At aprox. *4°C (39.2°F)* pure water has it's highest density (weight or mass):

- *1 g/cm^3 = 1 g/ml = 1 kg/litre = 1000 kg/m^3 = 1 tonne/m^3 = 62.4 lb/ft^3 = 8.34 lb/gallon.*

Densities and Specific Weight of Water in Imperial Units

Temperature - *t* - (°F)	Density - *ρ* - (slugs/ft^3)	Specific Weight - *γ* -	
		(lb/ft^3)	(lb/US gallon)
32	1.940	62.42	8.3436
40	1.940	62.43	8.3451
50	1.940	62.41	8.3430
60	1.938	62.37	8.3378
70	1.936	62.30	8.3290
80	1.934	62.22	8.3176
90	1.931	62.11	8.3077
100	1.927	62	8.2877
120	1.918	61.71	8.2498
140	1.908	61.38	8.2048
160	1.896	61	8.1537
180	1.883	60.58	8.0969
200	1.869	60.12	8.0351
212	1.860	59.83	7.9957

Weight per US gallon is based on *7.48 gallons per cubic foot.*

- *1 Gallon (U.S.) = 3.785x10^{-3} m^3 = 3.785 dm^3 (liter) = 0.13368 ft^3 = 4.951x10^{-3} yd^3 = 0.8327 Imp. gal (UK)*

Densities and Specific Weight of Water in SI Units

Temperature - *t* - (°C)	Density - *ρ* - (kg/m^3)	Specific Weight - *γ* - (kN/m^3)
0	999.9	9.806
5	1000	9.807
10	999.7	9.804
20	998.2	9.789
30	995.7	9.765
40	992.2	9.731
50	988.1	9.690
60	983.2	9.642
70	977.8	9.589
80	971.8	9.530
90	965.3	9.467
100	958.4	9.399