4	39.5	39.6	39.8	39.9	40.1	40.3	40.5	40.7	40.9	41.1	41.4	41.6	41.9	42.2
1.0420	41.3	41.3	41.2	41.2	41.2	41.1	41.2	41.2	41.3	41.3	41.4	41.5	41.6	41.8	41.9	42.1	42.3	42.5	42.7	42.9	43.1	43.4	43.6	43.9	44.2
1.0440	43.3	43.3	43.2	43.2	43.2	43.1	43.2	43.2	43.3	43.3	43.4	43.5	43.6	43.8	43.9	44.1	44.3	44.5	44.7	44.9	45.1	45.4	45.6	45.9	46.2
1.0460	45.3	45.3	45.2	45.2	45.2	45.1	45.2	45.2	45.3	45.3	45.4	45.5	45.6	45.8	45.9	46.1	46.3	46.5	46.7	46.9	47.1	47.4	47.6	47.9	48.2
1.0480	47.3	47.3	47.2	47.2	47.2	47.1	47.2	47.2	47.3	47.3	47.4	47.5	47.6	47.8	47.9	48.1	48.3	48.5	48.7	48.9	49.1	49.4	49.6	49.9	50.2
1.0500	49.3	49.3	49.2	49.2	49.2	49.1	49.2	49.2	49.3	49.3	49.4	49.5	49.6	49.8	49.9	50.1	50.3	50.5	50.7	50.9	51.1	51.4	51.6	51.9	52.2
1.0520	51.3	51.3	51.2	51.2	51.2	51.1	51.2	51.2	51.3	51.3	51.4	51.5	51.6	51.8	51.9	52.1	52.3	52.5	52.7	52.9	53.1	53.4	53.6	53.9	54.2
1.0540	53.3	53.3	53.2	53.2	53.2	53.1	53.2	53.2	53.3	53.3	53.4	53.5	53.6	53.8	53.9	54.1	54.3	54.5	54.7	54.9	55.1	55.4	55.6	55.9	56.2
1.0560	55.3	55.3	55.2	55.2	55.2	55.1	55.2	55.2	55.3	55.3	55.4	55.5	55.6	55.8	55.9	56.1	56.3	56.5	56.7	56.9	57.1	57.4	57.6	57.9	58.2
1.0580	57.3	57.3	57.2	57.2	57.2	57.1	57.2	57.2	57.3	57.3	57.4	57.5	57.6	57.8	57.9	58.1	58.3	58.5	58.7	58.9	59.1	59.4	59.6	59.9	60.2
1.0600	59.3	59.3	59.2	59.2	59.2	59.1	59.2	59.2	59.3	59.3	59.4	59.5	59.6	59.8	59.9	60.1	60.3	60.5	60.7	60.9	61.1	61.4	61.6	61.9	62.2
1.0620	61.3	61.3	61.2	61.2	61.2	61.1	61.2	61.2	61.3	61.3	61.4	61.5	61.6	61.8	61.9	62.1	62.3	62.5	62.7	62.9	63.1	63.4	63.6	63.9	64.2
1.0640	63.3	63.3	63.2	63.2	63.2	63.1	63.2	63.2	63.3	63.3	63.4	63.5	63.6	63.8	63.9	64.1	64.3	64.5	64.7	64.9	65.1	65.4	65.6	65.9	66.2
1.0660	65.3	65.3	65.2	65.2	65.2	65.1	65.2	65.2	65.3	65.3	65.4	65.5	65.6	65.8	65.9	66.1	66.3	66.5	66.7	66.9	67.1	67.4	67.6	67.9	68.2
1.0680	67.3	67.3	67.2	67.2	67.2	67.1	67.2	67.2	67.3	67.3	67.4	67.5	67.6	67.8	67.9	68.1	68.3	68.5	68.7	68.9	69.1	69.4	69.6	69.9	70.2
1.0700	69.3	69.3	69.2	69.2	69.2	69.1	69.2	69.2	69.3	69.3	69.4	69.5	69.6	69.8	69.9	70.1	70.3	70.5	70.7	70.9	71.1	71.4	71.6	71.9	72.2
1.0720	71.3	71.3	71.2	71.2	71.2	71.1	71.2	71.2	71.3	71.3	71.4	71.5	71.6	71.8	71.9	72.1	72.3	72.5	72.7	72.9	73.1	73.4	73.6	73.9	74.2
1.0740	73.3	73.3	73.2	73.2	73.2	73.1	73.2	73.2	73.3	73.3	73.4	73.5	73.6	73.8	73.9	74.1	74.3	74.5	74.7	74.9	75.1	75.4	75.6	75.9	76.2
1.0760	75.3	75.3	75.2	75.2	75.2	75.1	75.2	75.2	75.3	75.3	75.4	75.5	75.6	75.8	75.9	76.1	76.3	76.5	76.7	76.9	77.1	77.4	77.6	77.9	78.2
1.0780	77.3	77.3	77.2	77.2	77.2	77.1	77.2	77.2	77.3	77.3	77.4	77.5	77.6	77.8	77.9	78.1	78.3	78.5	78.7	78.9	79.1	79.4	79.6	79.9	80.2
1.0800	79.3	79.3	79.2	79.2	79.2	79.1	79.2	79.2	79.3	79.3	79.4	79.5	79.6	79.8	79.9	80.1	80.3	80.5	80.7	80.9	81.1	81.4	81.6	81.9	82.2
1.0820	81.3	81.3	81.2	81.2	81.2	81.1	81.2	81.2	81.3	81.3	81.4	81.5	81.6	81.8	81.9	82.1	82.3	82.5	82.7	82.9	83.1	83.4	83.6	83.9	84.2
1.0840	83.3	83.3	83.2	83.2	83.2	83.1	83.2	83.2	83.3	83.3	83.4	83.5	83.6	83.8	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.4	85.6	85.9	86.2
1.0860	85.3	85.3	85.2	85.2	85.2	85.1	85.2	85.2	85.3	85.3	85.4	85.5	85.6	85.8	85.9	86.1	86.3	86.5	86.7	86.9	87.1	87.4	87.6	87.9	88.2
1.0880	87.3	87.3	87.2	87.2	87.2	87.1	87.2	87.2	87.3	87.3	87.4	87.5	87.6	87.8	87.9	88.1	88.3	88.5	88.7	88.9	89.1	89.4	89.6	89.9	90.2
1.0900	89.3	89.3	89.2</td																						